

FINANCIAL MASTER PLAN (FMP)

Recommendation

The Commissioner of Finance & City Treasurer and the Director of Budgeting & Financial Planning, in consultation with the Senior Management Team recommends:

1. That the report and presentation on the Financial Master Plan be received; and
2. That recommendations relating to the following "A" priorities underway:
 - Performance Measurement
 - Asset Management Strategies

be reconfirmed, and the implementation plans and progress on these priorities continue and be reported back to Council; and

3. That a prioritization framework and methodology be developed to focus the City's efforts and that an implementation plan be reported back to Council in early 2013; and
4. That a public education, awareness and consultation program be developed around the need for additional Infrastructure Financing, which will be followed by further recommendations.

Contribution to Sustainability

Financial sustainability is defined as the enduring ability of the City to ensure that it can deliver the level and types of programs and services to the community, while proactively assessing and managing associated risks, at acceptable levels of taxation and fees. This report and attached Financial Master Plan aims to address the above noted and contribute to sustainability by:

- Providing insight into the City's financial health
- Aiding in determining the extent of financial challenges
- Reconfirming the key financial goals that guide the City
- Evaluating progress towards financial sustainability.
- Providing recommendations to maintain financial sustainability

Economic Impact

The financial implications associated with the Financial Master Plan will vary depending on the choices and decisions of Council.

- The most significant financial implication is related to financing the recommended infrastructure gap financing strategies, approximately \$2m per year equivalent to a 1.3% increase on the City's levy. The strategies are developed to be customised to the City's financial needs. Options to implement these strategies will be provided in a report to Council in the first quarter of 2013.
- A number of recommendations are classified as a "priority underway" and some resources have been secured. The recommended "A priorities" and implementation steps, excluding the above financial strategy are in the range of \$1.3m to \$3.5m over 3 to 4 years.
- To assist decision makers understand the nature of the recommendation and effort involved, within the Financial Master Plan Document, each recommendation is accompanied with suggested steps to implement. These steps are intended as a starting point and reference piece to support future discussion and review on a more detailed and specific implementation plan. Parameters are assigned to each suggested step to provide a clearer indication of the associated priority, duration, complexity, and cost.

Communication Plan

A public education, awareness and consultation program will be developed around the need to maintain the City's infrastructure and how maintaining the City's infrastructure is important to maintaining service levels, and ensuring a safe, healthy environment. A news release will be issued highlighting this important milestone, the Financial Master Plan, which is yet another step in the City's commitment to long-term financial management and builds on the significant work that has already been undertaken by the City over the past 15 plus years. There are very few municipalities that have endeavoured to develop a financial master plan and long-range forecast. Not only does this action demonstrate Vaughan's commitment to financial stewardship, the document highlights many positive results and Vaughan's progressive actions to date.

Purpose

The purpose of this report is to provide Council with a Financial Master Plan (FMP) document and presentation, obtain Council direction regarding the Infrastructure Funding Strategy, and have "A priority recommendations" endorsed, sponsors determined, and direction provided to have more thorough implementation plans developed.

Background – Analysis and Options

The City's Environment

The next 25 years will see the City of Vaughan begin the transition from a growing suburban municipality to a fully urban space. The City of Vaughan is one of Canada's fastest growing cities, with a population of over 300,000. It is projected that the number of residents will increase to 430,000 by 2031. In addition, the City has the largest supply of new employment lands in the Greater Toronto Area and it is projected the number of employees will increase to 278,000 by 2031. Supporting this transition are a variety of master plans and strategies in various stages of development, which lay out various initiatives, service needs and requirements for the short, medium, and long-term. This type of progress will require long-term thinking about how best to accommodate changes and make the most of new opportunities, while ensuring the resource commitment is viable.

The ability to understand and summarize key future financial trends and identify long term implications and their aggregated effects on debt service levels, reserves, and the tax rate enables decision makers to identify issues and test a variety of financial approaches. It also provides a framework in which to develop progressive fiscally prudent policies and strategies, which compliment Vaughan's vision, initiatives and guide important financial decisions.

Financial Planning History

The City has a long standing dedication to financial management through progressive best practices and prudent financial policies. The need for a long-range financial plan with supporting policies was recognized by the City as early as 1994. Since then, the City has implemented fiscal performance indicators, multi-year budgets and a number of financial policies designed to guide the municipality towards financial sustainability. Recognizing the need to dynamically manage the ever changing environment, the City with the assistance, support, and cooperation of all departments, built a comprehensive long-term financial planning model, with the next steps being the development of a Financial Master Plan.

Scope & Engagement

To meet this need the City engaged BMA Management Consulting Inc. to assist in developing the City's Financial Master Plan. BMA is a leading municipal finance consulting firm in the GTA with experience on numerous municipal projects, including the annual municipal study, long term financial planning, public policy development, development charges, PSAB implementation and many other studies.

The scope of this engagement was to:

- Perform a financial condition assessment
- Validate the City's long-range forecast and outcomes
- Provide progressive fiscally prudent recommendations
- Develop the FMP document and present findings.

Scope limitations are:

- Water & Wastewater budgetary components are excluded from this project, as they are rate based and subject to a separate forecast review.
- The City's Development Charges (DC) Background Study and By-law are currently being updated and therefore forecasting these reserves are also excluded from the project. However, the timing of growth related infrastructure illustrated within this document significantly contributes to the financial forecast.
- Give the complexity of the subject matter and its dependency on available information and decisions, the intention is to report on forecasted outcomes and provide recommendations for Council consideration. Further development of the FMP will depend on the implementation actions chosen.

City's Financial Overview

The Financial Master Plan is based on a financial health assessment and a sophisticated long-range financial planning model developed using a significant amount of data and numerous drivers, assumptions, and analysis. Although complex by the activity's very nature, the "Financial Big Picture" can be summarized by discussing the following four main questions:

1. Can the City continue to pay for the services currently provided?
2. Is there sufficient financial flexibility to address uncertainty and liabilities?
3. Is the City's infrastructure network sustainable and adequately funded?
4. Can the City's vision and corporate initiatives be achieved financially?

The following sections will discuss the results of the Financial Master Plan by using the above question framework.

1. Can the City continue to pay for the services currently provided?

The City has a strong assessment base upon which to raise taxes and is experiencing an excellent balance of residential and non-residential development. The average income levels are relatively high in Vaughan and property taxes in relation to income are within GTA averages. In addition municipal property taxes for a comparable dwelling are within the GTA average.

Municipality	2011 Average Dwelling Value	2011 Municipal Property Taxes	2011 Disposable Income	2011 Municipal Taxes as a % of Disposable Income	2011 Municipal Taxes as a % of Average Dwelling Value
Brampton	\$ 429,288	\$ 4,082	\$ 71,900	5.7%	1.0%
Burlington	\$ 553,639	\$ 4,236	\$ 81,100	5.2%	0.8%
Markham	\$ 607,067	\$ 4,256	\$ 84,600	5.0%	0.7%
Mississauga	\$ 536,115	\$ 3,922	\$ 75,500	5.2%	0.7%
Oakville	\$ 575,979	\$ 4,187	\$ 103,900	4.0%	0.7%
Richmond Hill	\$ 552,250	\$ 4,000	\$ 83,400	4.8%	0.7%
Group Average	\$ 542,390	\$ 4,114	\$ 83,400	5.0%	0.8%
Group Median	\$ 552,944	\$ 4,134	\$ 82,250	5.1%	0.7%
Vaughan	\$ 569,124	\$ 4,103	\$ 90,900	4.5%	0.7%

Note: Above chart is based on a 3,000 square foot home

All indicators reflect that Vaughan is an attractive place to live and invest which ensures that the City has a strong assessment base upon which to pay for services provided.

The City of Vaughan provides a vast array of programs and services to its residents and has instituted a number of initiatives to provide high quality efficient and effective services. The majority of residents believe that they receive good value for their tax dollars, however, a significant proportion of residents would like to see the City hold the line on property taxes and user fee increases even if it means a reduction in services. While the City has kept property tax increases below the Municipal Price Index (MPI) and maintained service levels, the ability to sustain this practice will prove challenging.

Assuming no growth, new initiatives, or service level changes, the City will experience price escalation pressures on cost components such as labour, contracts, utilities, materials, capital projects, etc. These pressures are unavoidable and due to their nature have escalated in price faster than the general rate of inflation. This becomes very apparent in the City's long-range forecast.

Total Net Expenditures (000s)	2012	2013	2014	2015	2016
Existing Service Levels & Growth	146,243	157,498	168,291	177,221	188,427
Master Plan Propositions/City Building Initiatives		669	1,703	5,244	8,066
Total Forecast Net Levy	146,243	158,167	169,994	182,465	196,493
Assessment Growth Revenues	4,812	4,307	4,564	4,850	5,523
Net Levy After Growth	141,431	153,860	165,430	177,615	190,970
% Change in Tax Rates		5.20%	4.60%	4.50%	4.70%

Notes:

- Fiscal impacts of many vision initiatives/master plans are not available.
- Figures are forecasted estimations based on assumptions and will vary from the City Budget.

Over the next 20 years, Vaughan's population is expected to grow by an additional 38%. The cost of adding new facilities, parks, and transportation networks create additional pressure to the City's operating and capital plans. This includes sufficient resources to support growth which are not fully funded through development charges or assessment growth, for example development co-funding, future infrastructure renewal funding or service level changes.

An additional pressure facing Vaughan is that an increased portion of future residential growth will occur as intensification within the existing urban boundary. This change in development adds another layer of sophistication, which will require changes to business activities and higher levels of upfront infrastructure investment to support this transition e.g. storm drainage, streetscapes, etc.

Going forward, the City will need to set priorities and make choices in light of future budget challenges, in order to balance these items with the community's willingness to pay.

2. Is there sufficient financial flexibility to address uncertainty and future liabilities?

The City of Vaughan utilizes a number of financial tools to help smooth the impact of unexpected events, uncertainty and future liabilities. There are a number of indicators, which reflect a strong level of financial flexibility.

- The policy of maintaining a Discretionary Reserve balance of 50% of own source revenues provides financial flexibility to address unexpected events such as an economic recession.
- Working capital, tax rate stabilization, and other sustainability reserves exist to improve flexibility. These reserves are in a very healthy position and exceed industry standards.
- The City's debt levels are below policy limits and substantially below the Province's maximum target, providing access to emergency funds.

Overall corporate liabilities are adequately funded, with the exception of post employment benefits. Further consideration will be needed to assess existing reserve balances, future contributions and the timing of expected liability requirements.

3. Is the City's infrastructure network sustainable and adequately funded?

The City of Vaughan has over a billion dollars in infrastructure, excluding land and water/wastewater infrastructure, which will require eventual replacement to sustain the community's overall quality of life and the economic health for future generations. As illustrated below, the FMP includes the replacement of \$208.7 million of existing infrastructure over the next 10 years, plus the existing backlog of projects estimated at \$42m. This figure is based on replacing assets as they reach their theoretical useful life.

Infrastructure Category (\$,000)	Backlog	10 year Requirement	Sub-total	10 year Contributions	Funding Gap 1	Reserves \$	* Funding Gap 2
Building and Facilities	13,189	35,801	48,990	36,085	(12,905)	13,515	610
Parks	15,257	24,752	40,009	13,245	(26,764)	207	(26,557)
Fleet Vehicles	6,005	13,119	19,124	1,851	(17,273)	2,658	(14,615)
Artificial Turf	-	1,388	1,388	1,675	287	316	603
Fire	3,963	10,191	14,154	15,977	1,823	3,491.0	5,314
Streetscape	2,317	2,259	4,576	13,952	9,376	325.0	9,701
Heritage	797	2,281	3,078	2,344	(734)	475.0	(259)
City Playhouse	80	53	133	174	41	30.0	71
Uplands	763	279	1,042	1,500	458	(1,132)	(674)
Sub-total Reserve Funded	42,372	90,123	132,495	86,803	(45,692)	19,886.4	(25,805)
Roads		90,000	90,000	90,000	-		-
Non- reserved items		28,567	28,567	28,567	-		-
Sub-total Non-reserve Funded	-	118,567	118,567	118,567	-	-	-
Combined Total	42,372	208,690	251,062	205,370	(45,692)	19,886	(25,805)

The table above illustrates that Vaughan's infrastructure funding contributions are not adequate to sustain future requirements. The gap is reduced to \$25 million by applying infrastructure reserve funds. However, full application of the reserve balance is not recommended as these funds also support the City's discretionary reserve policy.

Furthermore, prudent asset management principles suggest that, at minimum, annual contributions to the capital program for asset replacement be at least equivalent to historical amortization expense, the annual consumption or utilization expense of an asset.

Component (\$,000)	2013	2014	2015	2016	2017	2022
Capital Contributions	9,742	7,403	11,461	11,810	12,519	15,937
Amortization	19,909	20,808	22,018	23,908	26,384	47,696
Gap	(10,167)	(13,405)	(10,557)	(12,098)	(13,865)	(31,759)
Accumulated Amortization	(151,401)	(161,568)	(174,973)	(185,530)	(197,628)	(295,661)
Cumulative Gap	(161,568)	(174,973)	(185,530)	(197,628)	(211,493)	(327,420)

The table above reflects a funding gap of \$151.4 million in 2012 (net of reserves), which consistently grows by 10 to 15 million/year to a total of \$327 million in 2022. This balance reflects the funding imbalance between funds on hand and the City's consumption of existing and new assets, which will need replacement in the future, likely beyond this forecast period. This is not a unique situation to Vaughan and is a factor that virtually all municipalities are faced with across Ontario.

Without additional infrastructure investment, there is a risk that Vaughan's infrastructure network will deteriorate, potentially compromising community health, safety, and service levels. Addressing the infrastructure replacement funding gap will take time and is a key consideration in the development to the Financial Master Plan.

4. Can the City's vision and corporate initiatives be achieved financially?

The City has undertaken a number of strategic activities, master plans, and planning studies to ensure the City is well positioned and prepared for the future changing municipal environment. In addition to discussing growth patterns and actions to address existing services, there are business propositions or corporate "City Building" recommendations over and above existing practises or service levels the City is looking to initiate. Most of these initiatives will require additional staff time, funds or other resources above and beyond the tax pressures quantified in this report. The resourcing implications for many of these initiatives have not been established, resulting in a trend to approve initiatives in principle. There is a need to strengthen and enhance the relationships between initiatives and resource planning to ensure financial sustainability.

Per the Ipsos Ried residents' survey, it is also apparent that the community has indicated its wishes to hold the line regarding levy increases. Given the quantity of initiatives and community resistance to accept tax increases it will be challenging to meet these expectations. A greater focus on determining the financial and resourcing plans for these initiatives is an essential step to prioritizing what the City can practically achieve and resource.

Recommendations

Financial Sustainability must be a primary consideration in light of cost escalations, growth, infrastructure requirements, future liabilities and corporate initiatives. As a result of the Financial Master Planning effort undertaken, 22 recommendations organized into 4 classifications, Future Based Organization, Sustainability, Infrastructure and Post-Retirement Benefits, and Administration, were developed. These Recommendations are intended as high level principle actions the City should endorse and move towards.

To assist decision makers understand the nature of the recommendation and effort involved, within the Financial Master Plan Document, each recommendation is accompanied by Suggested Steps to Implement. These steps are intended as a starting point and reference piece to support future discussions needed to develop a more detailed and specific implementation plan. Parameters are assigned to each suggested step to provide a clearer indication of the associated priority, duration, complexity, and cost. Caution is advised, as assignments are estimates and intended to illustrate the order of magnitude and are not absolute factors.

A priority rating is applied to assist with managing the above recommendations. A's are the most important, followed by B's, C's and D's. It should also be noted the City is currently undertaking a number of corporate initiatives and where appropriate the term "underway" has been included. All recommendations are available in the document for consideration, but the highest priority items are illustrated below for immediate consideration:

1. Prioritization (A Priority): It is recommended that the City continue to develop a prioritization framework that can be fully integrated into the City's strategic, corporate, and departmental processes. Resources can then be allocated to services or initiatives based on value, through a blend of community importance, overall performance, and available long-term funding. A critical element is to ensure further engagement of elected officials, the public, senior staff and employees, to ensure that prioritization happens more and becomes the lens for decision making.
2. Performance Measurement (A Priority Underway): It is recommended that the City expand the use of performance measures for planning, accountability, budgeting, communication and management purposes. To best assess performance it is suggested that a range of financial and non-financial measures be used to evaluate and monitor new initiatives, budget results, and resource allocation. Furthermore, an effective performance measurement system includes a combination of output, outcome, and efficiency metrics which reflect various factors that contribute to performance. Of great importance is to relate inputs to outputs/outcomes in order to develop a sense of community return for taxpayer investment. This will help decision making, support prioritization and drive budgets and resource allocations. Incorporating logic models will assist in this endeavour. A logic model identifies the linkages between the activities of a program and the achievement of its outcomes. It succinctly clarifies the set of activities that make up the program and the sequence of

outcomes that are expected to flow from these activities. As such, a logic model serves as a “roadmap”, showing the chain of results connecting activities to the final outcomes and, thus, identifying the steps that would demonstrate progress toward their achievement.

3. Asset Management Strategies (A Priority Underway): It is recommended to effectively maintain and manage the City’ infrastructure and assets in a state of good repair by implementing life cycle costing and developing and maintaining:

- An Asset Management Framework and Systems
- An Asset Management Plan
- An Asset Management Funding Strategy

4. Infrastructure Financing (A Priority):

Given the need and benefit of further infrastructure investment in order to protect, sustain, and maximize the use of Vaughan’s infrastructure assets, in addition to continuing existing practices the following six strategies are recommended:

- I. **Utilize a portion of Assessment Growth** –Utilizing a portion of assessment growth annually toward the replacement of capital infrastructure. For example, 10% would generate \$26.5 million over 10 years.
- II. **Recreation User Fee Surcharge** – Collect funding from groups utilizing the assets through a capital surcharge. For example, a 5% user surcharge could generate \$11.4 million over 10 years.
- III. **Special Infrastructure Levy** – Establish an infrastructure levy for the replacement of existing infrastructure. For example, a 1% annual levy increase could generate \$106m over 10 years.
- IV. **Reserve Reallocation** – There is an opportunity in the discretionary reserve group to redistribute balances in excess of targets to areas of greater need. Estimated at \$7-8m.
- V. **Rethinking Infrastructure** - Reduce infrastructure replacement costs through alternative capital replacement and service delivery options.
- VI. **Advocacy** - Advocate for the Federal and Provincial Government to institute increased permanent and sustainable funding.

The strategy presented to address the infrastructure gap can be modified and financial impacts will vary depending on the decisions of Council.

Relationship to Vaughan Vision 2020

This report is consistent with the Vaughan Vision organizational excellence goal, in that it supports the “Ensure Financial Sustainability” and “Manage Corporate Asset” themes by delivering on the “Financial Master Plan” strategic initiative.

Regional Implications

There are no Regional implications associated with this report.

Conclusion

The next 25 years will see the City of Vaughan begin the transition from a growing suburban municipality to a fully urban space. This type of progress will require long-term thinking about how best to accommodate and make the most of new opportunities, while ensuring the resourcing commitments are viable. To meet this need, the City engaged BMA Management Consulting Inc. to assist in developing the City's Financial Master Plan. The Financial Master Plan is based on a financial health assessment and a sophisticated long-range financial planning model. Although complex by the activity's very nature, the "Financial Big Picture" is summarized by discussing the following four main questions:

1. Can the City continue to pay for the services currently provided?
2. Is there sufficient financial flexibility to address uncertainty and liabilities?
3. Is the City's infrastructure network sustainable and adequately funded?
4. Can the City's vision and corporate initiatives be achieved financially?

Financial Sustainability must be a primary consideration in light of cost escalations, growth, infrastructure requirements, future liabilities and corporate initiatives. As a result of the Financial Master Planning effort undertaken a number of recommendations are provided. The highest priority recommendations for immediate consideration are:

- Prioritization
- Performance Measurement
- Asset Management
- Infrastructure Financing

Financial sustainability is defined as the enduring ability of the City to ensure that it can deliver the level and types of programs and services to the community, while proactively assessing and managing associated risks, at acceptable levels of taxation and fees. This report and attached Financial Master Plan aims to address financial sustainability.

Attachment

Attachment 1 – Financial Master Plan

Report prepared by:

John Henry, CMA
Director of Budgeting & Financial Planning
Ext. 8348

Respectfully submitted,

Barbara Cribbett, CMA
Commissioner of Finance & City Treasurer

John Henry, CMA
Director of Budgeting & Financial Planning



Financial Master Plan



City of Vaughan

Table of Contents

Executive Summary	i
Introduction - Financial Master Plan (FMP)	1
Building a Financial Master Plan (FMP)	2
Benefits to Long Range Financial Forecasting	3
Vaughan's Financial Planning History	4
Ensuring Vaughan's Future Financial Sustainability	5
Purpose of the FMP	5
Financial Master Plan Report Format	6
Introduction - Assessment of the City of Vaughan's Financial Health	7
Trend Analysis	9
Peer Analysis	9
SWOT Analysis	9
Financial Health Evaluation - Questions to Consider	10
Financial Health Evaluation - Dashboard	10
Financial Health Assessment Key Indicators	11
Growth and Socio-Economic Indicators	12
Growth and Socio-Economic Dashboard Evaluation	13
Population Changes	14
Age Demographics and Quality of Life	15
Employment and Labour Force Indicators	16
Construction Activity	18
Assessment	19
Household Income	20
Growth & Socio-Economic Evaluation - What Does This Mean to the City of Vaughan's FMP?	21

Table of Contents Cont'd

Vaughan's Financial Position	22
Financial Position Dashboard Evaluation	23
Introduction to Reserves and Reserve Funds	24
Summary of Tax Discretionary Reserves and Reserve Funds by Category	25
Tax Discretionary Reserves/Reserve Funds 2007-2011 Year End Balances	26
Tax Discretionary Reserve Ratio	27
Infrastructure Sustainability Reserves	28
Annual Infrastructure Funding Gap	28
Infrastructure Sustainability Reserve Ratio	29
Assets Beyond Their Useful Life	29
Financial Sustainability (Stabilization) Reserves	31
Corporate Reserves	32
Operating Surplus	33
Debt Management	34
Financial Position	35
Taxes Receivable	36
Financial Position Evaluation - What Does This Mean to the City of Vaughan's FMP?	37
Municipal Levy, Property Taxes and Affordability	39
Municipal Levy, Property Taxes and Affordability Dashboard Evaluation	40
Municipal Levy	41
Municipal Price Index	42
Growth Related Influences	42
Corporate Initiatives and Corporate Priorities	43
Infrastructure Repair and Replacement	43
Legislative Requirements	43
Municipal Levy Per Household and Per \$100,000 of Assessment Comparison	45
Affordability	47
Non-Residential Municipal Tax Ratios	47
Competitive Non-Residential Municipal Taxes	48
Municipal Levy, Property Taxes & Affordability - What Does This Mean to the City of Vaughan's FMP?	48

Table of Contents Cont'd

Summary - Financial Health Evaluation	50
SWOT Analysis	51
Summary - Financial Health Evaluation - Answers to Questions	53
Vaughan's Financial Future - Operating Budget Forecast Introduction	55
Operating Budget Forecast - Key Challenges	56
A Balanced Approach is Required	60
Operating Budget Forecast	64
Model 1: Base	65
Gross Expenditures - Base - 2012-2022	66
Gross Expenditures - Base Change - 2012-2022	67
Revenues - Base - 2012-2022	68
Operating Revenues - Base - 2012-2022	69
Summary - Base - Net Levy Change	70
Model 2: Growth	71
Growth Assumptions	71
Gross Expenditures - Growth - 2012-2022	73
Commission Summary - Growth - 2012-2022	74
Revenues - Growth - 2012-2022	75
Model 3: Master Plans/New Initiatives	76
Status of Master Plan Inclusion in the FMP	77
Gross Expenditures - Master Plans - 2012-2022	78
Model 4: Other Requests	80
Gross Expenditures - Other Requests - 2013-2022	81
Consolidated Operating Budget Forecast	82
Summary Operating Budget Forecast	83

Table of Contents Cont'd

Capital Requirements	84
Capital Plan Assumptions	86
Summary of Capital Projects and Sources of Financing	87
Existing 10 Year Capital Plan	88
Growth-Related Capital Project Summary	89
Growth-Related Capital Financing Summary	90
New Initiatives Capital Summary	91
Replacement Capital Project Summary	92
Replacement Capital Financing Summary	93
Capital Replacement Requirements	94
Contributions to Capital vs. Amortization Expense	95
Strategies to Address the Infrastructure Gap	96
Impact Analysis - Strategies to Address the Infrastructure Gap	99
Recommendations	101
Introduction	102
Future Based Organization	105
Sustainability	116
Infrastructure and Post-Retirement Benefits	128
Administration	135
Summary of Recommendations	144
Consolidated Table of Suggested Steps to Implement Recommendations	145
Appendices	
Appendix A - SWOT Analysis	148
Appendix B - Discretionary Reserve and Reserve Funds	153
Appendix C - Operating Budget Assumptions	156
Appendix D - 10 Year Addition of Facilities, Parks and Infrastructure	164

Executive Summary

Executive Summary

Introduction

The City of Vaughan has a long standing dedication to financial management through progressive best practices and **prudent financial policies**. This includes the implementation of fiscal performance indicators, multi-year budgets and a number of financial policies designed to guide the municipality towards financial sustainability. The **Financial Master Plan (FMP)** is yet another step in the City's commitment to long-term financial management and builds on the significant work that has already been undertaken by the City over the past 15 plus years.

The FMP is focused on **financial sustainability** which is defined as the enduring ability of the City to ensure that it can deliver the level and types of programs and services to the community, while proactively assessing and managing associated risks, at acceptable levels of taxation and fees. The FMP:

- Provides insight into the City's financial health;
- Aids in determining the extent of financial challenges;
- Reconfirms the key financial goals that guide the City;
- Evaluates progress towards financial sustainability; and
- Provides recommendations to maintain financial sustainability.

Existing and Future Financial Health

It is important to understand the City's current financial health and the external factors that impact the City's delivery of programs and services which should be incorporated into the FMP. Numerous industry recognized financial and socio-economic indicators and factors were reviewed to assess the City's financial health. This included trend analysis, analysis against best practice research as well as against peer municipalities. **Four key questions** were used to assess the City's financial health.

Question 1: Can the City continue to pay for the services currently provided?

The City has a strong assessment base upon which to raise taxes and is experiencing an excellent balance of residential and non-residential development. Average income levels are relatively high in Vaughan and property taxes in relation to income are within the GTA average. In 2012, municipal property taxes in Vaughan were 4.6% of disposable income compared to an average of peer municipalities of 5.1% (3,000 sq.ft home). All indicators reflect that Vaughan is an attractive place to live and invest which ensures that the City has a strong assessment base upon which to pay for services provided.

The vast majority of residents believe that they receive good value for their tax dollars, however, the majority of residents would like to see the City hold the line on property taxes and user fees even if it means a reduction in services. To this end, the City has done an excellent job of keeping property tax increases below the Municipal Price Index while maintaining service levels.

However, the ability to sustain this practice in the long-term, with the addition of new corporate initiatives, will prove challenging.

Question 2: Is there sufficient financial flexibility to address unexpected events, uncertainty and future liabilities?

There are a number of positive indicators that reflects the City's financial flexibility including:

- The policy of maintaining a Discretionary Reserve balance of 50% of own source revenues provides financial flexibility to address unexpected events such as an economic recession;
- Healthy Financial Sustainability Reserves exceeding industry standards; and
- Debt levels well below the Province's maximum target.

Liabilities related to post-employment benefits will require further consideration to assess existing reserve balances, future contributions and the timing of expected liability requirements.

Question 3: Is the City's infrastructure network sustainable and adequately funded?

The City has over a billion dollars in infrastructure, excluding land and water/wastewater infrastructure, which will require eventual replacement to sustain the community's overall quality of life and the economic health for future generations. The FMP includes replacement of \$208.7 million of existing infrastructure over the next 10 years plus an existing backlog of projects estimated at \$42 million.

Vaughan's infrastructure repair and replacement spending requirements reflects a funding gap of \$151.4 million in 2012 (net of reserves) which consistently grows by \$10-\$15 million per year to a total of \$327 million in 2022. This is not a unique situation and is a factor that virtually all municipalities are faced with across Ontario.

Without additional infrastructure investment, there is a risk that Vaughan's infrastructure network will deteriorate, potentially compromising community health, safety, and service levels. Addressing the infrastructure replacement funding gap will take time and is a key consideration in the development to the FMP.

Infrastructure sustainability has been a prevailing theme for a number of years as reflected in the City's long term financial planning documents but is an ongoing challenge that is yet to be fully addressed due to other corporate initiatives, growth challenges and affordability considerations. Given the need and benefit for further infrastructure investment in order to protect, sustain, and maximize the use of Vaughan's infrastructure assets, a number of options and strategies have been included in the FMP.

Question 4: Can the City's vision and corporate initiatives be achieved financially?

The City has undertaken a number of planning studies and Master Plans to ensure that it is well positioned to meet its vision. However, the operational and capital funding requirements for all Master Plans are yet to be fully defined and as such, it is difficult to state, with certainty, that all corporate initiatives can be achieved within the proposed timelines and budget. Given the quantity of initiatives and community resistance to accept tax increases it will be challenging. A greater focus on determining the financial and resourcing plans for these initiatives is an essential step to prioritizing what the City can practically achieve and resource.

Future Challenges

The following summarizes the future challenges that the City of Vaughan is expected to face in the next decade that have been taken into consideration in the development of the FMP.

- **Costs Escalating Faster than Inflation**—The City will experience price escalation pressures on cost components such as labour, contracts, utilities, materials, capital projects, etc. These pressures are unavoidable and due to their nature have escalated in price faster than the general rate of inflation.
- **Unprecedented Growth**—Over the next decade, Vaughan is expected to undergo a tremendous transformation fueled by high growth. The cost of adding new facilities, parks and transportation networks and associated costs to support new growth places considerable demands on the City's operating and capital plans. Although the intent of DCs is to ensure that growth pays for itself, there are restrictions in the Provincial *Development Charges Act (DCA)*. The DCA only allows fees to be collected for 90% of the capital costs associated with some services. DCs fund only the initial capital construction cost of the infrastructure. Therefore, the funding for the future infrastructure repair and replacement resides within the municipality, predominantly the tax base, as does the associated operating costs related to the growth in programs and services.
- **Higher Levels of Sophistication and Complexity**—Much of the future residential growth will occur as intensification. Intensification typically results in higher levels of service to support an urban setting (e.g. streetscaping, lighting, cultural services) which is more costly to develop and maintain. Higher levels of sophistication and complexity result in an enhanced need to establish clearly defined service standards and the development of multi-year plans.

- **Asset Renewal/Replacement Funding**—The increased demand for additional infrastructure to match Vaughan’s growth will take place at the same time that the existing assets are reaching an age where their renewal/replacement is becoming critical and more costly. Consequently, it is vital to enhance Vaughan’s current plan for this eventuality and further develop funding policies to protect and sustain the foundation of the community.
- **Inflexible Revenue Raising Tools**—Although the City of Vaughan is responsible for providing a wide range of essential services that citizens expect and value, it must rely on limited sources of revenue; primarily property taxes (66% of the City’s revenues) and fees and charges (16% of the City’s revenues). Grants from other levels of government which have declined over the years represent only 0.1% of revenues and this trend is expected to continue. Payments-in-lieu of taxes have historically not kept pace with property taxation increases and are uncontrollable by the City.
- **Shifting Demographics**—Vaughan has a considerably higher proportion of residents that are below the age of 15. The larger proportion of young families increases the demand for age-sensitive City services such as parks and recreational programs, services and facilities. The City has undertaken a number of Master Plans to ensure alignment of programs, services and facilities with demographic trends. The City must also manage expectations for quality programs, the need for new recreational and other programs and services to support growth and to align with changes in demographics.

The FMP highlights financial implications for decision makers to discuss and make choices regarding:

- Fairness and equity between existing and future taxpayers;
- Meeting the requirements of urban development, and, to the extent possible, matching growth-related revenues with service demands;
- Maintaining existing high quality affordable programs and services and meeting new demands for services based on changing community priorities and growth;
- Maintaining existing infrastructure replacement requirements and the need to have infrastructure in place to support new growth and economic development; and
- Achieving the City’s strategic, corporate and department initiatives.

It is also about **prioritization** of capital and operating programs and services to ensure that community service requirements are aligned with their willingness to pay for municipal programs and services.

Summary of Recommendations

The FMP is designed to address long-term financial sustainability through four strategy areas.

1. Future Based Organization

2. Sustainability

3. Infrastructure and Post-Retirement Benefits

4. Administration

These strategies will guide actions to both change City approaches and maintain current beneficial practices. The FMP includes 22 recommendations organized into four classifications. The following provides a summary list of all recommendations, their classification and their respective priority (A, B, C, D).

Recommendations	Classification	Priority
Prioritization	Future Based Organization	A
Infrastructure Financing	Infrastructure & Post-Retirement	A
Performance Measurement	Future Based Organization	A _{underway}
Asset Management	Infrastructure & Post-Retirement	A _{underway}
Build Financial Relationships into Strategic, Corporate and Master Planning	Future Based Organization	B
Intensification	Sustainability	B
Post-Retirement Benefits	Infrastructure & Post-Retirement	B
Reserve Policy and Classification Framework	Administration	B _{underway}
Continuous Improvement & Innovation	Future Based Organization	C
Public Education/Engagement	Future Based Organization	C
Fund Balances and Financial Position	Sustainability	C
Surplus/One-Time Funding	Sustainability	C
Operating Liquidity and Cash Flow	Sustainability	C
Full Cost Allocation	Administration	C
Financial Planning	Future Based Organization	D
Financial Sustainability/Recession Resiliency	Sustainability	D
User Fees	Sustainability	D
Municipal Price Index	Sustainability	D
Financial Review Policy	Administration	D
Debt Management	Administration	D
Deferred Revenue	Administration	D

These recommendations are intended as high level principle actions the City should endorse and move towards. A priority rating is applied to assist with managing the above recommendations. A's are the most important, followed by B's, C's and D's. It should also be noted the City is currently undertaking a number of corporate initiatives and where appropriate the term "underway" has been included.

Priority A Recommendations

- **Prioritization**—It is recommended that the City continue to develop a prioritization framework that can be fully integrated into the City’s strategic, corporate, and departmental processes. Resources can then be allocated to services or initiatives based on value, through a blend of community importance, overall performance, and available long-term funding. A critical element is to ensure further engagement of elected officials, the public, senior staff and employees, to ensure that prioritization happens more and becomes the lens for decision making.
- **Performance Measurement (Underway)**—It is recommended that the City expand the use of performance measures for planning, accountability, budgeting, communication and management purposes. To best assess performance it is suggested that a range of financial and non-financial measures be used to evaluate and monitor new initiatives, budget results, and resource allocation. Furthermore, an effective performance measurement system includes a combination of output, outcome, and efficiency metrics which reflect various factors that contribute to performance.
- **Asset Management Strategies (Underway):** To effectively maintain and manage the City’s infrastructure and assets in a state of good repair, it is recommended that the City develop an asset management strategy which will include:
 - An Asset Management Framework;
 - An Asset Management Plan; and
 - An associated Asset Management Funding Strategy.
- **Infrastructure Financing**—Given the need and benefit of further infrastructure investment in order to protect, sustain, and maximize the use of Vaughan’s infrastructure assets, in addition to continuing existing practices the following six strategies are recommended:
 - **Utilize a portion of Assessment Growth** –Utilizing a portion of assessment growth annually toward the replacement of capital infrastructure. For example, 10% would generate \$26.5 million over 10 years.
 - **Recreation User Fee Surcharge** – Collect funding from groups utilizing the assets through a capital surcharge. For example, a 5% user surcharge could generate \$11.4 million over 10 years.
 - **Special Infrastructure Levy** – Establish an infrastructure levy for the replacement of existing infrastructure. For example, a 1% annual levy increase could generate \$106m over 10 years.
 - **Reserve Reallocation** – There is an opportunity in the discretionary reserve group to redistribute balances in excess of targets to areas of greater need. Estimated at \$5.7 million.
 - **Rethinking Infrastructure** - Reduce infrastructure replacement costs through alternative capital replacement and service delivery options.
 - **Advocacy** - Advocate for the Federal and Provincial Government to institute increased permanent and sustainable funding.

Priority B Recommendations

- **Build Financial Relationships into Strategic, Corporate and Master Planning** - It is recommended that the City further incorporate financial and resource capacity relationships into strategic, corporate, master planning and new initiative processes to help set realistic boundaries on priorities and what can be reasonably accomplished.
- **Intensification** - It is recommended that the City further investigate the transition pressures and timing implications associated with land use intensification in order to plan accordingly for upfront advance infrastructure investment for future population growth.
- **Post-Retirement Benefits** – It is recommended that the City develop a phase-in strategy to gradually address the unfunded post-retirement liabilities over a period of 5-10 years.
- **Reserve Policy and Classification Framework** - It is recommended that the City develop a consolidated reserve policy and framework which will provide guidance and reference regarding all reserves e.g. reserve intent, target balances, limitations etc.

Priority C Recommendations

- **Continuous Improvement & Innovation** - It is recommended that the City continue to identify and implement opportunities to create efficiencies through innovative programs and service delivery strategies.
- **Public Education/Engagement** - It is recommended that the City continue its community education, outreach and engagement efforts regarding the financial pressures facing the City and associated alternatives. These efforts should be complimented with new and emerging practices to extend a deeper reach into the community.
- **Fund Balances and Financial Position** – It is recommended that the City monitor its financial position, taking into consideration forecast changes that would impact the assets and liabilities of the corporation.
- **Surpluses and One-Time Funding** – It is recommended that the City not use any operating surplus (revenues exceed operating expenses) to fund ongoing operating budget expenditures as this results in annual revenues which may not materialize in future years.
- **Operating Liquidity and Cash Flow Management** – It is recommended that the City prepare cash flow forecasts and monitor cash requirements.
- **Full Cost Allocation** – It is recommended that the direct and indirect costs associated with providing each program and service be identified to assist the City in determining whether it wishes to support that service in full, or in part, with fees.

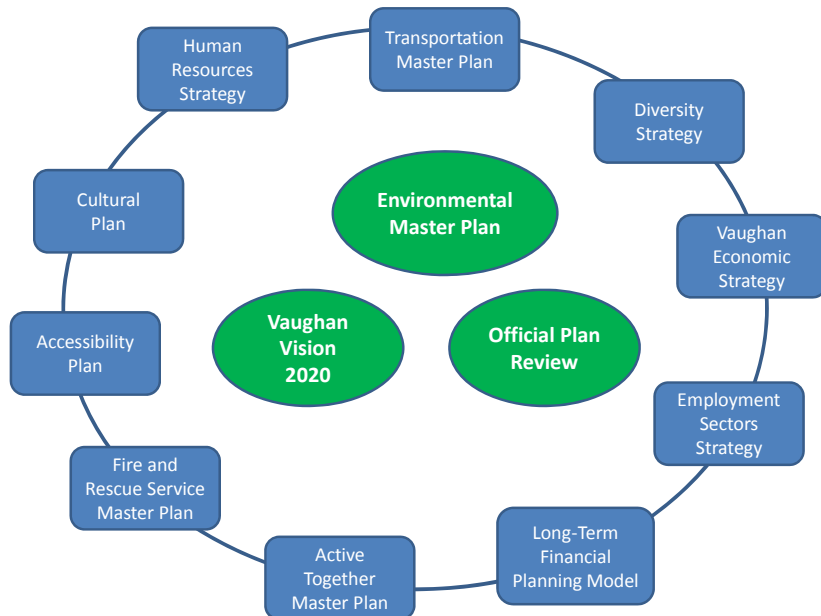
Priority D Recommendations

- **Financial Planning**—It is recommended that the City continue to foster financial planning efforts by identifying emerging challenges that may potentially impact the City’s ability to meet its goals and objectives.
- **Financial Sustainability/Recession Resiliency**—It is recommended that the City continue to determine the risks associated with a potential future recession and determine the appropriate amount of flexibility required in the event of an economic downturn.
- **User Fees**—It is recommended that the City continue with its current user fee practices and complement them by developing a policy which illustrates the appropriateness of user fees, the basis for development, levels of recovery, frequency of review, price escalation, etc.
- **Municipal Price Index (MPI)**—It is recommended that the City forecast base operating budget increases to gage the ability of the corporation to manage its costs against anticipated increases.
- **Financial Review Policy**—It is recommended that all financial policies be reviewed and amended, as necessary, but at a minimum annually as part of the budget process.
- **Debt Management**—It is recommended that the City continue to maintain a conservative debt control policy whereby debt charges do not exceed 10% of own source revenues.
- **Deferred Revenue**—It is recommended that operating departments make the determination of revenue or deferred revenue based on Generally Accepted Accounting Principles.

Introduction—Financial Master Plan (FMP)

Introduction—Financial Master Plan

The City of Vaughan has a long history of effectively and prudently planning for its future. As part of an ongoing planning process, the City has initiated numerous master plans as shown below, to ensure that programs, services and facilities align with the needs of the community and can effectively address the unparalleled growth that the City continues to experience. Many of the master plans have been approved in principle but the financial implications of each plan have not been fully developed and as such have not yet been included in the Financial Master Plan (FMP).



NOTE: the FMP excludes water/wastewater which has been developed and previously presented in a separate report.

Building a Financial Master Plan (FMP)

The **Financial Master Plan (FMP)** will build on the significant work that has already been undertaken by the City over the past 15 plus years in financial and growth management. The FMP is a comprehensive financial plan that:

- Incorporates, to the extent where financial information is available, all **master plans** and growth projections into one financial plan for all tax supported programs and services. It is anticipated that future FMPs will further identify the financial implications of these plans as more detail becomes available;
- Incorporates all existing **financial policies and strategies** that the City has in place as well as including recommendations, where appropriate, to refine these strategies;
- Assesses the City's financial position over the last 5-10 years through the evaluation of the City's **existing financial health** to help identify the City's strengths, weaknesses, future opportunities and challenges;
- Provides a clear indication of the **impact of growth** from an operational and capital perspective, incorporating **asset management strategies**; and
- Provides a **long range financial forecast** including **key financial performance indicators**.

Benefits to Long Range Financial Forecasting

There are many benefits to long range financial forecasting:

- ✓ Examines fiscal trends (past and future);
- ✓ Identifies fiscal issues and opportunities;
- ✓ Increases communication & awareness;
- ✓ Stimulates long-term thinking;
- ✓ Helps establish fiscal policies and goals;
- ✓ Stimulates alternative approaches to solve future challenges;
- ✓ Provides the necessary information to establish feasible solutions and decisions;
- ✓ Identifies implications of fiscal decisions;
- ✓ Helps develop an action plan;
- ✓ Provides a tool to monitor progress against Council approved plans;
- ✓ Provides financial transparency and accountability; and
- ✓ Provides a consolidated view.

Better Information = Better Decisions

Vaughan’s Financial Planning History

The City of Vaughan has a long standing dedication to financial management through progressive best practices and **prudent financial policies**. The need for a long-range financial plan with supporting policies was recognized by the City as early as 1994. Since then, the City has implemented fiscal performance indicators and a number of financial policies designed to guide the municipality and ensure that the City maintains its sustainability.

The City’s overall financial position has, in fact, improved considerably since 1994. The chart below reflects the City’s ongoing commitment to financial sustainability.

Financial Indicators	1994	2011	City's Target	
Discretionary Reserve Ratio	39.3%	68.1%	Greater than	50.0%
Working Capital Reserve Ratio	3.7%	12.6%	Greater than	10.0%
Debt Charge Ratio	5.8%	4.3%	Less than	10.0%

As shown above, the City is achieving its target for all financial indicators. For example, the City’s Discretionary Reserve Ratio which represents the reserves available to fund capital, program specific requirements and corporate liabilities in relation to own source revenues has increased from 39% in 1994 to 68% in 2011.



To ensure that there is sufficient cash flow available, the City’s policy is to maintain at least 10% in the Working Capital Reserve as a percentage of own source revenues. Since 1994, the Working Capital Reserve Ratio increased from 3.7% to 12.6%.

The City’s debt policy ensures that the City retains financial flexibility by avoiding over-reliance on long term debt. This is accomplished by establishing a ceiling of 10% of debt charges in relation to own source revenues. The City’s Debt Charge Ratio has declined since 1994 and is well below the ceiling.

Recognizing the need to continue to dynamically manage the ever changing environment, the City built a **comprehensive long term planning model** in 2006 which is updated annually to reflect the approved policies, budgets, Council directives and future forecasts for every municipal program and service. This model also incorporates growth and asset management principles to support financial sustainability. For example, as new assets are added, annual contributions to reserves are made.

The City of Vaughan continues to be a leader in the development of a comprehensive long-range forecast. To facilitate the development of a financial forecast, the City has undertaken **Master Plans** for the vast majority of municipal programs and services. The financial implications of these Master Plans have been incorporated into the FMP where information is available. It is anticipated that additional updates to the FMP will be required once financial information on the remainder of the Master Plans become available.

Ensuring Vaughan's Future Financial Sustainability

Financial Sustainability is defined as the enduring ability of the City to ensure that it can deliver the level and types of programs and services to the community, while proactively assessing and managing associated risks, at acceptable levels of taxation and fees.

Financial Sustainability is supported by:

- **Flexibility** - Able to respond to changing circumstances, which may relate to economic, social, environmental or political conditions;
- **Efficiency** - Using public funds in ways that are cost effective to provide services within the amount of funding available;
- **Sufficiency** - Having sufficient resources to support the delivery of services for which the City of Vaughan bears responsibility;
- **Integration** - Ensuring the financial constraints under which the City operates are fully considered when engaging in policy-making and decision-making; and
- **Credibility** - Achieving financial performance in a way that maintains and enhances public confidence in the municipal corporation.

Purpose of the FMP

The FMP is designed to meet the following purposes:

- To identify the assumptions and projections used to develop the forecast and update the assumptions as required;
- To build awareness of the results of 10-year projections of current operating and capital spending and funding levels which provide the foundation for decision-making and innovation;
- To assist the City in determining the extent of its financial challenges;
- To reconfirm the key financial goals and strategies that should guide future planning;
- To spur the development of actions in department business plans and master plans that respond to the long-term strategies;
- To evaluate progress toward improving financial sustainability; and
- To provide forecast outcomes and recommended actions, some of which will require further study and Council discussion to clarify which actions the City plans to undertake.



Financial Master Plan Report Format

The report includes the following key sections:

Assessment of the City of Vaughan’s Financial Health	Pages 7—54
Future Operating Budget Forecast	Pages 55—83
Model 1: Base	
Model 2: Growth	
Model 3: Master Plans	
Model 4: Other Requests	
Capital Requirements	Pages 84—95
Strategies to Address the Infrastructure Gap	Pages 96—100
Recommendations	Pages 101—145
Future Based Organization	Sustainability
Infrastructure/Post Retirement	Administration

Assessment of the City of Vaughan's Financial Health

Assessment of the City of Vaughan's Financial Health

Prior to developing the FMP, it is important to understand the City's current "Financial Health" and the external factors that impact the City's delivery of programs and services. The City's "Financial Health" can be best described as its ability to:

- Achieve its vision as identified in the City's Strategic Plan;
- Maintain required service levels including the maintenance and renewal of capital assets and infrastructure;
- Withstand local and regional economic changes; and
- Meet the demands of growth and change in service requirements.



Key financial and socio-economic indicators have been included to help evaluate the City's existing financial health and to identify future challenges and opportunities. Industry recognized indicators that are used by credit rating agencies and/or recommended by Government Finance Officers' Association (GFOA) have been included. GFOA is a municipal association representing best practices in North America. GFOA has a committee dedicated to addressing Canadian issues and have developed recommended best practices from a Canadian perspective. GFOA has developed a body of recommended practices in the functional areas of public finance.



Trend Analysis

Analyzing the trends of the City's key financial performance and socio-economic indicators offers several advantages including:

- It provides information on changes in the City's financial health, revealing the most current trends;
- It shows how quickly a trend is changing;
- It will form the basis for future forecasting;
- It builds awareness and helps identify the potential need to modify existing policies or develop new strategies; and
- It provides a good indication of where the City is heading.



Peer Analysis

Peer analysis has also been included to gain perspective on the City's financial health in relation to other GTA municipalities. The following table summarizes municipalities which are considered good comparators in terms of growth patterns, proximity and financial management. These six progressive municipalities typically outperform the Ontario average.

Peer Municipalities	Region	2011 Population
Mississauga	Peel	713,443
Burlington	Halton	175,779
Oakville	Halton	182,520
Richmond Hill	York	185,541
Markham	York	301,709
Brampton	Peel	523,911
Vaughan	York	288,301

SWOT Analysis

A summary of the City's existing financial health also includes a SWOT analysis which includes identification of the City's internal strengths and weaknesses as well as external opportunities and threats. A summary SWOT using major themes has been included at the end of this section of the report and a detail SWOT has been included in **Appendix A**.

Internal	S Strengths	W Weaknesses
External	O Opportunities	T Threats

Financial Health Evaluation—Questions to Consider





Finally, at the conclusion of the Assessment of the City's Financial Health, the following questions will be addressed to help set the stage for the development of the financial forecast.

- 1. Can the City continue to pay for the services currently provided?*
- 2. Is there sufficient financial flexibility to address unexpected events, uncertainty and future liabilities?*
- 3. Is the City's infrastructure network sustainable and adequately funded?*
- 4. Can the City's vision and corporate initiatives be achieved financially?*



Financial Health Evaluation—Dashboard

A summary dashboard has been included in each subsection of the Financial Health portion of the report to provide a summary of the City's trends over time, against targets or benchmarks as well as against the Ontario or peer municipal comparator group.

Legend - Trend and Performance Target

-  **Positive:** stay the course
-  **Caution:** in the right range but may be moving in the wrong direction
-  **Negative:** take corrective action
-  **Neutral:** stable

Legend – Peer Comparison

-  Outperforming peer municipalities
-  Underperforming peer municipalities

Financial Health Assessment—Key Indicators

The Financial Health Assessment includes the following:

Growth and Socio-Economic Indicators

This includes an evaluation of the City's growth and socio-economic indicators which are largely external to the City's control but important to understand from a planning and forecasting perspective.

- Population
- Employment Statistics
- Building Construction Activity
- Property Assessment
- Household Income

Vaughan's Financial Position Indicators

This includes an evaluation of the City's financial framework upon which the City operates. These indicators help determine if modifications are needed to the City's existing financial policies and strategies as part of the development of the FMP.

- Discretionary Reserves
- Operating Surplus
- Debt
- Municipal Financial Position
- Asset and Liabilities
- Taxes Receivable

Municipal Levy, Property Taxes & Affordability Indicators

This includes an evaluation of the cost of municipal programs and services and how these costs translate into municipal property taxes from a taxpayer affordability perspective to gain perspective on whether there are any affordability concerns.

- Municipal Levy
- Comparison of Relative Taxes
- Municipal Property Taxes as a % of Income
- Tax Ratios
- Non-Residential Taxes

Growth and Socio-Economic Indicators

Growth and socio-economic indicators describe and quantify a community's wealth and economic condition and provide insight into the community's collective ability to generate revenue relative to the community's demand for public services.

An examination of economic and demographic characteristics can identify, for example, the following types of situations:

- An inclining tax base and correspondingly, the community's ability to pay for public services;
- A need to shift public service priorities because of demographic changes in the community; and
- A need to shift public policies because of changes in economic and legislative conditions.

These indicators are closely interrelated and affect each other in a continuous cycle of cause and effect. Also important are the City's plans and potential for future development. The diversification of the commercial and industrial tax base was considered for its revenue-generating ability, employment-generating ability, vulnerability to economic cycles, and relationships to the larger economic region.

Excerpts from City of Vaughan Official Plan

Provincial and Regional forecasts see Vaughan reaching a population of 416,600 people and 266,100 jobs by 2031.





















The pace and form of growth in Vaughan has created numerous challenges that must be addressed. These include, among many others: car dependence, traffic congestion and increasing commuting times; low-density, single-use areas that do not allow for the efficient provision of transit; a limited range of housing options; and, a significant loss of agricultural and natural areas.

The City of Vaughan has actively canvassed and discussed these challenges with its residents and businesses during the course of the Vaughan Tomorrow project and Official Plan Review. The result has been a commitment to create a second transformation that builds on the City's existing strengths, addresses the current challenges, implements Provincial and Regional policies and, most importantly, builds a vibrant and sustainable City for the 21st century.



Growth and Socio-Economic Dashboard Evaluation

From a socio-economic and growth perspective, Vaughan has experienced significant growth and positive trends. For every growth and socio-economic indicator, Vaughan has outperformed the Ontario average and/or peer municipal comparative group. The dashboard below summarizes the growth and socio-economic indicators.

Growth and Socio-Economic Indicator		Comparison
Population Growth		
Participation Rate		
Unemployment Rate		
Employment Rate		
Employment Growth		
Construction Activity		
Assessment Composition		
Assessment Strength		
Assessment Growth		
Household Income		

Vaughan's population increased significantly over the past 20 years and is expected to continue to grow over the next 20 years. Construction activity reflects an excellent balance between residential and non-residential development and the City's relative construction activity is the highest compared with peer municipalities reflecting Vaughan's desirability as a place to invest.

The City's assessment base is strong and is growing at a rate faster than peer municipalities which helps support the delivery of municipal programs and services required as a result of growth. Average household incomes in Vaughan are amongst the highest in Ontario. This is reflective of the workforce in Vaughan which is a large, relatively young, diverse and skilled labour force. As the City continues to experience residential growth, the labour force is expected to expand representing the potential to attract the brightest and best.

As identified in the City's Official Plan, Vaughan has one of the strongest local economies in the Greater Golden Horseshoe and a high ratio of jobs to population. Vaughan's strong competitive position has resulted in significant growth in the City's employment base and this is expected to continue into the foreseeable future.

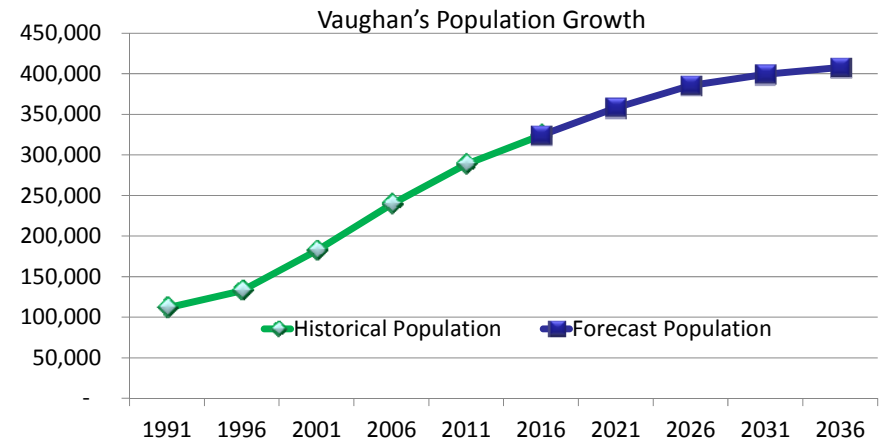
The City has many positive attributes that will continue to encourage development including excellent access to markets, strong transportation networks and superior community amenities and resources. Vaughan has a large and well-located supply of employment land which will support further growth in the employment sector and the City's economic development policies reflect a positive business philosophy. Unemployment rates, which have increased since 2006 due to economic challenges felt globally, are significantly lower in Vaughan than the Provincial average.

All indicators reflect that Vaughan is an attractive place to live and invest. The next several pages provide additional details on the growth and socio-economic indicators considered in the evaluation.

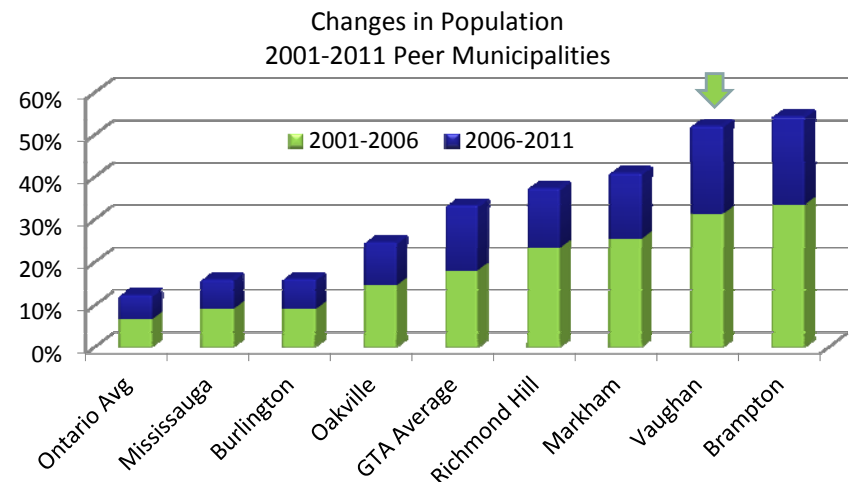
Population Changes

Changes in population directly impact both revenues (assessment base) and expenditures (service demand). The following summarizes key findings related to the City's population growth:

- In the 1990s, population growth in Vaughan took place at an incredibly fast pace during which time Vaughan became a major centre of economic activity and employment growth;
- Vaughan has grown from a population of 111,000 in 1991 to over 288,000 in 2011 (159% increase). Population is forecast to exceed 400,000 by 2036;
- Vaughan is well positioned to continue as one of the premier growth engines in the GTA which will be supported by substantial investments in new infrastructure. The FMP will consider most operating and capital requirements associated with growth, as information is available;
- The form of residential growth is changing, in large part driven by provincial policy. Much of the future residential growth will occur as **intensification within the existing urban boundary**. As intensification is relatively new in Vaughan, **it will require the City to rethink its approach and policies compared with the traditional development that the City has experienced in the past**. The transition from green field development to an urban environment development will present a number of financial challenges. For example; Planning, Engineering, and Building Standard fees will require alignment with this type of development activity to avoid revenue losses, additional services and planning will be required to ensure effective integration, advanced network retrofitting might be required to support intensification demand, etc.; and



Source: Stats Canada (Historical), Watson Report (Forecast)



Source: Stats Canada

- Over the past 10 years, Vaughan's population growth was second highest in comparison to peer municipalities, well above the GTA average and survey average.

Age Demographics and Quality of Life

The age profile of a population affects City expenditures. For example, expenditures may be affected by seniors requiring higher public service costs and **families with young children desiring enhanced services for recreational and related programs.**

- While the City of Vaughan's age profile is close to the Ontario average, there are some notable differences. The City has a lower percentage of residents that are ages of 65+ and a **higher percentage of residents that are 14 years of age or under** compared to the Ontario average which can increase the needs for recreational programs and services.
- From 2006-2011, there was an increase in the proportion of residents in the age group 45 and older in Vaughan, reflecting a similar aging population pattern experienced across Ontario.

Age Profile	2006		2011	
	Vaughan	Vaughan	Ontario	Ontario
Age 0-14	21.6%	20.3%	18.2%	17.0%
Age 15-19	7.3%	7.2%	6.9%	6.7%
Age 20-44	37.0%	34.5%	34.9%	33.0%
Age 45-54	14.6%	15.9%	15.3%	16.0%
Age 55-64	9.7%	10.9%	11.2%	12.7%
Age 65+	9.7%	11.2%	13.6%	14.6%
Total	100.0%	100.0%	100.0%	100.0%

Source: Stats Canada

Excerpts from City of Vaughan's Active Together Master Plan

Vaughan has one of the best service provision ratios in the GTA for many parks and recreation amenities, all of which have and continue to contribute to the City's **high quality of life.** Moving forward, the challenge will be to continue the good work undertaken by the City and its community partners. This will be achieved primarily by maintaining and enhancing existing facilities and services for new residents as well as offering new opportunities for all residents to engage in physical activity.



Excerpts from Citizen Survey 2012

- According to the latest Ipsos Reid Citizen Survey, residents of the City of Vaughan continue to rate the **overall quality of life in the City as very high.** At present, 98% say the quality of life is very good or good.
- The proportion of residents who rate the quality of life in the City of Vaughan as 'very good' has increased since 2007.

Employment and Labour Force Indicators

Labour force statistics are an important measure of the economy's potential. The larger the percentage of the population that enters the labour force; the larger the potential output and standard of living. Growth in the labour force implies expanding potential. The rate of employment of the community's citizens is a measure of and an influence on the community's ability to support its local business sector. Municipalities with **higher employment rates are likely to have higher standards of living**, other things being equal. A decline in employment base or higher than average rates of unemployment, can be a warning signal that overall economic activity may be declining.

- The **participation rate** is the percentage of working age people who are currently employed or actively seeking employment. In both 2006 and 2011, the participation rate in Vaughan **significantly exceeds** the Ontario average. The participation rate has increased in Vaughan during this time.
- The **unemployment rate** is the percentage of the labour force that actively seeks work but is unable to find work at any given time. When economic growth is strong, the unemployment rate tends to be low. Consistent with the situation across Ontario, from 2006 to 2011, there has been an increase in the **unemployment** in Vaughan however **unemployment continues to be lower in Vaughan** than the Ontario average.




- The **employment rate** is the percentage of total number of working-age people (includes working age people not actively seeking employment) who have jobs. The employment rate shows a community's ability to put its population to work and thereby generate income to its citizens. The employment rate in Vaughan is also significantly higher than the Ontario average.

2006	Vaughan	Ontario	Difference
Participation Rate	75.6%	68.9%	6.7%
Unemployment Rate	4.1%	6.8%	-2.7%
Employment Rate	72.5%	64.2%	8.3%
2011	Vaughan	Ontario	Difference
Participation Rate	76.1%	67.3%	8.8%
Unemployment Rate	7.5%	8.3%	-0.8%
Employment Rate	70.4%	61.7%	8.7%

Source: Financial Post Canadian Demographics

- **Employment in the City has nearly doubled over the last 10 years.** During this time, the City's employment base has grown at a compound annual rate of nearly 7%, much faster than the Greater Toronto Area and Hamilton (GTAH) as a whole over the same period.
- Vaughan's share of GTAH employment has also increased from 3.3% to 5.0% which is a significant shift in just a 10 year span.
- Within York Region, Vaughan's share of employment growth from 2006 to 2031 is forecast at 33%, the highest share for any municipality in the Region and Vaughan will remain the **largest employment base for the Region**. Vaughan is expected to be financially sustainable through a balanced mix of residential and business growth, which is forecast for the future.
- The Region of York forecast that Vaughan will **create more than double the number of new jobs** than any other municipality in the Region.

Vaughan's Employment	
2011	183,445
2016	205,445
2021	226,445
2026	246,445
2031	266,100
2036	283,600



Employment Change	
% Change	Change
From 2011-2016	12%
From 2016-2021	10%
From 2021-2026	9%
From 2026-2031	8%
From 2031-2036	7%

Source: Watson Report

Excerpts from Vaughan's Economic Development Strategy

Four key goals were developed to guide the City's economic development activities. To achieve economic prosperity through the year 2020, the Economic Development Department will:

1. Position Vaughan as the gateway of economic activity to the Greater Toronto Area.
2. Develop Vaughan as the incubator of entrepreneurial and economic activity for the economic region.
3. Provide best-in-class economic development services.
4. Grow Vaughan's dynamic quality of place and creative economy.

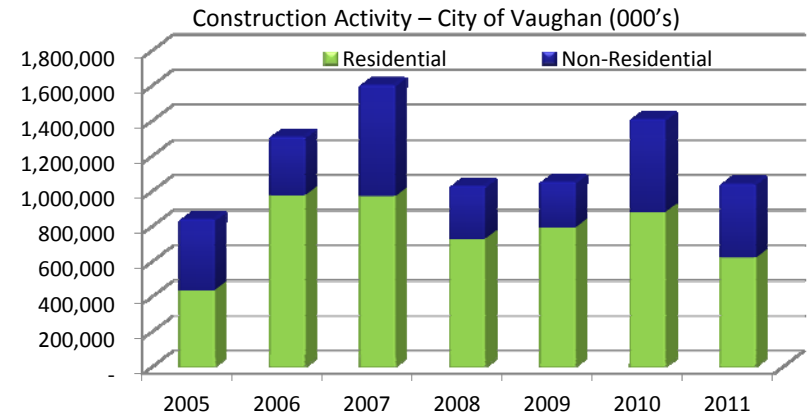


In recognition that Vaughan may face the need to provide significant infrastructure to service new employment areas, it will be important that these areas be developed in an efficient and cost competitive basis. Further, it is important that Vaughan's policies associated with developer/landowner capital provision maximize cost recovery from these parties.

Construction Activity

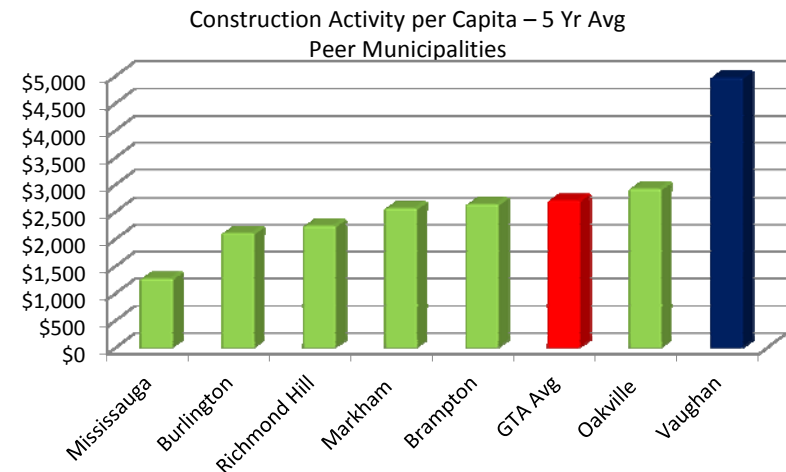
Another growth related indicator is the construction activity within a municipality which provides information on both residential and non-residential development. Changes in building activity impact other factors such as the employment base, income and property values.

- Generally, a municipality's net operating costs (expenditure increase net of the associated growth in assessment) to service residential development is higher than the net operating cost of servicing commercial or industrial development because many services such as recreation, libraries and parks are provided for use by residents.
- The ideal condition is to have sufficient commercial and industrial development to offset the net increase in operating costs associated with residential development. Non-residential development is desirable in terms of developing a strong assessment base upon which to raise taxes and in providing employment opportunities.
- Over the past seven years, residential/non-residential construction activity (on a \$ of construction) is a 65/35 split in the City of Vaughan, representing a **good balance between residential and non-residential development**. Vaughan's significant supply of developable employment lands has contributed to well-balanced development within the City.



Source: City year end construction reports

- Building permit value per capita is used as an indicator of the relative construction activity within each peer municipality. The average building permit value per capita from 2006-2010 in Vaughan was over **double the peer municipal comparator group and exceeded the total GTA average**.



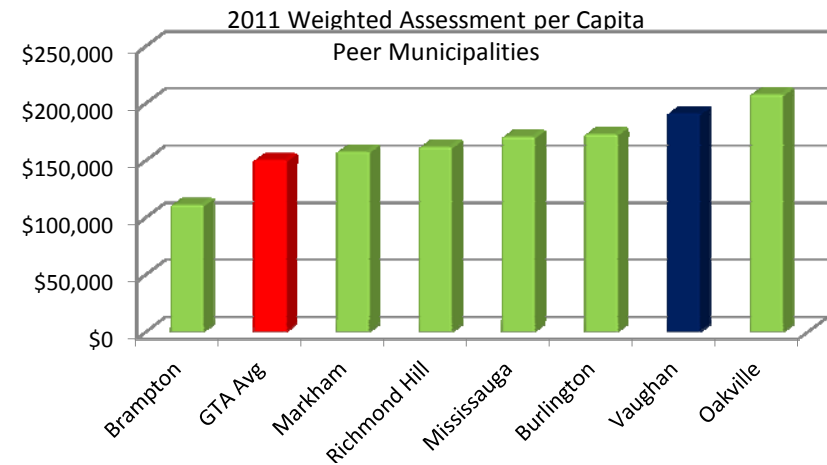
Source: BMA Municipal Study

Assessment

Property assessment is the basis upon which the City raises taxes. Assessment growth, the richness of the assessment base and assessment composition is important indicators of fiscal strength.

- Assessment composition provides an understanding of the mix of assessment. In comparison to the peer municipalities and the GTA average, Vaughan's assessment composition represents **an excellent balance between residential and non-residential**. In fact, the proportion of assessment in the commercial class has increased in Vaughan significantly since 2006. Vaughan's residential/non-residential assessment split of 75/25 compared with the peer average of 80/20. It is more desirable to have a larger share of non-residential assessment as the municipal cost of service is generally lower than residential.
- Assessment per capita statistics have been compared to provide an indication of the "richness" of the assessment base in each municipality as well as changes in assessment from year to year. Vaughan's assessment base per capita is the second highest in the peer municipal comparison and significantly higher than the GTA average reflecting a **strong assessment base upon which to raise taxes**.
- From 2006-2011, Vaughan's increase in assessment exceeded the peer municipal and GTA average. However, the assessment increase includes changes in assessment related to growth as well as changes in market value of existing properties (which does not generate additional revenues).

2011 Unweighted Assessment Composition %			
	GTA Avg	Peer Avg	Vaughan
Residential	81.5%	79.5%	74.6%
Multi-Residential	1.8%	2.2%	0.4%
Commercial	11.9%	14.5%	17.2%
Industrial	2.9%	3.5%	7.4%
Other	1.9%	0.3%	0.4%
Total	100.0%	100.0%	100.0%



	% Change in Unweighted Assessment				
	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011
GTA Average	3.3%	2.5%	7.7%	7.3%	7.5%
Peer Average	3.2%	2.0%	8.1%	7.3%	7.7%
Vaughan	3.4%	4.1%	9.0%	9.3%	8.1%

Source: BMA Municipal Studies

Household Income

Household income is one measure of a community's ability to pay. While a higher relative gross income is a positive indicator of the overall local economy, a higher gross income tends to lead to greater expectations for quality programs (i.e. streetscapes, artificial soccer turfs) which impacts the cost of municipal programs and services and can lead to additional challenges in balancing desired levels of service with a willingness to pay for services.

- Average household gross and disposable income in the City of Vaughan are higher than the peer municipal, GTA and Ontario average. Higher income levels provide an increased potential ability to pay for municipal services.
- In 2011, the estimated average gross household income in Vaughan was \$123,000, compared with the peer average of \$111,850.
- Disposable Income is the income that is left after federal and provincial income tax is deducted. In 2011, the **average disposable household income in Vaughan is amongst the highest** in the survey. While this is a positive indicator because it reflects a community's available income, as will be discussed later in this section of the report, the Ipsos Reid survey indicates that 50% of Vaughan residents would like to see the City **hold the line on increases in taxes and user fees**. The desire to keep taxes low is a common response in citizen surveys but nonetheless should be considered in the development of the FMP.

Municipality	2011 Avg. Gross Household Income	2011 Avg. Disposable Household Income
Brampton	\$ 93,900	\$ 71,900
Mississauga	\$ 100,300	\$ 75,500
Burlington	\$ 108,600	\$ 81,100
Richmond Hill	\$ 111,700	\$ 83,400
Markham	\$ 112,800	\$ 84,600
Oakville	\$ 143,800	\$ 103,900
Peer Average	\$ 111,850	\$ 83,400
Peer Median	\$ 110,150	\$ 82,250
GTA Average	\$ 114,400	\$ 85,050
Ontario Average	\$ 87,400	N/A
Vaughan	\$ 123,000	\$ 90,900

Source: Financial Post Canadian Demographics (rounded)



Growth & Socio-Economic Evaluation What Does This Mean to the City of Vaughan's FMP?

One of the questions identified earlier in the report to determine the financial health of the City included:

Can the City continue to pay for the services currently provided?

In summary, Vaughan has many positive growth and socio-economic indicators that support the community's ability to pay for services including:

- Being one of the premier growth engines of the GTA;
- Strong employment and growth in the employment sector with low unemployment rates;
- Rich, diversified and growing assessment base (non-residential assessment represents 25% of the total assessment);
- An inclining tax base to support the community's ability to pay for municipal services;
- Construction activity over the past five years has far exceeded peer municipalities, reflecting a local economy and Vaughan's desirability as a place to invest; and
- High gross incomes.



As the City continues to grow, the City should strive for an even larger proportion of the assessment growth to be in the non-residential sector as the municipal cost of service is generally lower for non-residential than residential development. While the City can afford the services currently provided, in a high growth environment there will be the need to expand the services to sustain the same level of service to a larger community. The City must also manage expectations for quality programs, the need for new recreational and other programs and services to support growth and to align with changes in demographics. Further, intensification requires the City to rethink its approach to traditional policies.

To continue to be able to pay for services currently provided, the City must ensure that:

- There is recognition that many of the City's costs are increasing at a rate greater than inflation;
- All forecast operating expenditures and revenues associated with growth have been incorporated into the FMP;
- There are sufficient financial, technical and human resources available to meet growth pressures and the costs associated with new corporate initiatives;
- It continues to stay on its path toward financial sustainability and resiliency through well planned and executed growth-related strategies; and
- There is an alignment between the programs and services provided, shifts in demographics and the community's willingness to pay for services.

Vaughan's Financial Position

Reserves/Reserve Funds are an important financial indicator in a City's overall financial health. By maintaining reserves, the City has the capability to fund future liabilities; a key link to long-term financial planning practices. They also provide a cushion to absorb unexpected shifts in revenues and expenditures. The availability of reserves also reduces the cost of financing capital as it allows a municipality to avoid debt interest payments. Credit rating agencies consider municipalities with higher reserves more advanced in their financial planning.

Debt is also an important indicator of the City's financial health and is an appropriate way of financing longer life items, especially new assets or new corporate initiatives that are not fully recovered through DCs since future taxpayers, that receive the benefit, will also pay through future debt charges. However, when debt levels get too high, it compromises the City's flexibility to fund programs and services.

Operating Position of the City compares the operating expenses including the City's historical annual amortization expense in relation to the revenues generated. This helps to determine if the City is generating sufficient revenues to fund operating expenditures as well as contributing toward the replacement of assets (on a historical cost basis). **Financial Position** of the City is important to consider as this takes into consideration the City's total assets and liabilities. **Taxes Receivable**, as a percentage of taxes levied, is an indicator of the overall economic health whereby trends and industry benchmarks can be evaluated.

Excerpts from the City's Long Term Financial Plan Reports

Over the past two decades the City of Vaughan has grown at an unparalleled pace, adding new facilities, parks, and transportation networks on an annual basis. Vaughan is now entering an era where these assets require significant investment to ensure they are maintained in an acceptable state of repair. As Vaughan ages and continues to transition from a rapidly growing township to a thriving mature City, infrastructure repair and replacement requirements will begin to accumulate at a pace similar to which they were constructed. Without further infrastructure investment, Vaughan's infrastructure network will deteriorate, potentially compromising community health, safety, and service levels.















The condition and state of municipal infrastructure is an important factor in assessing a community's overall quality of life and economic health. The City of Vaughan has **over a billion dollars in infrastructure**, excluding land and water/wastewater infrastructure, which will require eventual replacement to sustain the community's overall quality of life and the economic health for future generations. Consequently, it is critical to understand that there is a great need and benefit for **further infrastructure investment in order to protect, sustain, and maximize the use of Vaughan's infrastructure assets.**



Financial Position Dashboard Evaluation

As a result of the City's long standing dedication to financial management through progressive best practices and prudent policies, the City is currently in a good financial position however additional financial policies and strategies may be required to further enhance the City's overall financial position. These potential strategies will be discussed at the end of this section of the report.

The dashboard below summarizes key financial indicators used to determine the City's financial position.

Financial Indicators	Comparison	
Tax Discretionary Reserves Ratio		
Infrastructure Sustainability Reserves		N/A
Tax Infrastructure Reserve Ratio		N/A
Tax Financial Sustainability Reserves Ratio		
Corporate Reserves		N/A
Operating Surplus Ratio	N/A	
Debt Charges Ratio		
Financial Asset to Liability Ratio		
Taxes Receivable Ratio		

The City's overall tax supported reserve position has increased over the past five years but, in relation to own source revenues, has been trending down since 2007. While still at a reasonably healthy level, this trend should be monitored.

The City's Infrastructure Sustainability Reserves have been increasing which will help support the timely replacement of existing infrastructure but at a rate lower than inflation. Similar to the situation across Ontario, the City's Infrastructure Sustainability Reserves are not sufficient to recover the full infrastructure replacement needs at this time. Strategies will be discussed later in the report to gradually address the infrastructure gap and backlog of assets that are due for replacement.

The City has a very healthy level of Financial Sustainability Reserves to support in-year cash flows. There may be opportunities to realign some of the reserves where balances are exceeding industry standards or the City's existing targets, to areas of greater need, such as the Infrastructure Sustainability Reserves. The City's post-retirement liabilities have increased significantly, placing pressure on the City's Corporate Reserves. Strategies will also be developed later in the report to ensure that City has sufficient funds to meet cash flow requirements as post-retirement benefits come due.

Tax-related debt charges in the City have remained at a low level over the past five years and are well below the City's internal policy ceiling reflecting a good level of financial flexibility.

Introduction to Reserves and Reserve Funds

Reserves are a critical component of the City's long-term financial plan. The purpose for maintaining reserves is:

- ✓ To provide tax **stabilization** in the face of variable and uncontrollable factors (growth, interest rates, changes in subsidies) and to ensure adequate and **sustainable cash flows**;
- ✓ To provide financing for **one-time** or short term requirements without permanently impacting the tax rates thereby reducing reliance on long-term debt;
- ✓ To make provisions for **replacement of assets/infrastructure** on a timely basis;
- ✓ To provide **flexibility** to manage debt levels and protect the City's financial position; and
- ✓ To provide for **future liabilities** incurred in the current year, but paid for in the future like post-retirement benefits.

The City of Vaughan maintains numerous Discretionary and Obligatory Reserve/Reserve Funds and has a long history of maintaining prudent reserve policies to support financial sustainability.

Obligatory Reserve Funds are created whenever a statute requires revenue received for special purposes to be segregated from the general revenues of the municipality and includes reserve funds for development charges and developer agreements. Given that these are not available for use at the discretion of the City or to support existing operations, they have **not been included in this section of the analysis**.

Discretionary Reserve Funds are established to finance a future expenditure for which it has the authority to spend money, and physically set aside a certain portion of any year's revenues so that the funds are available as required.



Summary of Tax Discretionary Reserves and Reserve Funds by Category

The City maintains five different types of Discretionary Reserves, with multiple reserves within each classification.

Discretionary Reserve Classification	Description and Observations
Infrastructure Sustainability Reserves	Infrastructure Sustainability Reserves are used to assist in financing the capital program. These reserves provide flexibility and liquidity as well as enhancing the City's capacity to handle current and future capital infrastructure needs. Annual contributions are made to these reserves to address the eventual rehabilitation and/or replacement of the assets and infrastructure. While efforts have been made to support infrastructure renewal, these reserves are currently underfunded. This is referred to as the infrastructure gap.
Legislative Infrastructure Reserve	This is the Gas Tax Reserve. While this reserve fund is not discretionary, per se, it has been included in the analysis as it directly supports the City's existing capital infrastructure.
Financial Sustainability (Stabilization) Reserves	The City maintains several stabilization reserves to offset extraordinary and unforeseen expenditure requirements, revenue shortfalls and to manage cash flows. This includes reserves for areas with extreme volatility such as winter events, tax stabilization, working capital, tax surplus and building and planning reserve funds. These reserves are healthy and a reallocation to areas of higher need may be appropriate as part of the FMP.
Corporate Reserves	The City has a number of corporate reserves to protect against the consequences of certain risks, liabilities and corporate programs in such areas as insurance, WSIB and employee benefits.
Program Specific Reserves	These reserves are available to fund specific programs and services including the Garnet Williams CC Day Centre, the Keele Valley Landfill and Senior Citizens Bequests.

The next section of the report provides an overview of the reserve trends and comparisons to industry standards and peer municipalities. **Appendix B** provides additional detail on each classification of Discretionary Reserves.

Tax Discretionary Reserves/Reserve Funds 2007-2011 Balances

Tax Supported Discretionary Reserves/ Reserve Funds (000's)	2007	2008	2009	2010	2011	% Change 2007-2011
Infrastructure Sustainability	\$45,816	\$46,556	\$41,157	\$46,679	\$48,043	5%
Financial Sustainability	\$69,834	\$80,756	\$85,388	\$91,868	\$92,247	32%
Corporate	\$7,303	\$9,812	\$11,345	\$12,753	\$13,988	92%
Program Specific	\$1,500	\$1,276	\$1,569	\$1,026	\$1,231	-18%
Total	\$124,454	\$138,400	\$139,460	\$152,325	\$155,508	25%
Legis. Infrast. Sustainability	\$4,297	\$3,496	\$4,937	\$9,855	\$1,272	-70%
Total	\$128,751	\$141,896	\$144,397	\$162,180	\$156,780	22%

Source: FIR total tax, City's year end report tax less commitments

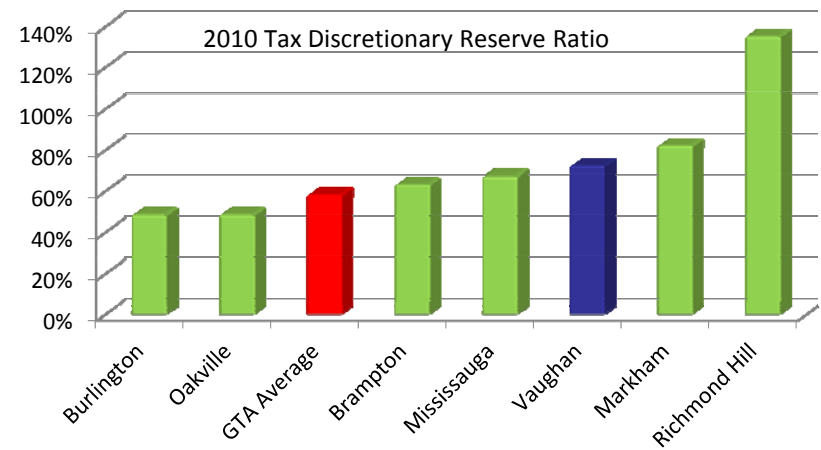
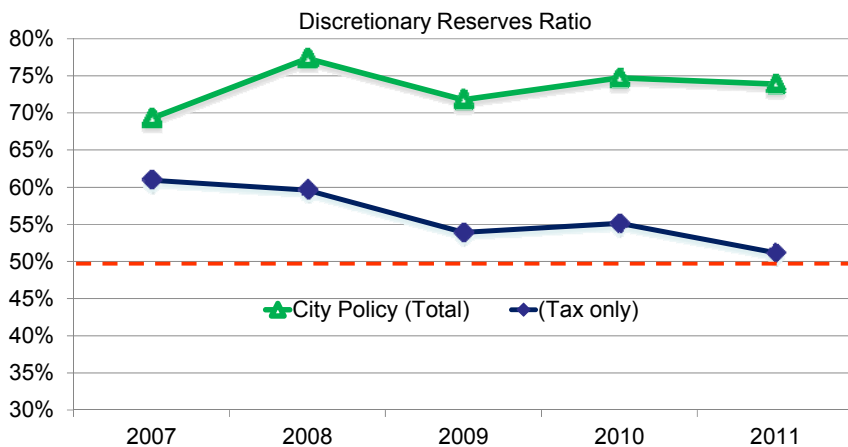
- The City's total tax discretionary reserves/reserve funds (net of commitments and excluding DCs and Developer Agreements) increased **25% since 2007**. As shown above:
 - The Infrastructure Sustainability Reserves increased only 5% since 2007. As will be discussed later in this section of the report, these reserves are underfunded;
 - Financial Sustainability Reserves have increased 32% since 2007;
 - Corporate Reserves have significantly increased since 2007, largely driven by increases in the Employee Benefits Reserve which has an increasing unfunded liability;
 - Program Specific Reserves are tied to underlying programs. The reduction is attributed mainly to the Keele Valley Landfill Reserve. This is forecast to continue based on an assumption that historical spending will continue (no formal plan); and
 - Legislative Infrastructure Sustainability Reserve Funds is the Gas Tax. Revenues of approximately \$7.3 million annually are received which is used to fund the capital program on an annual basis and year end balances vary based on timing of spending.

Appendix B provides additional reserve details that comprise each reserve classification.

Tax Discretionary Reserve Ratio

- The City's internal reserve policy is to maintain a Discretionary Reserve balance (excluding Working Capital Reserve which has a separate policy target and the Building Continuity Reserve which is segregated) as a percentage of own source revenues of **50%**. The City's Discretionary Reserve Ratio represents the reserves available to fund capital, program specific requirements, provide cash flows, fund corporate liabilities and provide protection against unpredictable one-time events in relation to own source revenues.
- The City's Discretionary Reserve Policy includes water/wastewater and tax reserves. As discussed previously, the FMP only relates to tax supported programs and services and, as such, a separate line has been shown in the graph above to isolate the Tax Discretionary Reserve Ratio. The City's tax discretionary reserves as a percentage of own source revenues remained above 50% throughout the period but have **declined by approximately 10%**.

- The discretionary ratio is a strong indicator of Vaughan's financial stability. The City's Discretionary Reserve Policy and target of maintaining a minimum balance of 50% was established in 1996, and has remained unchanged. As stated in the original policy recommendation, as additional information becomes available, further refinements will be necessary.
- The last section of this report (**Recommendations**) will review and re-evaluate the existing Discretionary Reserve Policy and make recommendations for change, as required.
- For comparison purposes the graph below uses Financial Information Returns (FIRs) which do not exclude commitments (as is the approach used by the City in calculating their internal policy). Further, the below noted graph also includes the Working Capital Reserve. As such, the ratio below differs from the line graph shown on the left column of this page, but is the only readily available means to undertake comparative analysis.



- As shown in the graph on the previous page, **Vaughan's tax discretionary reserve ratio is greater than most municipalities in the peer comparator group and the GTA.** The need for reserves will vary based on services provided by the municipality and the age, composition and amount of assets and infrastructure that each municipality supports as well as the type of liabilities.
- Richmond Hill sold its hydro utility and placed the proceeds in the reserves resulting in a strong relative reserve position.

Infrastructure Sustainability Reserves

- A review of the adequacy of the Infrastructure Sustainability Reserves was undertaken using a number of different indicators as follows:
 - Annual Infrastructure Funding Gap**—this compared the annual amortization expense based on the historical cost of the assets to the annual amount of funds that are contributed to the replacement of capital assets and infrastructure, including debt payments. This helps determine, on an annual basis whether sufficient funds are being set aside for the replacement of assets;
 - Infrastructure Sustainability Reserve Ratio**—this compared the existing Infrastructure Sustainability Reserves available in relation to the Accumulated Amortization which reflects the amount of assets and infrastructure that has been depreciated or used; and
 - Assets Beyond Their Useful Life**—this analysis identified the historical cost of assets that are past their theoretical life.

Annual Infrastructure Funding Gap

- Prudent asset management principles suggest that, at minimum, annual contributions to the Infrastructure Sustainability Reserves and capital replacement should be at least equivalent to the amortization expense. As shown in the table below, the total contributions to the capital program in 2011 (excluding roads) was \$8.1 million compared with the annual historical amortization of \$15.7 million, resulting in an annual infrastructure funding gap of \$7.6 million. The roads contributions, which include capital from taxation, gas tax reserves and associated debt charges was 17.3 million in 2011 compared with the annual amortization expense of \$23.4 million, reflecting an annual infrastructure gap of \$6.1 million. The combined **annual infrastructure funding gap was \$13.7 million.**

(000's)	Annual Amort. Expense	Total City Contributions to Capital	Variance
Land Improvements (Parks)	\$ 4,816	\$ 1,730	\$ (3,086)
Building & Improvements	\$ 5,087	\$ 2,354	\$ (2,733)
Leasehold improvements	\$ 258	\$ 750	\$ 492
Mach & Equip	\$ 3,141	\$ -	\$ (3,141)
Vehicles	\$ 1,454	\$ 1,241	\$ (213)
Furniture & fixtures	\$ 248	\$ 227	\$ (21)
ITM	\$ 696	\$ 1,774	\$ 1,077
Total Excluding Roads	\$ 15,699	\$ 8,075	\$ (7,624)
Roads	\$ 23,357	\$ 17,292	\$ (6,065)

- As shown above, parks, building and improvements and machinery and equipment are significantly underfunded.

Infrastructure Sustainability Reserve Ratio

- In addition to the annual infrastructure gap shown on the previous page, the City, like virtually every Ontario municipality, has an infrastructure deficit which accumulates annually as a result of a historic under-funding of assets.
- A common financial indicator used to determine the adequacy of reserves that support infrastructure, is to compare the infrastructure reserve balances in relation to the accumulated amortization (Infrastructure Sustainability Ratio). Ideally, this ratio should be 100% or greater, meaning that the amount available in reserves at any time is equal to the amount of assets that has been depreciated or used (based on an historical cost basis). This is based on the principle that the City should set aside funds, on a regular and planned basis, to support infrastructure renewal.
- A target of 100% is conservative because accumulated amortization is based on historical costs and does not represent the amount of money that will ultimately be required to replace assets. For example, if costs were to increase by 2% annually related to inflation, in 20 years the cost to replace the asset would increase by 50%.

(000's)	Reserve Balance	Accumulated Amortization	Infrastructure Sustainability Reserve Ratio
Total Tax (Excluding Roads)	\$ 16,064	\$ 159,019	10%

- Infrastructure Sustainability Reserve Ratio for tax supported capital programs (excluding roads which is funded by debt) is **10%, well below the recommended 100% ratio**. This calculation is based on the theoretical useful life of assets as reflected in the City's PSAB policy. The actual reserve requirements should be based on asset condition assessments for every asset. However, this measure is still valuable as an estimate of the potential reserve requirements based on the existing assets.
- Roads has been shown separately as the City currently funds the roads program through the issuance of debt.

Assets Beyond Their Useful Life

- As shown in the following table, the City currently has \$42.4 million in assets that are past their theoretical useful life.

Infrastructure Reserve	Items Past Lifecycle (000s)
Vehicle Replacement	\$ 6,005
Fire Equipment Replacement	\$ 3,963
Heritage Fund	\$ 797
Building & Facilities Reserves	\$ 13,189
Parks Infrastructure	\$ 15,257
Streetscapes	\$ 2,317
City Playhouse	\$ 80
Uplands Capital Improvement	\$ 763
Total	\$ 42,372

According to the Federation of Canadian Municipalities, Canadian cities are facing a combined infrastructure deficit of \$123 billion, based on a recent study by a McGill University engineering professor. This money is necessary for building, maintaining and repairing bridges, roads, and transportation and sewer systems in Canadian cities.

Excerpts from the City's Long Term Financial Plan Reports

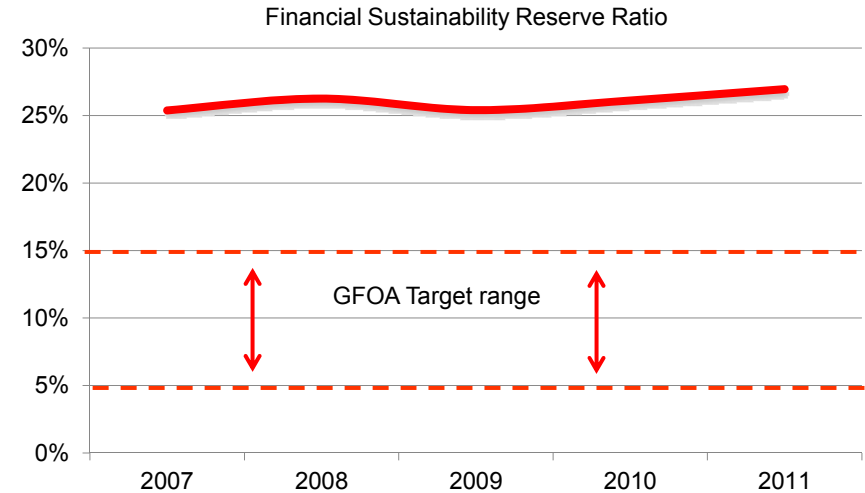
- The 2011 LRFP report includes a policy for new infrastructure that focuses on the following principles:
 - Annual contributions based on lifecycle replacement principals; and
 - Annual inflationary adjustments to contributions to keep pace with future values.
- This policy will safeguard against a widening funding gap, resulting from new growth based infrastructure coming on board.

- In summary, there are numerous indications that the City's Infrastructure Sustainability Reserves are currently underfunded and there exists infrastructure funding gaps resulting from under-contributions in previous years.
- While efforts have been made to close the gap by making annual contributions to reserves for new assets, additional strategies are required.

- The last section of this report (***Recommendations***) includes additional strategies that Council may wish to consider to further address the existing infrastructure gap. These include:
 - Gradually increasing contributions for the replacement of existing assets through planned contributions;
 - Utilizing a portion of the assessment growth to transfer to the Infrastructure Sustainability Reserves;
 - Redistribution of reserve balances;
 - Transferring additional funds to Infrastructure Sustainability Reserves as debt charges fall off;
 - Prioritizing capital replacement projects; and
 - Reviewing user fees.

Financial Sustainability (Stabilization) Reserves

- The City maintains stabilization reserves to offset extraordinary and unforeseen expenditure requirements, revenue shortfalls and to manage cash flows. This includes reserves for severe winter conditions, tax stabilization, working capital, year-end surplus and building and planning reserve funds.
- The City has an existing policy to maintain a minimum balance in the Working Capital Reserve (which is one reserve within this classification) at 10% of the own source revenues. The Working Capital Reserve position is currently at almost 13%. The City has other Financial Sustainability Reserves that should be taken into consideration as part of this policy requirement (e.g. winter and tax stabilization).
- On a consolidated basis, the Financial Sustainability Reserves as a percentage of own source revenues (excluding Building, Engineering and the Year End Surplus which are segregated for a specific purpose or fully committed) is 27%, **reflecting significant flexibility**.
- GFOA recommends that municipalities maintain Stabilization Reserves/Reserve Funds for the general tax base within a target range of **5%-15%** of own source revenues to provide sufficient liquidity and protection against unforeseen events.
- There are opportunities to reallocate some of the Financial Sustainability Reserves to address some of the infrastructure sustainability challenges.



Source: City reserve reports and FIRs



Corporate Reserves

- One of the measures of financial sustainability is that future generations are not forced to pay for services provided to the current generation. The City incurs liabilities that do not have to be paid immediately. For instance, the City will face future budget pressures as the City workforce ages and post-retirement or post-employment benefits start to be paid out in larger quantities. Prudent and sustainable financial management strategies are needed to ensure future generations are not required to absorb a disproportionate share of these costs.
- As such, the City has a number of Corporate Reserves to protect against the consequences of certain risks, liabilities and corporate programs in such areas as insurance, WSIB and employee benefits.
- Consistent with the practice in the City of Vaughan, it is common for municipalities to establish Corporate Reserves to provide for employee accident and benefit liabilities.
- Municipalities undertake actuarial valuations annually for a number of Corporate Reserves to determine potential liabilities which is consistent with the practice in the City of Vaughan.
- The extent of the unfunded liabilities varies across the municipal sector and as such there is no consistent strategy identified in terms of the amount of coverage required or target balance for Corporate Reserves.

- As of 2011 year end, there was \$66 million in post-employment liabilities in the City of Vaughan and the 2011 year-end balance in the associated reserve was \$11 million.
- It is financially prudent to have sufficient Corporate Reserve Funds to cover associated liabilities. However, based on a review of Corporate Reserve Funds in other municipalities, this is an area where unfunded liabilities exist in a number of municipalities, including Vaughan.
- Because the liabilities do not come due at the same time, to avoid significant budget fluctuations, it is prudent to identify what is a reasonable level of reserves based on expected or forecasted timing of future payment requirements.
- An approach undertaken by some municipalities has been to gradually address the unfunded liability over a period of 5-10 years and by ensuring that annual contributions are made reflective of historical and forecast requirements to ensure that the liability does not continue to grow. Strategies will be included in the Recommendations section of the report.

Program Specific Reserves

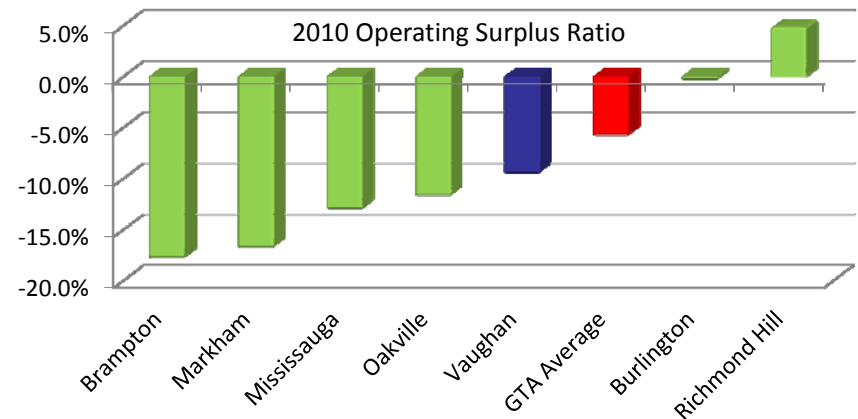
- Program Specific Reserves/Reserve Funds are set aside for specific purposes. These reserve funds are to be used for their identified purpose. These types of reserves and reserve funds may also include special one-time purchases or activities approved by Council. There are no issues with respect to these reserves. However, formalized policies or practices should be established for each Program Specific Reserve Fund.

Operating Surplus

Financial statements are now prepared on a full accrual basis in accordance with accounting standard PS3150. On an accrual basis, expenditures consist of operating costs excluding transfer to reserve, debt interest payments and amortization of capital assets. **Vaughan is operating at a surplus based on its cash flow requirements however amortization is a non-cash expense, which means that it does not correspond to a cash outflow.** Amortization, instead, reflects the annual allocation of a prior capital expenditure. This is a financial indicator that credit rating agencies use on a regular basis.

- An operating surplus (deficit), on an accrual basis, arises when revenues exceed (are less than) operating expenses, including amortization. This is the amount available for capital replacement.
- The use of accrual accounting which was introduced in 2009 by the Provincial government aids in determining if current revenues generated are sufficient to pay for use of current services (e.g. operating surplus/deficit).
- The calculation of a surplus (deficit) provides an assessment of a municipality's financial performance and sustainability.
- **If a municipality is not generating an operating surplus on a consistent basis, it is most likely underfunding its assets and accordingly not operating in a sustainable manner.**
- The **operating surplus/deficit ratio** is the amount of surplus/deficit as a percentage of own source revenues.

- A negative ratio indicates the percentage increase in own source revenues that would be required for a break-even operating result.
- A five year trend analysis could not be undertaken for this indicator because, prior to 2009, municipalities did not report amortization as an operating expense.
- In 2010, Vaughan had a tax **operating deficit ratio** on an accrual basis of 9.5%, a further indication that insufficient funds are being generated for the replacement of its capital infrastructure. This is not unique to the City, as shown below, where all but one of the peer municipalities experienced an operating deficit in 2010. The GTA average operating deficit was 5.8%.
- While there is no specific target, municipalities should, at a minimum, operate at break-even position which would mean that revenues are sufficient to recover the cost of operations, including annual amortization on a historical cost basis.



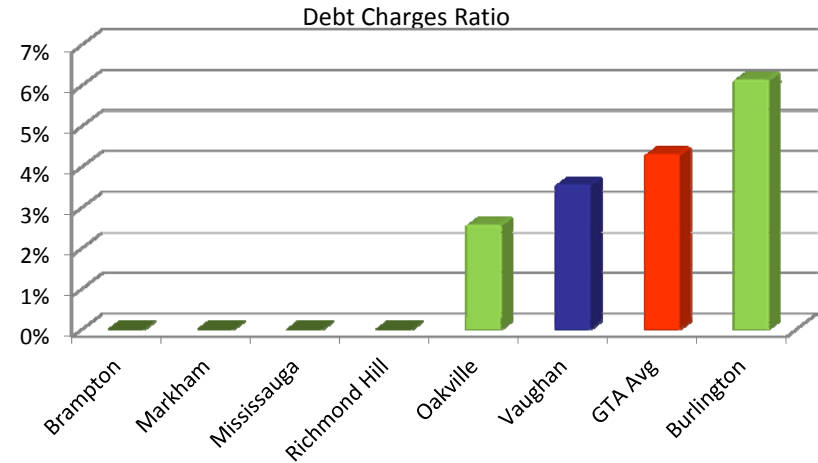
Source: 2010 FIRs as 2011 were not available for all municipalities

Debt Management

When municipalities issue debentures, they enter into a long-term commitment that requires them to make principal and interest payments over the life of the debentures. Hence, they need to ensure that:

- Future debt service payments can be made in full and on time, without jeopardizing the provision of essential services;
- Outstanding debt obligations will not threaten long-term financial stability of the municipality; and
- The amount of outstanding debt will not place undue burden on residents and businesses.

The Province regulates the amount of debt municipalities issue by setting an annual repayment limit for each municipality. This is the maximum amount by which a municipality may increase its debt. The repayment limit is set at 25% of a municipality's own source revenues.



Source: 2010 FIRs as 2011 were not available for all municipalities

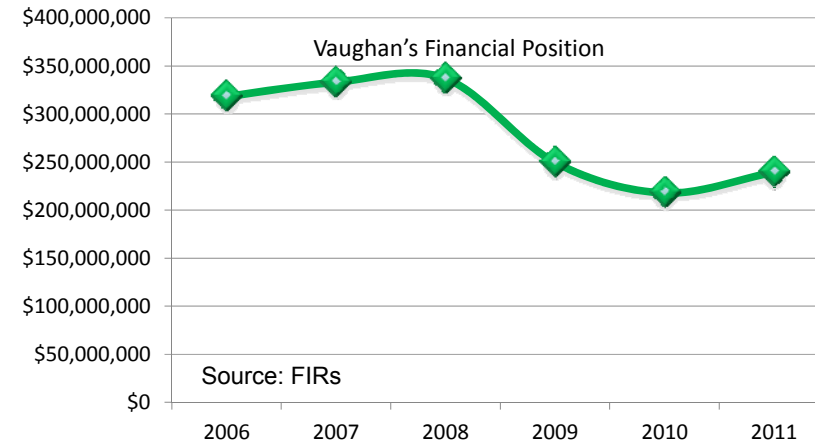
- The City's tax debt charges as a percentage of own source revenues (debt ratio) have remained relatively consistent over the past five years.
- The City annually plans to issue \$9 million in tax related debt amortized over a 10 year period to fund the roads replacement program. Although more costly due to the addition of interest costs, the overall substantial value of this asset and its lengthy life cycle supports the use of long term debt.
- The City's policy is to maintain a Debt Charges Ratio at 10% or lower which is consistent with credit rating agency guidelines. In 2010, the City's **ratio for tax supported debt ratio was 3.6%, well below the Provincial limit and the City's policy.**

Financial Position

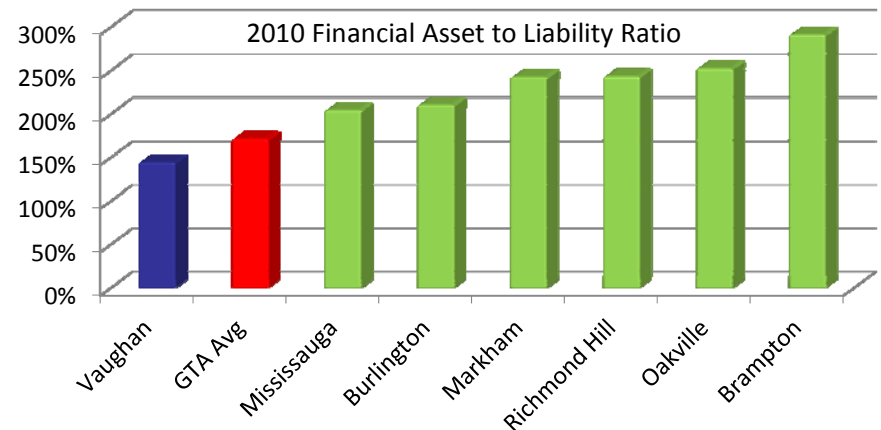
A municipality's financial position is defined as the total fund balances including equity in business government enterprises less the amount to be recovered in future years associated with long term liabilities. A comparison was made of the City's overall financial position (assets less liabilities) from 2006 to 2011.

- Vaughan's financial position (assets in excess of liabilities) decreased in 2009 primarily as a result of \$60 million in hospital funding but has since increased.
- The table below helps to explain the City's change in financial position from 2006-2011. The City's assets increased by \$48.3 million from 2006-2011 but the liabilities increased \$127.0 million. The main reason for the decrease was due to a swap between financial assets to tangible capital assets (i.e. City Hall, Hospital Land).

(000's)	2006	2011	Difference	% Difference
Assets				
Cash & Investments	\$ 375,607	\$ 370,648	\$ (4,959)	-1.3%
Government Enterprises (Powerstream)	\$ 216,720	\$ 256,227	\$ 39,507	18.2%
Receivables	\$ 61,192	\$ 76,498	\$ 15,306	25.0%
Other	\$ 2,381	\$ 838	\$ (1,543)	-64.8%
Total Assets	\$ 655,900	\$ 704,211	\$ 48,311	7.4%
Liabilities				
Accounts Payable	\$ 74,615	\$ 77,737	\$ 3,122	4.2%
Deferred Revenue	\$ 173,737	\$ 255,435	\$ 81,698	47.0%
Long Term Liabilities	\$ 57,007	\$ 66,279	\$ 9,272	16.3%
Post Employment Benefits	\$ 32,319	\$ 65,281	\$ 32,962	102.0%
Total Liabilities	\$ 337,679	\$ 464,732	\$ 127,053	37.6%
Net Financial Position	\$ 318,221	\$ 239,479	\$ (78,742)	-24.7%



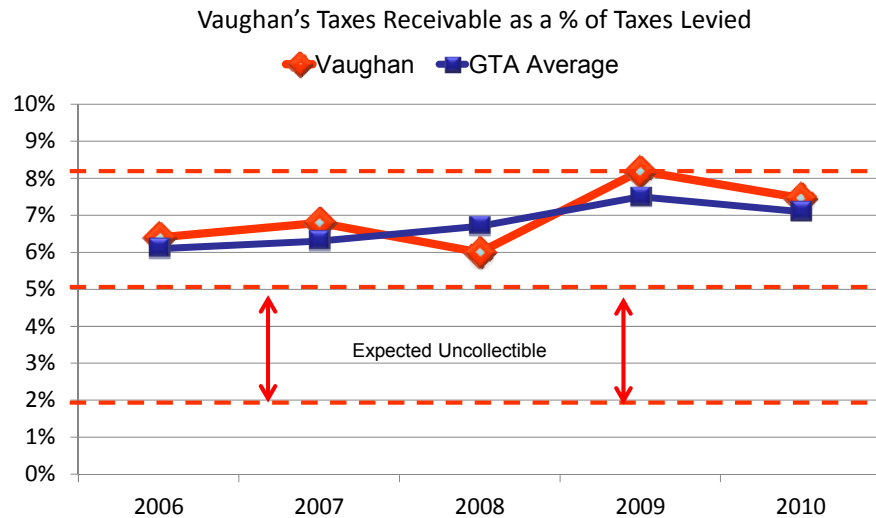
- A ratio of financial assets to financial liabilities was calculated for Vaughan and its peer municipalities. For every dollar of financial liability there is \$1.40 of financial assets in Vaughan. In 2010 Vaughan has the lowest ratio, meaning that the City has more liabilities in relation to its assets than the peer municipalities however it is relatively close to the GTA average. This has improved to \$1.51 in 2011. A ratio of 1:1 or better is recommended by credit rating agencies. Brampton with no debt has the highest asset to liability ratio.



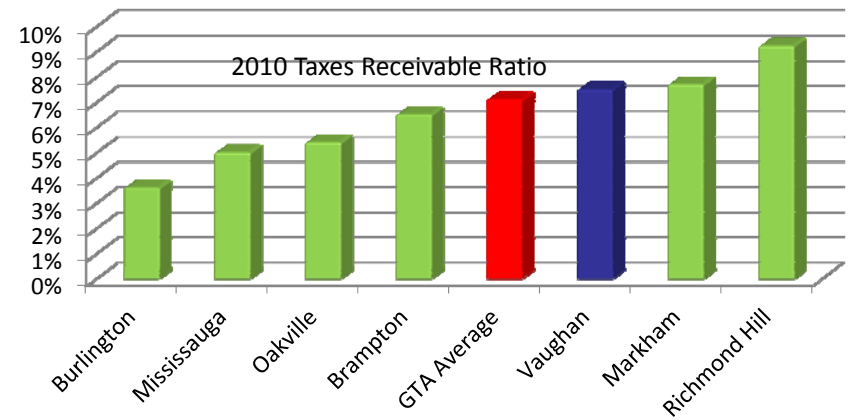
Taxes Receivable

Every year, a percentage of property owners are unable to pay property taxes. If this percentage increases over time, it may indicate an overall decline in the municipality's economic health. Credit rating agencies assume that municipalities normally will be unable to collect 2 - 5% of its property taxes within the year that taxes are due. If uncollected property taxes rise to more than 8%, credit rating firms consider this a negative factor because it may signal potential instability in the property tax base. The City of Vaughan is **within the range considered to be acceptable**.

- Vaughan's ratio has remained at or below the credit rating limit in every year. Vaughan's ratio is close to the GTA average in each year.



Source: FIRs



Source: 2010 FIRs as 2011 were not available for all municipalities

- Vaughan's ratio in 2010 was 7.5% compared with the survey median of 6%. It is worth noting that all York municipalities included in the comparison are at the upper end of the peer comparison.



Financial Position Evaluation
What Does This Mean to the City of Vaughan's FMP?

One of the key questions identified earlier in the report to determine the financial health of the City included:

Is there sufficient financial flexibility to address unexpected events, uncertainty and future liabilities?

As shown in this section of the report, the City of Vaughan has a number of positive indicators that reflect a reasonable level of financial flexibility including:

- Relatively high discretionary reserves in relation to own source revenues and in relation to other municipalities surveyed. In 2011, the Discretionary Reserve Ratio exceeds the City's internal policy of maintaining a minimum of 50%;
- Relatively high Financial Sustainability Reserves, exceeding the City's own target policy of maintaining a minimum of 10% in Working Capital as a percentage of own source revenues as well as exceeding GFOA best practices; and
- Low debt levels, well below the City's internal policy of a maximum of 10% of own source revenues and provincial guidelines of 25%.

However, the City has a significant unfunded liability associated with post-employment benefits. Currently, the reserve to support this liability is 17% funded. As mentioned earlier, because the liabilities do not come due at the same time, it is reasonable to have some unfunded liabilities. Strategies to ensure that funds will be available as the liabilities come due will be presented later in the report.

Another key question to assess the City's financial health is:

Is the City's infrastructure network sustainable and adequately funded?

The City of Vaughan has a long standing history of financial planning to support the infrastructure. However, like the vast majority of other municipalities across Canada, there are a number of indications that infrastructure is not adequately funded including:

- The City has \$42.4 million in assets beyond their theoretical useful life;
- The annual contributions to capital are well below the historical annual amortization;
- The Infrastructure Sustainability Reserves as a percentage of accumulate amortization is 10%, well below the 100% suggested target; and
- Infrastructure sustainability has been a prevailing theme for a number of years as reflected in the City's long term financial planning documents but is an ongoing challenge that is yet to be fully addressed due to other corporate initiatives, growth challenges and affordability considerations.

In developing the FMP, **intergenerational equity** will be taken into consideration which ensures that taxpayers in each time period should, as a group, contribute to public expenditures from which they derive benefits. This is established on the principle that each generation of users should pay for the infrastructure that they require and not for infrastructure required by other generations. However, a challenge exists when past generations did not fully contribute at this level which has led to the infrastructure deficit in Vaughan as well as other Ontario municipalities.

Future financing mechanisms should be designed to match the cost of the infrastructure with the benefits of the users over time. This would require an increase in the contributions to infrastructure reserves to align benefits with contributions. Addressing the past deficit is also a factor that will need to be considered in the FMP.

Existing Assets

- Efforts will be made to address the existing infrastructure deficit and ensure that the gap does not widen. Based on affordability considerations, the funding for asset replacement will be made through **calculated annual contributions** from the Operating Budget using a **phase-in strategy** to take into consideration taxpayer affordability. Assessment growth and reserve reallocations will also assist in closing the gap. Opportunities also can be explored to extend the term of debt.

New Assets

- Consistent with the City's existing policy, the FMP will identify the impact of new facilities and infrastructure, including a contribution for the replacement of the assets in the future, using lifecycle costing to avoid increasing the infrastructure deficit.
- Where new assets are financed from the Infrastructure Sustainability Reserves (internal financing) consideration will be given to repaying the borrowings, including interest, to the reserve from future operating budgets over the life of the asset to help ensure that sufficient funds are available for the replacement and refurbishment of all existing assets.

As well, the FMP will address funding deficiencies in other corporate reserves. Opportunities will be explored to re-direct funds in the stabilization reserves and other reserves to these areas.

Municipal Levy, Property Taxes and Affordability

Prior to establishing a FMP, it is important to understand the cost of municipal services as well as affordability metrics to ensure that there is an alignment between the cost of municipal programs and services and the ability and willingness of taxpayers to support the existing service levels. This section of the Financial Health Review provides an overview of cost of service from 2007-2011 in the City of Vaughan and in relation to peer municipalities. In addition, property taxes are reviewed in relation to household income to provide an indication of the affordability of services in the City of Vaughan. Finally, this section of the report compares the competitiveness of non-residential property taxes.



Vaughan takes the management and stewardship of public funds very seriously and continues to demonstrate financial leadership and discipline, ensuring residents receive value for their tax dollars.

As part of an ongoing process of continuous improvement, the following summarizes some of the key initiatives that have been undertaken by the City in recent years to support the delivery of efficient and effective services to the community of Vaughan:

- **Departmental business plans** are prepared annually identifying business planning objectives and performance measures to enhance transparency and resident awareness of service delivery and performance pressures;
- In 2011, the City implemented a **multi-year budget** to help facilitate long range forecasting and to allow taxpayers in the City the ability to plan for the future;
- In 2011, the City undertook a detailed **Corporate Structure Review called "Taking the City to the Next Level"**. The purpose of the Corporate Structure Review was to support the City's Strategic Plan, Vaughan Vision 20/20 and make recommendations to change the current structure to enhance the City's ability to capitalize on challenges and opportunities as they emerge over the next decade;
- In 2012, the City of Vaughan updated its **Ipsos Reid Citizen Survey** to explore citizen feedback on a variety of topics to ensure that the City aligns the programs and services with taxpayer expectations; and
- The City currently has many processes in place that encourage and foster improved effectiveness and efficiency (i.e. internal audit, operational studies, suggestion programs, etc.). In addition, a **program review** was implemented.

The City has a strong commitment to fiscal accountability and sustainability. Sustainability by definition focuses on the ability to maintain an activity over an extended time horizon. To ensure that the City is operating on a sustainable basis, the City's multi-year budgets and business plans allocated the limited resources available to achieve the City's objectives and establish priorities. The following provides the guidelines that were used to develop the City's 2013-2016 Budget and Business Plans:

Excerpts from the Budget and Business Plan Guidelines

"To balance the pressures of maintaining existing services and growth requirements against available future funding/City resources necessary to undertake and manage operations and corporate initiatives"

Managing Our Future

- Resourcing our Vision "Corporate Planning Process"
- Looking to the future with multi-year budgets
- Managing operations through business planning

Managing Tax Increases

- Specific operating budget policy & guidelines
- Specific capital budget policy & guidelines
- A thorough multi-layer review process



Municipal Levy, Property Taxes & Affordability Dashboard Evaluation

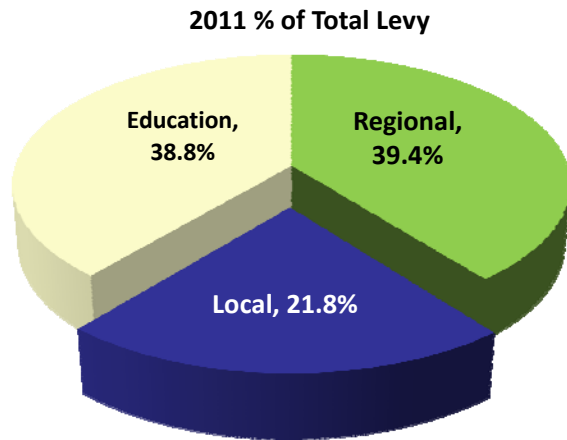
The City has always considered increasing taxes as a last resort. Through prudent policies, tight budget guidelines and strong leadership, the City provides value to residents with high quality services. The table below reflects an evaluation of the municipal levy, property taxes and affordability indicators in the City of Vaughan over time and against peer municipalities.

Municipal Levy and Affordability	Comparison	
Municipal Levy		
Municipal Levy Per \$100,000 Assessment		
Residential Affordability - Average Residential Municipal Property Taxes as a % of Income		
Non-Residential Tax Ratios		
Non-Residential Property Taxes		

The City has been holding the line on property tax increases through prudent budget guidelines, resulting in lower annual increases than many of its peer municipalities. However, the ability to hold the line on tax increases in the future may prove to be difficult at the same time that new corporate initiatives are being undertaken. The City's strong assessment base helps to support growth related pressures that are expected to continue into the future. From an affordability perspective, the City's residential and non-residential taxes are competitive. The next section provides additional detail on the above noted indicators.

Municipal Levy

Property taxpayers in the City of Vaughan receive municipal programs and services through a two-tiered government structure: Local and Regional. As shown in the following pie chart, in 2012 approximately 39% of property taxes were related to the Regional cost of services, another 39% are related to education taxes, with the remaining 22% related programs and services delivered by the City of Vaughan. As such, the **City only controls the smallest portion** of the total cost of property taxes and has no control over Regional or Education costs.



Source: Levy By-law and 2011 Operating Budget

The FMP forecasts only the local portion of the property tax bill.

Factors Impacting the City's Net Levy

A common but misleading measure used to assess a municipal budget increase is the Consumer Price Index (CPI), but it is important to understand **what is typically not included in an inflation index**. For example, there are many other factors that impact the City's cost of municipal programs and services including but, not limited to the following:



Municipal Price Index

More and more municipalities are establishing an internal **municipal price index (MPI)** by applying relevant indexes/ indicators to the weighting of major expense categories. This takes into account the actual increases in many expenditure items that have exceeded the cost of inflation such as insurance, utilities and materials and supplies. The City of Vaughan has been a leader in documenting the trends in these costs and incorporating these assumptions into planning forecasts and annual budgets.

The following table illustrates the City's MPI for 2012-2014.

Component	Inflation Figure	Source	Scenario #1		Scenario #2	
			% of Budget	Weighted Average	% of Budget	Weighted Average
Salaries & Benefits	4.0%	CoV settlement agreements	58.5%	2.3%		
	2.2%	Ministry of Labour			58.5%	2.3%
Contracts & Materials	5.1%	5 yr Average Historical Increase	16.0%	0.8%	16.0%	0.8%
Utilities and Fuel	11.2%	Stats Can. Aug 2011 - Energy CPI	3.5%	0.4%	3.5%	0.4%
Capital Funding	3.4%	Construction Price Index	3.0%	0.1%	3.0%	0.1%
Insurance	20.8%	AMO Municipal Insurance Survey	2.4%	0.5%	2.4%	0.5%
All Other	1.8%	Core Inflation - Aug. 2011	16.6%	0.3%	16.6%	0.3%
Calculated MPI				4.5%		3.3%

- Since 2009, the City's MPI has ranged from 2.85%-4.5% compared with CPI of 1.1%-2.5% during the same time.
- It is important to note the City's expenses include **growth impacts**, which are not included in the MPI or CPI.

Growth Related Influences

- The City's budgetary increases are also impacted by increases in the service portfolio to address growth related requirements.
- The following table illustrates some of the 2012 anticipated increases in programs and services which will also directly impact the capital and operating budget.

	2012		2012
Road km	15	Tennis Courts	2
Sidewalk km	50	Ball Diamonds	1
Waste/Recycling Stops	3,300	Indoor Pool Tanks	2
Streetlights	1,625	Outdoor Soccer Fields	2
Trail Ha	12	Indoor Skating Rinks	2
Playgrounds	4	Skateboard Parks	2

- As assets are added, the operating costs associated with programs and services increase.
- Assessment growth which is estimated at approximately 3.5% for 2012 and 3% for 2013 to 2014 partially offsets the increase in the cost of service. Although not specifically allocated, these funds help offset the increasing service costs associated with community growth.

Corporate Initiatives and Corporate Priorities

- In addition to growth-related programs and services, the City's budget is also impacted by new corporate initiatives and priorities.
- These corporate initiatives and priorities are essential to move the City towards its vision, meet the communities evolving needs, transition to an intensified urban area, and benefit from value propositions that improve the City's operations. For example:

Vaughan Metropolitan Centre	Zoning By-law Review
Operational Reviews	Performance measurement
Electronic Data Management	Citizen Public Engagement
LEED's Certified Buildings	Theatre District
Artificial Soccer Turfs	Civic Centre City Square
Asset Management	And many more initiatives illustrated In the City Vision and various
Emerald Ash Bore Program	Master Plans

- These items typically result in the additional funding or resourcing requirements beyond that normally required to sustain ongoing City operations (e.g. growth and municipal price pressures). However, due to perceived funding constraints and limited funding sources, corporate initiatives and priorities compete directly with ongoing operational requirements, which can potentially result in diminishing service levels or delayed initiatives.

Infrastructure Repair and Replacement

- As discussed in the previous section of the report, the City must set aside funds for the replacement of assets as they reach the end of their useful life.
- If insufficient funds had been set aside in previous year's budgets and there is a desire to address infrastructure gaps, this will also impact the budget and future budgets and can be a significant factor on the operating budget.

Legislative Requirements

- Municipalities must adhere to legislative and regulatory requirements as set out by the Provincial and Federal Governments. These can have an impact on the cost of operations beyond inflation. For example, Accessibility Plans are a requirement under the Ontarians with Disabilities Act, 2001 (ODA) and the Accessibility for Ontarians with Disabilities Act, 2005 (AODA). The City's accessibility planning process has been set out in the Vaughan Vision 2020. Accessibility is one of Vaughan's strategic initiatives, which means it has a high priority in all planning. There are annual budget implications related to this important initiative that place pressures on the cost of service.

Excerpts from the Budget Guidelines

As identified in the City's Budget Guidelines, all account budgets will remain at prior year budget levels with the exception of established commitments and pre-defined external pressures. This action will limit the base budget increase to the following items:

- Council approved employment agreements;
- Full year impact of prior year decisions;
- Council authorized recommendations;
- Supported external service contract commitments;
- Established utility & insurance increases, where justified;
- Debenture obligations;
- Defined corporate contingency items; and
- Reserve contributions in accordance with approved policy.



Under these actions, departments are only permitted to include very specific increases, typically related to predetermined agreements, contracts or Council approvals.

Determining which resource requests move forward is a very difficult and challenging task as all departments are experiencing challenges associated with maintaining service levels, meeting legislative requirements, and implementing initiatives to move the City forward. Recognizing the value of requests greatly exceed the amount of available limited resources, a prioritization process to evaluate each request based on a blend of associated municipal value and risk criteria is performed.

- By taking such an approach, departments must strive to achieve efficiencies within the operations to absorb additional increases in the cost of service for such expenditures as materials and supplies. The City has, in fact, been able to deliver a budget with increases at a level lower than the MPI adjusted percentage guide; clearly illustrating **Vaughan is continuously improving** and providing the taxpayer with value. However, the ongoing ability to create efficiencies when many of the costs are uncontrollable by the City may not be achievable on an annual basis throughout the forecast period.

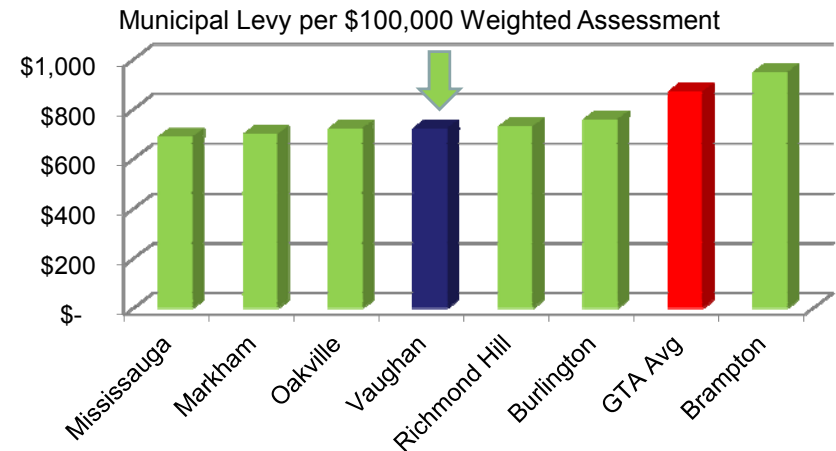


Municipal Levy Per Household and Per \$100,000 of Assessment Comparison

In order to better understand the relative municipal tax position for the City and to take into consideration the impact of growth, a comparison of net municipal levies on a per \$100,000 of assessment was used. This analysis does not indicate value for money or the effectiveness in meeting community objectives as net municipal expenditures may vary as a result of:

- Different service levels;
- Variations in the types of services;
- Different methods of providing services;
- Different residential/non-residential assessment composition;
- Varying demand for services;
- Locational factors;
- Demographic differences;
- Socio-economic differences;
- Urban/rural composition differences;
- User fee policies;
- Age of infrastructure; and
- Use of reserves.

Note: These measures indicate the total net municipal levy (Regional and Local) to provide services to the municipality. The Local levy could not be isolated for comparative purposes because there are differences in which level of government delivers the service (e.g. transit, solid waste).



Source: BMA Municipal Study using Levy By-laws

- A comparison of the 2011 levy per \$100,000 of weighted assessment provides an indication of the levy in relation to the assessment base upon which taxes are raised. As shown above, the City of Vaughan has one of the lowest levies (local and regional) per \$100,000 of assessment. The City has low relative tax rates.
- Similar to other municipalities and organizations, the City of Vaughan faces multiple pressures annually to help reduce the increases experienced due to growth and uncontrollable factors. As expenditure demands increase, the City's options to meet those demands are restricted to efficiencies, user fees, and lastly taxation.

- An analysis was undertaken on the change in total municipal levy per capita from 2006-2011 across the peer municipal group to provide an indication on the relative increases in municipal levies over time, taking into consideration growth. As shown in the following table, the **City of Vaughan's increase during this time was amongst the lowest in the survey, despite having one of the fastest population growths.** This again reinforces the City's success in holding the line on expenditure increases.

% Change in Total Municipal Levy per Capita 2006-2011	
Markham	9%
Brampton	14%
Vaughan	20%
Richmond Hill	22%
Oakville	27%
Burlington	31%
Mississauga	34%

- It should further be noted that the City's share of the Region's costs on a per capita or per household basis are significantly higher than their counterparts in Markham and Richmond Hill due to the strength of the assessment base. This increases the overall cost of service in the City of Vaughan.

Excerpts from Ipsos Reid Citizen Survey



- According to the Ipsos Reid Citizen Survey undertaken in 2012, the vast majority of residents continue to believe they **receive good value for their tax dollars.**
- City residents are slightly more likely to believe that they receive a **better value for tax dollars** compared to residents in other communities across Canada.
- Slightly more residents believe that the City should **hold the line on increased taxes or user fees** even if it means reductions in service, compared to those that would support an increase in taxes or users fees to maintain existing services.
- 20% of residents cite taxation and municipal government spending as the most important issue facing their community, an increase of six points since 2011.



Affordability

The following table compares upper and lower tier property taxes based on a 3,000 square foot, 4-bedroom, 2-car garage home in relation to disposable income to gain an appreciation of the municipal property tax burden in Vaughan in compared to peer municipalities.

Municipality	2011 Two Storey Home	2011 Municipal Property Taxes	2011 Disposable Income	2011 Municipal Taxes as a % of Disposable Income	2011 Municipal Taxes as a % of Average Dwelling Value
Oakville	\$575,979	\$ 4,187	\$ 103,900	4.0%	0.7%
Richmond Hill	\$552,250	\$ 4,000	\$ 83,400	4.8%	0.7%
Markham	\$607,067	\$ 4,256	\$ 84,600	5.0%	0.7%
Mississauga	\$536,115	\$ 3,922	\$ 75,500	5.2%	0.7%
Burlington	\$553,639	\$ 4,236	\$ 81,100	5.2%	0.8%
Brampton	\$429,288	\$ 4,082	\$ 71,900	5.7%	1.0%
Group Average	\$542,390	\$ 4,114	\$ 83,400	5.0%	0.8%
Group Median	\$552,944	\$ 4,134	\$ 82,250	5.1%	0.7%
Vaughan	\$569,124	\$ 4,103	\$ 90,900	4.5%	0.7%

Source: MPAC (dwelling value), BMA Municipal Study (Property Taxes)

- The average home value in the City of Vaughan is third highest in the survey of peer municipalities.
- Taking into consideration income levels, municipal property taxes in Vaughan in relation to disposable income are 3.9% which is at the survey average.
- Municipal property taxes as a percentage of average dwelling in Vaughan is lower than the survey average.

Non-Residential Municipal Tax Ratios

Tax ratios define each property class's rate of taxation in relation to the rate of the residential property class. The tax ratio for the residential class is set by the province at 1.00. The different relative burdens are reflected in the tax ratios. These relative burdens are used to calculate the municipal tax rate of each property class in relation to the residential class.

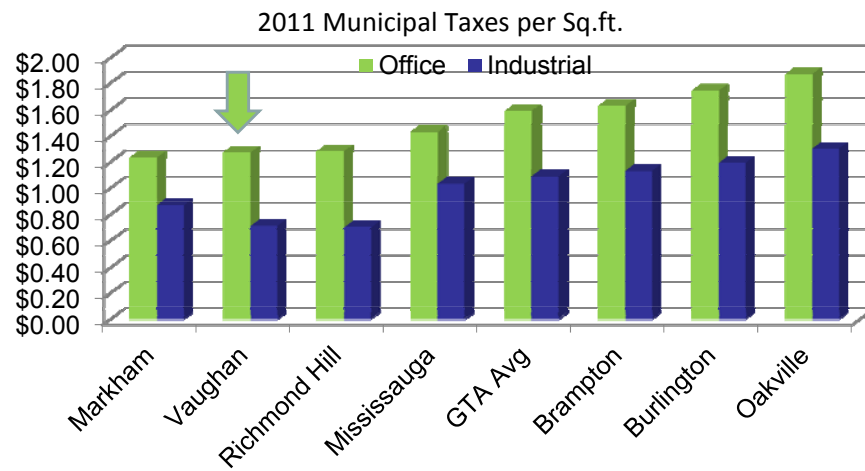
The Region of York is responsible for setting the tax ratios for all York municipalities, including the City of Vaughan. As shown below, the tax ratios in the Region of York are the lowest in relation to its peer municipalities. For example, a commercial property in the Region of York pay 1.14 times the residential municipal tax rate compared with the Region of Halton which charges 1.46 times the residential rate. This supports economic development by providing a low property tax environment for all non-residential properties.

2011 Tax Ratios			
	Multi-Residential	Commercial	Industrial
Halton Region	2.26	1.46	2.36
Mississauga	1.78	1.41	1.57
Brampton	1.71	1.30	1.47
York Region	1.00	1.14	1.33

Source: 2011 BMA Municipal Study

Competitive Non-Residential Municipal Taxes

A comparison was made of the non-residential municipal property taxes on a per square foot basis for office and industrial properties across the peer comparative municipalities to gain perspective on the municipal taxes paid. This takes into consideration the tax ratios, municipal and education taxes and the current value assessments.



- The non-residential municipal property taxes paid for similar types of non-residential buildings is **second lowest in the survey of peer municipalities for office and industrial properties.**
- Vaughan, as well as the other York municipalities, has **very competitive non-residential property taxes** as a result of low tax ratios in the commercial and industrial classes. This reflects strong economic development strategies. It should be noted that the Region is responsible for setting tax policy.

Municipal Levy, Property Taxes & Affordability What Does This Mean to the City of Vaughan's FMP?

The City of Vaughan is recognized as a leader in financial management and budgeting and has received the Government of Finance Officers Association (GFOA) **Distinguished Budget Presentation Award for the past three years.**

In response to one of the key questions posed at the beginning of this section of the report:

Can the City continue to pay for the services currently provided?

There are a number of indicators that reflect a positive and competitive tax environment and the ability to pay for services currently provided including:

- Lower annual increases in property taxes on a per capita basis than many of its peer municipal comparators;
- Tax increases have been lower than the Municipal Price Index (MPI) by operating efficiently and, to the extent possible, absorbing budgetary increases within the existing budget base;.
- Residential property taxes as a percentage of household income are comparable to peer municipalities, reflecting an average municipal tax burden; and
- Non-residential property taxes are amongst the lowest in the survey.

However, some of the challenges that the City will face include:

- Due to high assessment values, Vaughan bears a larger portion of regional costs which is expected to continue and place pressure on the cost of service;
- Holding the line on future property tax increases may be difficult at the same time that the City is considering undertaking a number of new corporate initiatives;
- The ability to create efficiencies and deliver property tax increase below the MPI where many of the municipal costs of service are uncontrollable and are escalating at a rate above inflation; and
- Funding the costs of infrastructure repair and replacement, as discussed previously, is a paramount concern for most municipalities but is particularly challenging in municipalities experiencing significant growth. This is largely caused from new facility construction being primarily funded through development charges, leaving the City to fund future infrastructure repair and replacement of assets at a later date from the City's tax base as well as the operating costs associated with the growth in roads, parks, recreation centres and other programs and services. These costs are not fully offset by increases in the assessment base, as will be illustrated in the FMP.



Another question posed to assess the City financial health includes:

Can the City's vision and corporate initiatives be achieved financially ?

As noted, the City will face some challenges in funding the existing services as well as being able to financially support all new initiatives that are being contemplated. The City will need to:

- Ensure that it prioritizes, plans, and has the available financial information with respect to corporate initiatives; and
- Ensure that the proposed new municipal programs and services are aligned with the community's expectations and willingness to pay for services. With a desire by the community to hold the line on tax increases, it is anticipated that the majority of new corporate initiatives currently being contemplated will not be achievable.

As the City moves forward, financial sustainability must continue as one of Vaughan's key priorities. Over the next decade, the City of Vaughan is expected to undergo a tremendous transformation fueled by sustained high growth rates, provincially driven intensification, increasing legislative requirements, mounting infrastructure renewal costs, and a number of vision based master plans reflecting important community needs. As the City becomes increasingly more sophisticated, it will also face increasing financial pressure beyond the many factors currently placing significant strain on the property tax rate to maintain existing service levels. These pressures are permanent and often require continuous funding solutions, typically taxation.

Summary - Assessment of the City of Vaughan's Financial Health

SWOT Analysis—Summary

The following table summarizes the key themes, the related SWOT analysis as well as the policies and strategies that will be explored later in the FMP. Appendix A provides additional detail on the SWOT analysis.

Themes	Strengths	Weaknesses	Opportunities	Threats	Policy Recommendations
<i>Planning/ Prioritization</i>	<p>Mult-year budget/ long term forecast</p> <p>*Program review framework</p> <p>*Staff level prioritization</p> <p>Annual Business Plans</p> <p>Corporate Initiatives</p> <p>Strategic Planning Documents</p> <p>Master Plans</p>	<p>Vision & Master Plans unresourced & not integrated</p> <p>Multiple initiatives</p> <p>Master Plans approved in principle</p> <p>Significant backlog of funding requests</p> <p>Undeveloped Performance Measurement system</p>	<p>Public education/engagement</p> <p>Formalize corporate prioritization process</p>	<p>Increasing community requests</p> <p>Community perception/support</p> <p>Government/economy impacts</p> <p>Resistance to tax increases</p>	<p>A.1 Prioritization</p> <p>A.2 Performance Measurement</p> <p>A.3 Build Financial Relationships into Strategic, Corporate and Master Planning</p> <p>A.4 Continuous Improvement & Innovation</p> <p>A.5 Public Education/Engagement</p> <p>A.6 Financial Planning</p> <p>A.6 Financial Planning</p>
<i>Infrastructure Gap</i>	<p>Strong planning ability</p> <p>Requirement understanding</p> <p>Funding polices in place for new assets</p> <p>Healthy Discretionary Reserves</p>	<p>Underfunded infrastructure reserves</p> <p>Contributions less than amort.</p> <p>50% discretionary policy restricts fund access</p> <p>\$42 million of asset beyond useful life</p> <p>High service levels</p> <p>Aging infrastructure</p> <p>No integrated asset management system</p>	<p>Some grant funding</p> <p>Privatization</p>	<p>Limited external funding options with no future guarantee</p> <p>Provincial/Fed funding reductions</p> <p>Upfront funding</p>	<p>A.2 Performance Measurement</p> <p>A.4 Continuous Improvement & Innovation</p> <p>A.6 Financial Planning</p> <p>C.1 Infrastructure Financing</p> <p>C.2 Asset Management</p> <p>D.2 Framework</p> <p>D.4 Debt Management</p>
<i>Funding Limitations</i>	<p>Dept. are good at managing/absorbing</p> <p>Strong planning ability</p> <p>High C&I assessment ratio</p> <p>Many reflection corp. initiatives</p> <p>Wide use of fees</p> <p>Reserve & Debt flexibility</p> <p>Program review</p>	<p>Sustainability of levy increase < MPI</p> <p>User fees not recovering all associated costs (indirect and corporate overhead)</p> <p>*Many unfunded corp. initiatives</p> <p>*Lack of PM to demonstrate eff.</p> <p>Reliance on unsustainable funding (year end surpluses)</p>	<p>Citizen believe in \$/value</p> <p>Ipsos - > quality of life</p> <p>High working age pop</p> <p>Low unemployment rates</p> <p>High household earnings</p> <p>Socio economic indicators exceed Province avg.</p> <p>Growth in C&I assessment base</p>	<p>Legislated limited funding</p> <p>Grant funding uncertain</p> <p>Community tax perception</p> <p>Unemployment increased</p> <p>C&I ratio set by Region</p>	<p>A.4 Continuous Improvement & Innovation</p> <p>A.6 Financial Planning</p> <p>B.2 Fund Balances and Financial Position</p> <p>B.4 Operating Liquidity and Cash Flow</p> <p>B.5 Financial Sustainability/Recession Resiliency</p> <p>B.6 User Fees</p> <p>D.4 Debt Management</p>

Themes	Strengths	Weaknesses	Opportunities	Threats	Policy Recommendations
<i>Post Employment Benefits</i>	Unfunded liability identified Some reserve funds have been set aside for the future requirements	Cash flow requirements has yet to be developed	Smooth budget impact by making planned contributions to Reserve to align with cash flow requirements	Growing & aging workforce will likely increase requirements	B.2 Fund Balances and Financial Position B.4 Operating Liquidity and Cash Flow C.3 Post-Retirement Benefits
<i>Growth/Intensification</i>	Well planned land use development Experienced growth municipality	Base funding inadequacies heightened *Intensification costs uncertain Longer term consequences not fully recognized Urbanization tends to increase service levels and associated costs	Regions premier growth engine Good residential/non-resid. mix Initially DC funded Availability of employment lands	Demand driven legislative intensification targets Transition green to grey is more complex and can be more costly New infrastructure requirements Long term consequences	A.2 Performance Measurement A.3 Build Financial Relationships into Strategic, Corporate and Master Planning A.6 Financial Planning B.1 Intensification B.5 Financial Sustainability/Recession Resiliency D.5 Deferred Revenue
<i>Financial Position</i>	Receivables within industry standard range	Operating deficit ratio Lower Assets to Liabilities ratio than peer municipalities		MPI & CPI pressures Current global economy	A.6 Financial Planning B.2 Fund Balances and Financial Position B.4 Operating Liquidity and Cash Flow
<i>Economic Resilience</i>	Healthy Discretionary Reserves Discretionary Policy Strong collection policies Low tax arrears Taxes guaranteed Strong Financial Sust. Reserves Balance assessment base growth	Fees sensitive to economy Revenues not diversified (75% tax)	Socio indicators exceed province avg. Low unemployment rates High working age pop Other government subsidies	Current global economy Managing community expectations	A.6 Financial Planning B.2 Fund Balances and Financial Position B.5 Financial Sustainability/Recession Resiliency D.4 Debt Management D.5 Deferred Revenue
<i>Public Engagement</i>	Citizen surveys conducted Public input sessions	*Incorporation into processes	Further educate the public Identifying additional public engagement opportunities to ensure cross representation	Special Interest Groups Influence Decision Conflicting Demands Lack of participation from all sectors of the community	A.5 Public Education/Engagement

Summary—Assessing the City's Financial Health—Answers to Questions

The following questions have been addressed in the next section of the report to evaluate the City's financial health:

1. *Can the City continue to pay for the services currently provided?*

The City has a strong assessment base upon which to raise taxes and is experiencing an excellent balance of residential and non-residential development. The average income levels are relatively high in Vaughan and the property taxes in relation to income are average. All indicators reflect that Vaughan is an attractive place to live and invest which ensures that the City has a strong assessment base upon which to pay for services provided.

The City of Vaughan provides a vast array of programs and services to its residents and has instituted a number of initiatives to provide high quality efficient and effective services. The vast majority of residents believe that they receive good value for their tax dollars, however, the majority of residents would like to see the City hold the line on property taxes and user fee increases even if it means a reduction in services. While the City has kept property taxes increases below the Municipal Price Index and maintained service levels, the ability to sustain this practice in the long-term, with the addition of new corporate initiatives, will prove challenging. Optimizing service delivery, going forward, will require the City to set priorities and make choices in light of future budget challenges and the community's willingness to pay for services.

2. *Is there sufficient financial flexibility to address unexpected events, uncertainty and future liabilities?*

The City of Vaughan utilizes a number of reserves to help smooth the impact of unexpected events and future liabilities. The City's policy of maintaining a Discretionary Reserve balance of 50% of own source revenues provides financial flexibility to address unexpected events such as an economic recession. The City's Financial Sustainability Reserves are in a very healthy position and exceed industry standards. Corporate liabilities related to post-employment benefits are significant and further consideration will be needed in the development of the FMP to assess existing reserve balances, future contributions to reserves and the timing of expected liability requirements.

3. Is the City's infrastructure network sustainable and adequately funded?

The City of Vaughan has over a billion dollars in infrastructure, excluding land and water/wastewater infrastructure, which will require eventual replacement to sustain the community's overall quality of life and the economic health for future generations. Vaughan's infrastructure repair and replacement spending requirements are underfunded on an annual basis and the Infrastructure Sustainability Reserve balances are not adequate to sustain all future requirements to replace assets and infrastructure at the end of their useful life. This is not a unique situation and is a factor that virtually all municipalities are faced with across Ontario. Without additional infrastructure investment, there is a risk that Vaughan's infrastructure network will deteriorate, potentially compromising community health, safety, and service levels. The City has established policies to ensure that any new facilities and infrastructure coming on stream will include a budgeted contribution for the replacement of the assets in the future to avoid increasing the infrastructure deficit. Addressing the past infrastructure deficit for existing assets will take time and will be a key consideration in the development to the FMP.

4. Can the City's vision and corporate initiatives be achieved financially?

The City has undertaken a number of planning studies and Master Plans to ensure that the City is well positioned to meet the City's vision. These plans will help to define future programs and services. However, the operational and capital funding requirements for all Master Plans are yet to be fully defined and as such, it is difficult to state, with certainty, that all corporate initiatives can be achieved within the proposed timelines. Given the quantity of initiatives and community resistance to accept tax increases it will be challenging. A greater focus on determining the financial and resourcing plans for corporate initiatives is recommended. It is also recommended that the City's corporate initiatives be prioritized to ensure they are achieved in properly resourced manner.

Operating Budget Forecast

Operating Budget Forecast—Key Challenges

As shown in the Financial Health section of the FMP, the City of Vaughan is in a strong financial position as a result of prudent fiscal practices, low taxes, solid reserves and manageable debt. Although the City's current financial position is strong, there are emerging issues that must be considered to ensure future financial sustainability including:

- *Costs Escalating Faster Than Inflation;*
- *Unprecedented Growth;*
- *Higher Level of Sophistication and Complexity;*
- *Underfunded Asset Renewal/Replacement Program;*
- *Inflexible Revenue Raising Tools;*
- *Shifting Demographics;*
- *Post-Employment Benefits; and*
- *Resistance to Tax Increases.*

Costs Escalating Faster than Inflation

Municipalities are under considerable pressure to keep property tax increases at or below inflation. However, the inflationary pressures to which a municipality is exposed are considerably different to those included in the consumer price index (CPI). To recognize the different pressures that municipalities face, the City of Vaughan developed a Municipal Price Index (MPI). The use of an MPI is well recognized and, in fact, the Federation of Canadian Municipalities (FCM) recently requested that Statistics Canada create and publish a MPI (adjusted by region) for use by its members.

Both the CPI and the MPI measure changes to the price of a basket of goods and services. The CPI measures the inflation rate the average family faces with annual increases to goods they consume like rent, cable, insurance, food and education. The MPI measures annual increases to goods consumed by a municipality such as asphalt, road salt, fuel, maintenance costs and electricity which typically increase at rates well above inflation. While the City's ***MPI has consistently exceeded CPI***, tax increases in Vaughan have held below the MPI. This has been possible by operating efficiently and, to the extent possible, absorbing increases within the existing budget base. The ability to continue to create efficiencies and deliver property tax increases below the MPI will prove to be a challenge over the forecast period given the pressures associated with new initiatives and growth. Further, there is a risk that maintaining tax increases below the MPI will eventually erode service levels which negatively impacts the community's quality of life.

The City must strive to deliver programs and services in an efficient and effective manner that are aligned with the community's willingness to pay for these programs and services. The **Base**, which will be discussed in further detail later in the report, provides the assumptions that have been built into the FMP to better understand how revenues and expenditures are anticipated to change over the forecast period. This **Base** assumes the delivery of the same level of programs and services that the community currently receives (excludes growth or new initiatives). The last section of the report, **Recommendations**, will also formalize the use of MPI.

Unprecedented Growth

Over the past 20 years, Vaughan's population increased by 159%, over **5.5 times the Provincial average**. Over the next 20 years, Vaughan's population is expected to grow by an additional 38%. The cost of adding new facilities, parks and transportation networks and associated costs to support new growth places considerable demands on the City's operating and capital plans. By 2022, growth-related expenditures account for 16% of the City's total gross operating expenditures.

While there are many opportunities associated with further growth and development, as a fast growth municipality, Vaughan is confronted with new challenges that must be taken into consideration in the development of the FMP. This includes ensuring that there are sufficient financial resources to meet the growing and changing community needs and to support infrastructure growth-related capital requirements that are not recoverable through Development Charges (DCs).

Although the intent of DCs is to ensure that growth pays for itself, there are restrictions in the Provincial *Development Charges Act* (DCA). For example, the City cannot use DCs to pay for some capital projects including entertainment facilities, tourism facilities, hospitals and municipal administrative buildings. In addition, the DCA only allows fees to be collected for 90% of the capital costs associated with some services (e.g. recreation, libraries), with the remainder funded from taxes. It should further be noted that **DCs fund only the initial capital construction cost** of the infrastructure. Therefore, the funding for the future infrastructure repair and replacement resides within the municipality, predominantly the tax base, as does the associated operating costs related to the growth in programs and services. As such, it is critical that the City has a clear understanding of the future implications of infrastructure decisions made today by incorporating these into the FMP.

There is considerable lead times required to plan and build municipal infrastructure to support growth. This takes place in advance of the growth in the assessment base and the associated contributing tax revenues which places an additional challenge on municipal finances in the short term. As such, the City is planning for anticipated growth and, through the development of the FMP, will be able quantify growth-related impacts on the capital and operating plans (see **Growth and Master Plan Model**). By doing so, the development of new financing strategies may be required and will be presented in the **Recommendations** section of the forecast.

Higher Level of Sophistication and Complexity

As discussed previously, much of the future residential growth will occur as **intensification** within the existing urban boundary which presents additional challenges for the City since urban development requires new infrastructure and upgrades to existing infrastructure. Intensification growth typically results in higher levels of service to support an urban setting (e.g. streetscaping, lighting, cultural services) which is more costly to develop and maintain. Also intensification requires higher levels of investment in infrastructure in developed areas to meet the increased needs for public transportation, water/wastewater and storm drainage. The higher level of sophistication and complexity results in an enhanced need for the establishment of clearly defined service standards and the development of multi-year plans.



Underfunded Asset Renewal/Replacement Program

The increased demand for additional infrastructure to match Vaughan's growth will take place at the same time that the existing assets are reaching an age where their renewal/replacement is becoming critical and more costly. Consequently, it is vital to enhance Vaughan's current plan for this eventuality and further develop funding policies to protect and sustain the foundation of the community.

As discussed previously, there is an annual infrastructure funding shortfall whereby the City is contributing less for the replacement of existing assets than the level by which the assets are being used. Further, there is an historical infrastructure deficit that will pose additional challenges that will need to be addressed as part of the FMP. The size of the deficit is daunting, but not insurmountable. Just as the problem took time to develop, the solution will require the consideration of phase in strategies. Failure to act now saddles the present and future generations with a significant financial burden.

Strategies will be presented in the **Recommendations** section of the forecast to ensure that the City follows prudent asset management principles and has the appropriate funding available to support the replacement of infrastructure on a timely basis.

Inflexible Revenue Raising Tools

Although the City of Vaughan is responsible for providing a wide range of essential services that citizens expect and value, it must rely on limited sources of revenue. The largest source of municipal revenues is property taxation (66% of the City's total revenues). Fees and charges represent approximately 16% of the City's revenues and there is resistance to increases in fees as this is considered another form of taxation. Payments-in-lieu of taxes have historically not kept pace with property taxation increases and are uncontrollable by the City. This trend is expected to continue. Grants from other levels of government represent only 0.1% of revenues and have declined over the years. As such, the City has limited options with respect to raising revenues to offset increases in expenditures.

Shifting Demographics

Vaughan has a considerably higher proportion of residents that are below the age of 15. The larger proportion of young families increases the demand for age-sensitive City services such as parks and recreational programs, services and facilities. The City has undertaken a number of ***Master Plan*** studies to ensure alignment of programs, services and facilities with the demographic trends that the City is experiencing. Master Plans related to managing the changing socio-demographic needs of the community include Vaughan Vision 2020, Creative Together: A Cultural Plan for Vaughan, Diversity Strategy and Active Together Master Plan.

These proactive strategies will improve the City's ability to anticipate change and plan for the future but they will undoubtedly place additional pressure on property taxes. Where information is available, the forecast provides an understanding of how the budget will be impacted by new programs and initiatives to meet community needs (see ***Master Plan/New Initiatives Model***).

Post-Employment Benefits

A post retirement liability is a legal commitment to pay benefits to its employees at some point in the future. There are two basic ways to fund this liability. One way is to set up a special fund and fully fund benefits as they are accrued ("full funding"). The other way is known as "pay-as-you-go". This method involves making only current payments from the general fund as they become due. The pay-as-you-go method involves less spending from the current budget. This method may seem successful as long as the money is available when needed. Deferral, however, may create a more serious problem than the problem it avoids, especially if accrued benefits are rapidly increasing while revenues are increasing at a slower pace.

As more employees become entitled to benefits, and as the cost of benefits grows with inflation, these benefit costs can become a large fixed cost to the operating budget. This appears to be the case in the City of Vaughan. For example, the dollar value for employees in receipt of benefits rose from \$10.6 million in 2008 to \$16.8 million in 2011; a \$6.2 million or 59% increase. This is expected to continue to increase as the size of the work force increases and the work force ages.

The outstanding liability increased from \$40 million to \$66 million from 2008-2011. On a pay-as-you-go basis, current service costs have increased from \$2.7 million to \$4.2 million (55% increase). Vaughan has a post-retirement reserve of \$14 million. Additional strategies will be presented later in the report to address the increase in post-retirement benefits to ensure that the City is well positioned to meet future obligations.

Tax Resistance

Although Vaughan's property taxes are low, there is considerable pressure from the community to continue to control tax rate increases. The ability to hold the line on property taxes and maintain existing service levels will be extremely challenging given the number of new initiatives being contemplated by the City and the growth-related operating costs that will be experienced. This will require the City to:

- Prioritize new initiatives based on the funds available and the associated increase in taxation;
- Clearly define service levels; and
- Determine which programs and services will be offered in the future.

A Balanced Approach is Required

Taken together, the ***sum of the issues and challenges is significant***. Maintaining existing levels of service in an environment where costs are increasing faster than inflation, introducing new services, meeting the demands of growth and changing the mix of services offered to meet a diverse community all contribute to an environment where expenditures exceed available revenue. Further, the City is facing increasing demand for new infrastructure at the same time that it must prudently manage the existing assets. These challenges must also be addressed in a climate that is resistant to property tax increases and a desire to continue to receive high quality services.



As such, the FMP is about **highlighting financial implications for decision makers to discuss and make choices regarding balancing**.

- Fairness and equity between existing and future taxpayers;
- Meeting the requirements of urban development, and, to the extent possible, matching growth-related revenues with service demands;
- Maintaining existing high quality affordable programs and services and meeting new demands for services based on changing community priorities and growth;
- Maintaining existing infrastructure replacement requirements and the need to have infrastructure in place to support new growth and economic development;
- Addressing health, safety risk, environmental risks as well as the demand for expanded service levels;
- Achieving the City's strategic, corporate and department initiatives; and
- Addressing post-employment benefits.

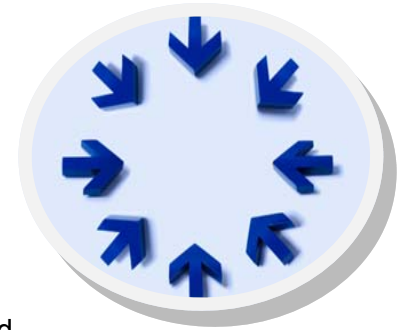
It is also about **prioritization** of capital, programs and services to ensure that community service requirements are aligned with their willingness to pay for municipal programs and services.

Prioritization and Balance Are Critical to Vaughan's Future Success

FMP Strategies

The FMP incorporates a number of strategies to achieve financial sustainability including:

- Ensuring adequate funding;
- Managing expenditures;
- Providing for contingencies;
- Using debt strategically;
- Operating with prudent foresight; and
- Maintaining sufficient cash flow.



Dynamic FMP

The FMP is dependent on the many assumptions made about such things as population and assessment growth, the programs and services provided, capital requirements and changes to revenues and expenditures. As assumptions will invariably change over time, the FMP reflects current thinking. Although great effort has been made to present accurate financial projections, based upon the data available at this time, a FMP is a **dynamic document** and should be updated and re-evaluated, on an ongoing basis. As such, the 2012 FMP should be considered a **work-in-progress**.

It is not meant to be an exercise in precision, rather it is intended for use as a forecasting tool to ensure that the City is on the right course to meet its financial obligations and future challenges. The intent is to provide Council with updates to this document (every five years), so it will be useful in the ongoing cycle of business planning and budgeting.

It is anticipated that updates to the FMP will:

- Incorporate new financial information related to strategic initiatives, corporate actions, and master plans;
- Reflect Council adopted policy changes;
- Amend the assumptions, projections and strategies, as required, based on changes in the municipal environment;
- Continue building awareness of the results of 10-year projections of current operating and capital spending and funding levels;
- Assist the City in determining the extent of its financial challenges;
- Reconfirm the key financial goals and strategies that should guide future planning; and
- Spur the development of actions in future business plans that would respond to the long-term strategies.

Operating Forecast Models

Operating Budget Forecast

The FMP Operating Budget forecast includes four distinct models to help identify the key drivers and isolate various future decisions that may be required to balance the many challenges and opportunities that the City will face over the next decade. At the end of this section of the report, the models will be consolidated to reflect the future 10 year Operating Budget forecast.

Model 1: Base

- Reflects existing service levels and programs that are delivered by the City and forecasts primarily price escalations of these services over the next 10 years using best practice research, historical trends and Council approved budget guidelines.
- Excludes impacts of growth, new initiatives that may be considered to further improve or enhance programs and services, other requests and Master Plans.

Model 2: Growth

- Includes all revenues and expenditures associated with forecast growth in the City of Vaughan over the next 10 years.
- Based on the City's Development Charges Background Study and most recent population forecasts.

Note: The combination of Model 1 and Model 2 provide a consolidated picture of resources for existing service levels.

Model 3: Master Plans/New Initiatives

- Includes the additional expenditures and revenues that have been identified in Master Plans (that are not represented Base and Growth) to meet community needs. These items are operational and business propositions the City is looking to initiate over and above service levels.
- It should be noted that only those Master Plans where financial information was available have been included in the forecast. It is anticipated that this area of the forecast will require future development as more information becomes available.

Model 4: Other Requests

- Includes information provided by Departments that are recommended to address service delivery gaps and/or enhance or improve the quality of the services and programs being delivered by the City that have not been reflected in the Growth or Master Plan model.
- Additional resource requests that have been recognized which are not captured in Models 1-3.

Model 1: Base

In order to understand and isolate the cost of service based on the delivery of existing programs and services, the FMP starts with what is referred to as the Base. The Base represents the City's estimate of what it will cost in the future to deliver the same programs and services. It reflects existing service levels and programs and is primarily about price escalation. As such, the Base excludes growth related requirements, Master Plans and additional resource requests.

The purpose of the Base is to identify the impact of future inflationary and obligatory pressures, independent of growth, new initiatives and infrastructure renewal requirements and to identify any potential risks, challenges and opportunities.

As will be shown over the next several pages, the Base reflects an average annual net levy (taxation) increase of 3.8% which is consistent with the MPI. Further, there are some **risks and challenges** associated with the Base which must be considered including:

- **Reliance on one-time sources** of revenues that may not materialize on an annual basis (e.g. a \$2.5 million in prior-year surplus and an annual withdrawal of \$2.8 million from the Tax Stabilization Reserve). The forecast has assumed no change in the 2012 assumption for these one-time revenues which are difficult to predict.

- **Non-tax revenues are not keeping pace with expenditure increases.** For example, non-tax revenues represented 35.5% of the total revenues in 2012 compared with 27.7% in 2022. As will be discussed in further detail, user fees and charges are increasing at a rate lower than inflation.
- The Base does **not fully address the infrastructure gap**. Any increases to address the infrastructure gap would further increase the impact on the net levy.
- In accordance with Council guidelines, the Base restricts budget increases to the following items:
 - Council approved employment agreements;
 - Full year impact of prior year decisions;
 - Council authorized recommendations;
 - Supported external service contract commitments;
 - Established utility & insurance increases, where justified;
 - Debenture obligations;
 - Defined corporate contingency items; and
 - Reserve contributions in accordance with approved policy.

As such, the Base does not include all anticipated cost increases (e.g. material and supply increases have been held at 0% increase) and relies on efficiency improvements to cover the increase in costs. This may be difficult to achieve over a 10 year period. As such, the Base is a **conservative estimate** of the forecast net levy increase.

Gross Expenditures—Base—2012-2022 (000s)

	2012	2012 % of Total	2022	2022 % of Total
Labour Costs	\$ 131,365	58.2%	\$ 182,893	62.3%
Capital Related Expenses	\$ 23,964	10.6%	\$ 25,779	8.8%
Contract Expenses	\$ 21,722	9.6%	\$ 26,051	8.9%
Utilities	\$ 7,785	3.4%	\$ 12,788	4.4%
Corporate Expenses	\$ 5,771	2.6%	\$ 6,337	2.2%
Materials and Supplies	\$ 4,757	2.1%	\$ 6,112	2.1%
Mtce. Buildings & Facilities	\$ 3,763	1.7%	\$ 4,879	1.7%
Miscellaneous Expenses	\$ 26,646	11.8%	\$ 28,751	9.8%
Total	\$ 225,773	100.0%	\$ 293,589	100.0%

The following summarizes the major expenditures (additional detail on the assumptions is presented in the next several pages):

- **Labour Costs** represent 58.2% of the total gross expenditures (\$131.4 million) compared with 62.3% in 2022 (\$182.9 million). Salaries, wages and benefits are forecast to increase from 2015-2022, on average, 3% annually with the exception of Fire which is forecast to increase 3.5% annually during this time. In addition, labour costs include contingencies for future salary negotiations in 2013-2014 as well as salary gapping reductions in expenditures based on 2012 assumptions;
- **Capital-Related Expenses** account for 10.6% of the City's gross expenditures in 2012 and include the capital transfers to the reserves to support the replacement of the City's existing assets, debt payments and capital from taxation. This reduces to 8.8% of expenditures in 2022;
- **Contracts** for the provision of such services as garbage collection, road, winter maintenance and parks maintenance account for 9.6% of total expenditures in 2012 and 8.9% in 2022. These contracts are subject to renewal every 4-5 years;
- **Utilities** includes the cost of water, hydro and gas and represents 3.4% of the expenditures in 2012 and by 2022 represent 4.4%. The forecast is based on a weighted average of the utility increases experienced over the past 7 years, equal to a blended annual increase of 4.8%; and
- The remaining 18% of gross expenditures is related to other expenditures such as building maintenance, materials and supplies, corporate expenses and other miscellaneous expenses.

Assumptions will be presented in the next section of the report for the forecast period from, 2013-2022. [Appendix C provides the detailed assumptions for the Base.](#)

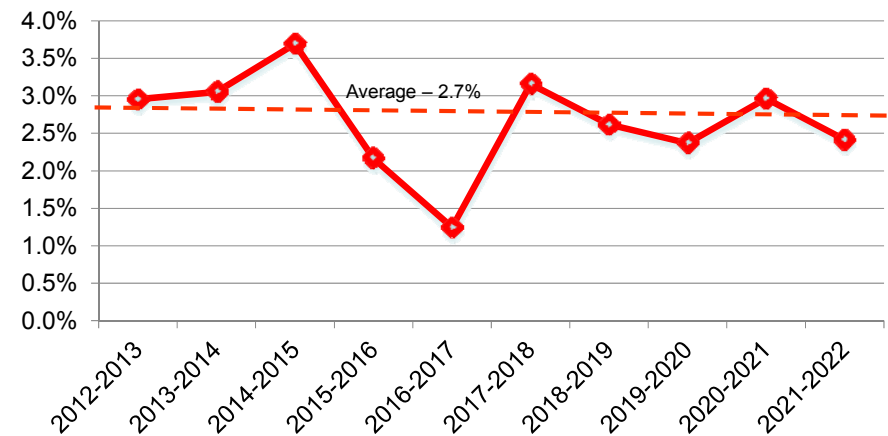
Gross Expenditures—Base Change—2012-2022

	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	Avg Change
Labour Costs	4.5%	4.0%	3.0%	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%	3.4%
Capital Related Expenses	-2.3%	-3.8%	19.7%	-1.3%	-10.8%	0.4%	6.9%	0.6%	5.9%	-5.0%	1.0%
Contract Expenses	4.5%	2.8%	0.3%	0.9%	1.6%	4.1%	1.4%	0.3%	0.9%	1.6%	1.8%
Utilities	5.5%	7.2%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	5.1%
Corporate Expenses	-2.4%	-1.9%	3.9%	1.3%	1.4%	1.4%	1.4%	1.4%	1.5%	1.5%	1.0%
Materials and Supplies	1.2%	1.6%	3.3%	2.6%	1.9%	3.5%	2.7%	2.0%	3.7%	2.8%	2.5%
Mtce. Buildings & Facilities	0.0%	1.6%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	2.6%
Miscellaneous Expenses	0.0%	4.3%	-3.0%	0.3%	0.3%	4.4%	-3.6%	0.3%	0.3%	4.7%	0.8%
Total Annual Increase	3.0%	3.1%	3.7%	2.2%	1.2%	3.2%	2.6%	2.4%	3.0%	2.4%	2.7%

The total gross expenditures in the Base increase, on average, annually by 2.7%, however, the impact varies from year to year. The following provides some highlights:

- Labour costs represent the largest municipal expenditure and are forecast to increase annually at a rate exceeding inflation. In the first two years of the forecast labour costs are higher than the remainder of the forecast due to contingencies associated with salary negotiations;
- Utilities are increasing at a rate far exceeding inflation which contributes to the annual forecast increases;
- Contract expenses are settled every 4-5 years which results in annual fluctuations in the forecast; and
- The Base assumes no increase in some of the costs of service which will be difficult to achieve over a 10 year period and as such is likely understated.

Base—% Change in Gross Expenditures



Capital-related expenses include both growth and non-growth capital requirements however the table above represents only capital from taxation that is related to non-growth projects.

Revenues—Base—2012-2022 (000's)

	2012	2012 % of Total	2022	2022 % of Total
Taxation	\$ 146,243	64.8%	\$ 212,305	72.3%
Fees and Charges	\$ 36,206	16.0%	\$ 39,537	13.5%
Corporate Revenues	\$ 17,727	7.9%	\$ 21,728	7.4%
Reserves	\$ 16,453	7.3%	\$ 10,215	3.5%
Taxation - Supplementals	\$ 4,000	1.8%	\$ 4,658	1.6%
Grants and PILs	\$ 2,645	1.2%	\$ 2,645	0.9%
Surplus Carry Forward	\$ 2,500	1.1%	\$ 2,500	0.9%
Total	\$ 225,773	100.0%	\$ 293,589	100.0%

The following summarizes the major revenues:

- **Tax Revenues** represent 64.8% of the total revenues in 2012 (\$146.2 million) compared with 72.3% in 2022 (\$212.3 million). As a result of other sources of revenue not keeping pace with inflationary cost increases, there is increased reliance on taxation as a source of revenues over the forecast period;
- **Fees and Charges** account for approximately 16.0% of the revenues in 2012, dropping to 13.5% of the total revenues;
- **Corporate Revenues** represent 7.9% (\$17.7 million) and by 2022 are forecast to represent 7.4% of total revenues. These include hydro investment income, interest earnings and fines and penalties;
- **Reserve** transfers decline over the forecast period, largely attributed to a reduction in planning and engineering not related to permits, reserve transfers in building, planning and engineering. The forecast includes an assumption that \$2.8 million will be annually transferred from the tax stabilization reserve which is a risk should year end surpluses not materialize to replenish the reserve;
- **Taxation Supplemental Revenues** vary throughout the forecast period based on growth and represent 1.6% to 1.8% of total revenues;
- **Grants and PIL Revenue** is assumed to remain at the existing level throughout the forecast which is a conservative assumption; and
- **Surplus Carry Forward** assumptions have been made in the forecast that \$2.5 million in revenues will be available from prior years surpluses annually which is a risk should these surpluses not materialize.

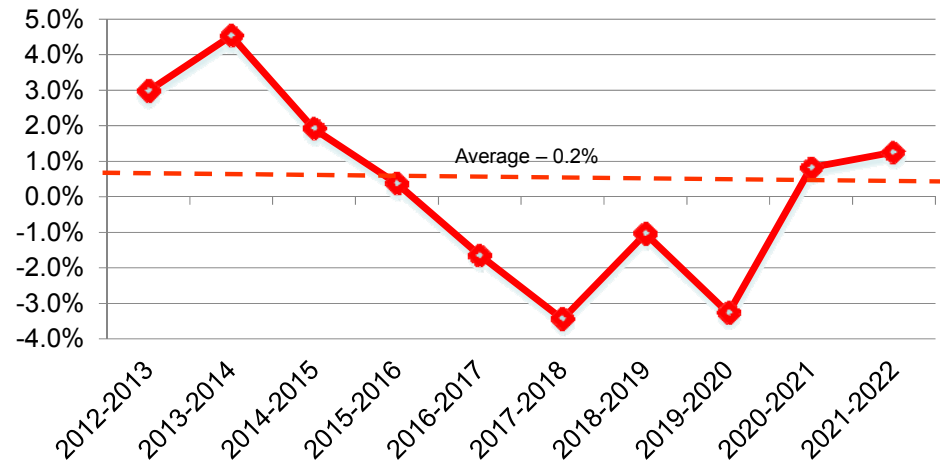
Operating Revenues—Base—2012– 2022

	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	Avg Change
Taxation	2.9%	2.2%	4.7%	3.1%	2.8%	6.5%	4.3%	4.8%	3.8%	2.9%	3.8%
Fees and Charges	2.7%	4.6%	3.0%	-3.2%	1.2%	1.2%	0.6%	1.4%	-0.3%	-2.1%	0.9%
Corporate Revenues	1.9%	2.0%	2.2%	1.3%	2.4%	2.2%	2.1%	2.2%	2.2%	2.2%	2.1%
Reserves	6.4%	9.4%	-4.0%	3.6%	-12.3%	-20.0%	-6.6%	-30.2%	1.5%	15.6%	-3.7%
Taxation - Supplementals	0.0%	0.0%	21.2%	13.9%	0.1%	-9.2%	-12.7%	1.7%	4.5%	0.0%	2.0%
Grants and PILs	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Surplus Carry Forward	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Annual Increase	3.0%	3.1%	3.7%	2.2%	1.2%	3.2%	2.6%	2.4%	3.0%	2.4%	2.7%
Total Annual Change Excluding Taxation	3.0%	4.5%	1.9%	0.4%	-1.6%	-3.4%	-1.0%	-3.3%	0.8%	1.3%	0.2%

The Base Total Gross Revenues increase annually by 2.7%. The following provides some highlights:

- Taxation is forecast to increase, on average, 3.8% annually, however, the Base forecast ranges from an annual increase of 2.2% to a high of 6.5% over the forecast period; and
- The annual increase in sources of revenues, excluding taxation, averages only 0.2% annually, well below inflation, resulting in an increased reliance on taxation as a source of revenues.

Base—% Change in Revenues Excluding Taxation



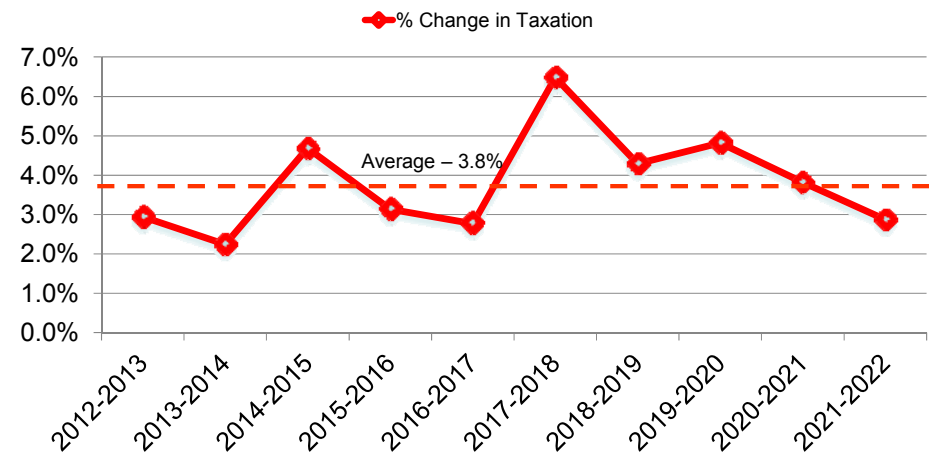
Summary—Base Net Levy Change

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Total Gross Expenditures	\$ 225,773	\$ 232,442	\$ 239,532	\$ 248,378	\$ 253,753	\$ 256,914	\$ 265,027	\$ 271,964	\$ 278,407	\$ 286,658	\$ 293,589
Total Revenues	\$ 79,531	\$ 81,900	\$ 85,615	\$ 87,254	\$ 87,581	\$ 86,141	\$ 83,176	\$ 82,314	\$ 79,617	\$ 80,272	\$ 81,283
Total Taxation	\$ 146,243	\$ 150,541	\$ 153,916	\$ 161,124	\$ 166,172	\$ 170,773	\$ 181,851	\$ 189,649	\$ 198,790	\$ 206,387	\$ 212,305
% Change in Taxation		2.9%	2.2%	4.7%	3.1%	2.8%	6.5%	4.3%	4.8%	3.8%	2.9%

Assuming no growth or change in service levels and no new initiatives, the City will experience an **annual increase in taxation of approximately 3.8%** over the next 10 years unless significant reductions in costs or increases in non-tax revenues can be achieved. The Base assumes no growth in the assessment base and as such, the 3.8% average annual increase in the net levy is also the forecast increase in the municipal property tax rates.

The Base has a number of risks related to past practices which could pose some challenges from a financial sustainability perspective. This includes reliance on one-time funding sources such as year-end surpluses and the ability to annually draw down the Tax Rate Stabilization Reserve which would reduce financial flexibility. As will be shown later in the report, by 2022, there will be less financial flexibility related to the availability of reserves.

Base—% Change Summary



Model 2: Growth

This section of the report includes all revenues and expenditures associated with forecast growth in the City of Vaughan over the next 10 years and is based on the City’s Development Charges Background Study and most recent population forecasts.

Growth Assumptions

The following summarizes some of the key assumptions used to forecast growth related operating expenditures and revenues:

- **Capital From Taxation** - Anticipated new infrastructure is based on the 2008 Development Charges Background Study (2008 DC Study) with modifications to project timing and costs based upon updated information (e.g. Active Together Master Plan, Fire Implementation Strategy). Approximately 90% of these costs are funded from development charges, but the remaining 10% is funded through the City’s Operating Budget (Capital from Taxation); and
- **Capital Induced Operating Expenditures** - As new infrastructure and assets are developed, the forecast incorporates the associated operating costs and revenues to support growth. The forecast is based on the average unit cost of the City’s existing facilities and infrastructure. For example, an average cost per square foot was calculated for various types of community centres and recreation facilities which was used to calculate future operating costs for new facilities and infrastructure.

The following table summarizes the approach used to forecast growth related operating costs:

Operating Expenditure Assumptions - Growth	average unit of cost assumption
Building and Facilities	
Departmental Costs	per square foot
Facility Maintenance Costs	per square foot
Fire Department	
Departmental Costs	per cohort
Facility Maintenance Costs	per square foot
Roads, Road Structures	
Maintenance	per lane km
Winter Control	per lane km
Park Structures	per field, per court
Water Facilities	per facility

The 2012 average per unit costs were increased annually based on the assumed CPI. **Appendix D** provides additional detail on the assumed growth in the City’s facilities, parks and infrastructure.

- **Reserve Contributions**—Contributions to the Infrastructure Sustainability Reserves for new infrastructure have been made based on lifecycle replacement principles with annual inflationary adjustments to keep pace with future values.

- Timing of Operating Impacts** - Operational impact lag times were incorporated into the Growth to estimate the time in which the new facility or park becomes partially and fully operational. The following table summarizes the assumptions that were incorporated into the growth forecast:

	Operating Impact Lag Time
Community Centres	two years after capital approval; half year impact the first year, full year impact in year two
Libraries	one year after capital approval; half year impact the first year, full year impact in year two
Fire Stations	Department - 75% the year prior to operations Building - one year after capital approval; half year impact in the first year, full year impact in year two
Parks	one year after capital approval; full year impact
Public Works	salt domes/yards - one year after capital approval; full year impact
	winter clearance - year the road is developed (assumes housing); full year impact
	waste collection - current year; does not include multi-residential units; full year impact
	road maintenance - two years after development; full year impact
Fleet	year of approval; full year impact

- Volume Driven Operating Costs** - In addition to operating costs directly attributed to the construction of new assets and infrastructure (capital), the City will also experience expenditure increases attributed to changes in the volume of activity. The table below summarizes those areas for which additional staff and support will be required to account for growth.

Operational Area	Rationale	Driver
Council	by-law allowance	population
Enforcement Services City Financial Services Public Works - Roads Public Works - Winter Libraries	maintain current FTE/population ratio	population
Recreation Buildings & Facilities Information Technology	FTE increase in relation to the additional square footage floor space added	community centre municipal building floor space
Parks-Operations	FTE increase in relation to the additional hectares added	parkland hectares

- In addition to the estimated additional staffing requirements related to growth noted above, departments have identified specific positions that will be required as the municipality continues to grow. These positions are not included in the Master Plans and are generally related to ensuring that there is sufficient administrative and management support to deliver the growth in programs and services.

Gross Expenditures—Growth—2012-2022

(000s)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Growth Related Expenditures											
Capital Induced Operating Impacts	\$ -	\$ 3,316	\$ 7,696	\$ 11,533	\$ 17,441	\$ 22,775	\$ 27,209	\$ 31,031	\$ 36,309	\$ 40,217	\$ 42,717
Volume Driven	\$ -	\$ -	\$ -	\$ 774	\$ 1,883	\$ 2,713	\$ 3,685	\$ 4,442	\$ 5,501	\$ 6,265	\$ 7,309
Reserve Contributions	\$ -	\$ 899	\$ 1,210	\$ 1,890	\$ 2,476	\$ 3,005	\$ 4,101	\$ 4,215	\$ 4,824	\$ 5,167	\$ 5,274
Capital from Taxation	\$ -	\$ 2,742	\$ 5,469	\$ 2,067	\$ 1,945	\$ 1,425	\$ 5,582	\$ 854	\$ 4,595	\$ 1,915	\$ 1,377
Total Growth Related Expenditures	\$ -	\$ 6,957	\$ 14,375	\$ 16,264	\$ 23,745	\$ 29,917	\$ 40,577	\$ 40,541	\$ 51,230	\$ 53,564	\$ 56,677
% Change			107%	13%	46%	26%	36%	0%	26%	5%	6%

The table above is a summary of the additional costs associated with the Growth. By 2022, it is forecast that there will be \$56.7 million in growth related operating expenses. The following summarizes the major budget drivers in the Growth:

- **Capital Induced Operating Expenditures** are expenditures directly related to the addition of new facilities, infrastructure, parks and roads. By 2022, capital induced operating expenditures are forecast to be \$42.7 million;
- **Volume Driven Operating Expenditures** include such items as additional staff to provide the same level of service to a growing population base. By 2022, volume driven operating costs are forecast to be \$7.3 million;
- **Reserve Contributions** increase as new assets are developed to ensure that the infrastructure funding gap does not widen. By 2022, the additional costs related to contributions to reserves to support growth in the infrastructure and assets is estimated to be \$5.3 million; and
- **Capital From Taxation** varies from year to year based on the growth related capital requirements. Increases in 2014 are largely related to the development of the Carrville Community Centre and in 2018 related to the Vellore Village Community Centre and again in 2020 related to post period funding requirements for the Vaughan Corporate Centre Community Centre. Over the 10 year period, the average annual contribution is \$2.8 million.

Commission Summary—Growth—2012-2022

The table below summarizes the growth related capital induced and volume driven operating expenditures included in the forecast by Commission as well as the reserve contributions and capital from taxation.

(000's)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Council/Integrity Commissioner	\$ -	\$ -	\$ -	\$ 11	\$ 26	\$ 42	\$ 56	\$ 67	\$ 78	\$ 89	\$ 100
City Manager	\$ -	\$ 1,966	\$ 5,092	\$ 5,788	\$ 7,638	\$ 8,449	\$ 11,280	\$ 13,398	\$ 14,480	\$ 14,926	\$ 15,386
Legal & Administrative Services	\$ -	\$ 145	\$ 319	\$ 459	\$ 450	\$ 565	\$ 687	\$ 815	\$ 950	\$ 1,093	\$ 1,242
Finance	\$ -	\$ 73	\$ 80	\$ 115	\$ 151	\$ 181	\$ 213	\$ 246	\$ 281	\$ 318	\$ 357
Community Services	\$ -	\$ 536	\$ 1,163	\$ 2,550	\$ 5,182	\$ 8,190	\$ 8,796	\$ 9,336	\$ 12,607	\$ 15,699	\$ 17,529
Planning	\$ -	\$ 494	\$ 480	\$ 492	\$ 111	\$ 114	\$ -	\$ -	\$ -	\$ -	\$ -
Strategic & Corporate Services	\$ -	\$ 102	\$ 234	\$ 235	\$ 200	\$ 205	\$ 210	\$ 215	\$ 288	\$ 295	\$ 372
Engineering & Public Works	\$ -	\$ -	\$ 328	\$ 1,260	\$ 2,162	\$ 3,070	\$ 4,218	\$ 4,993	\$ 5,712	\$ 6,459	\$ 7,241
Libraries	\$ -	\$ -	\$ -	\$ 1,397	\$ 3,402	\$ 4,671	\$ 5,435	\$ 6,402	\$ 7,415	\$ 7,604	\$ 7,799
Corporate Expense	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Reserve Contributions	\$ -	\$ 899	\$ 1,210	\$ 1,890	\$ 2,476	\$ 3,005	\$ 4,101	\$ 4,215	\$ 4,824	\$ 5,167	\$ 5,274
Capital from Taxation	\$ -	\$ 2,742	\$ 5,469	\$ 2,067	\$ 1,945	\$ 1,425	\$ 5,582	\$ 854	\$ 4,595	\$ 1,915	\$ 1,377
Total	\$ -	\$ 6,957	\$ 14,375	\$ 16,264	\$ 23,745	\$ 29,917	\$ 40,577	\$ 40,541	\$ 51,230	\$ 53,564	\$ 56,677

The following summarizes the major budget drivers in the Growth by Department:

- **Community Services** represents the largest growth driven operating expenditure and is largely related to the addition of community centres, parks and park structures. By 2022, Community Services represents 31% of the total growth related capital and volume induced operating expenditures;
- The **City Manager Commission** represents the next largest growth related operating expenditures, attributed to Fire. Growth has a significant impact on Fire services and the forecast includes the addition of new or repositioning of existing fire stations, staff and associated equipment and vehicles to support the delivery of service. By 2022, Fire represents 27% of the growth-related operating expenditures; and
- **Library Services** is also impacted by growth and by 2022, it represents 17% of the total growth related operating expenditures.

Gross Revenues—Growth—2012-2022

The table below summarizes the forecast growth related operating revenues included in the forecast by Commission.

(000's)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Legal & Administrative Services	\$ -	\$ -	\$ -	\$ 103	\$ 201	\$ 276	\$ 351	\$ 426	\$ 502	\$ 577	\$ 651
Community Services	\$ -	\$ -	\$ -	\$ -	\$ 1,140	\$ 2,335	\$ 2,390	\$ 2,447	\$ 3,760	\$ 5,135	\$ 6,209
Libraries	\$ -	\$ -	\$ -	\$ 64	\$ 149	\$ 194	\$ 220	\$ 293	\$ 369	\$ 376	\$ 384
Total	\$ -	\$ -	\$ -	\$ 167	\$ 1,490	\$ 2,804	\$ 2,961	\$ 3,167	\$ 4,630	\$ 6,087	\$ 7,244

The following summarizes the major forecast revenues in the Growth by Department:

- **Legal & Administrative Services** forecast assumes that the revenues in Licensing and Clerks and Legal By-law will increase in proportion to population increases;
- **Community Services** revenues are forecast to increase related to the Carville Block 11, the Vellore Village Block 40/41/42 and the Vaughan Corporate Centre based on the average revenues generated per square foot for existing recreation facilities; and
- **Library** revenues are forecast to increase based on the average revenues generated per square foot for existing library facilities.

Model 3: Master Plans/New Initiatives

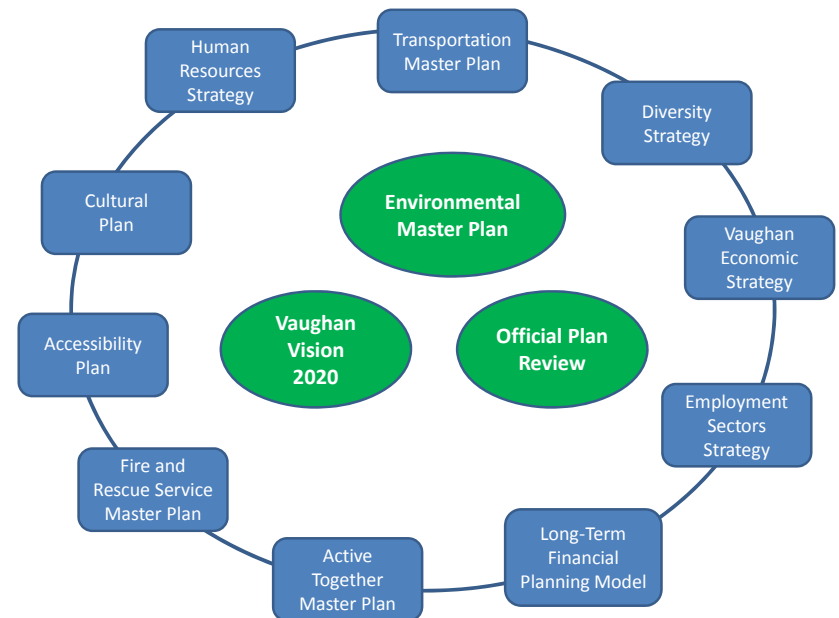
This section of the report includes the additional expenditures and revenues that have been identified in Master Plans (that are not represented in Base and Growth) to meet community needs. These items are operational and business propositions the City is looking to initiate over and above service levels. It should be noted that only those Master Plans where financial information was available have been included in the forecast. It is anticipated that this area of the forecast will require future development as more information becomes available.

Master Plans provide:

- Consistency in decision making - Gives decision makers a steady point of reference for future actions;
- Ability to make informed decisions - Plans provide facts on existing conditions and trends, enabling decision makers to better understand the impact of their decisions”
- Achieve predictability - Master Plans describe where and what type of development the community desires which allows municipalities to plan for the purchase and use of property consistent with community goals;
- Wise use of resources - Master Plans can be used to prioritize which projects to undertake, particularly when resources are limited; and
- Preserving community character - Master Plans describe the City’s vision. It permits the community to identify what is important and how it should be protected.

Summary of Master Plans/New Initiatives

The City’s Master Plans include analysis, recommendations and proposals for the community’s population, economy, housing, transportation, community facilities and land use. They were developed based on public input, surveys, planning initiatives, existing development, physical characteristics, and social and economic conditions. Master Plans can provide an excellent basis upon which supporting financial plans can be developed to fully understand the implications to taxpayers. At this stage in the process, not all Master Plans have been included financial implications.



Note: Excludes Storm, Water and Sewer Master Plans which are outside the scope of this report.

Status of Master Plan Inclusion in the FMP

The following table identifies whether the Master Plan has been incorporated into the FMP, which model reflects the Master Plan financial implications and whether there is additional financial information yet to be included.

Master Plan (Tax Services)	In Base Model	In Growth Model	In Master Plan Model	Cost Inclusion
Vaughan Vision 2020	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Additional Costs TBD
Official Plan				Yet to be Determined
Environmental Master Plan			<input checked="" type="checkbox"/>	Additional Costs TBD
Transportation Master Plan				Yet to be Determined
Diversity Strategy			<input checked="" type="checkbox"/>	Additional Costs TBD
Vaughan Economic Strategy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Additional Costs TBD
Employment Sector Strategy		<input checked="" type="checkbox"/>		Additional Costs TBD
Long Term Financial Planning Model	<input checked="" type="checkbox"/>			Additional Costs TBD
Active Together Master Plan	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Substantial Costs Included
Master Fire Plan	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Substantial Costs Included
Accessibility Plan				Yet to be Determined
Creative Together: Cultural Plan			<input checked="" type="checkbox"/>	Additional Costs TBD
Human Resource Strategy			<input checked="" type="checkbox"/>	Additional Costs TBD

- Due to timing issues in terms of the preparation of the Development Charges Study and Master Plans, it is difficult to isolate all costs that are directly attributed to Master Plans. Typically, Master Plans that were developed before or around the time of the DC Study have been incorporated in Growth.
- Some Master Plans have yet to be incorporated into the FMP because financial analysis of the future cost of service is not yet available. In other cases, portions of the Master Plans have been incorporated into the forecast where information was available.
- The next step is to continue to build the financial implications of Master Plans into the FMP.

Gross Expenditures—Master Plans—2012-2022

Master Plans (000's)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Fire Master Plan	\$ -	\$ -	\$ -	\$ 2,780	\$ 4,933	\$ 5,866	\$ 6,155	\$ 6,464	\$ 7,078	\$ 7,251	\$ 7,470
Human Resource Strategy		\$ 100	\$ 192	\$ 192	\$ 197	\$ 202	\$ 208	\$ 213	\$ 219	\$ 225	\$ 232
Creative Together: Cultural Plan	\$ -	\$ -	\$ -	\$ 141	\$ 574	\$ 479	\$ 167	\$ 172	\$ 177	\$ 183	\$ 188
Environmental Master Plan		\$ 45	\$ -	\$ 178	\$ 99	\$ 154	\$ 49	\$ 39	\$ 34	\$ 34	\$ 134
Diversity Strategy	\$ -	\$ -	\$ -	\$ 41	\$ 41	\$ 41	\$ 3	\$ 3	\$ -	\$ -	\$ -
Vaughan Vision 2020	\$ -	\$ -	\$ -	\$ -	\$ 65	\$ -	\$ -	\$ -	\$ 70	\$ -	\$ -
Total	\$ -	\$ 145	\$ 192	\$ 3,332	\$ 5,908	\$ 6,741	\$ 6,581	\$ 6,891	\$ 7,579	\$ 7,693	\$ 8,024

Master Plan	Comments
Master Fire Plan	<ul style="list-style-type: none"> In November 2007 the City of Vaughan Master Fire Plan & City-Wide Risk Assessment as presented to Council followed by the Master Fire Plan Implementation Strategy in March 2009. As such, much of the implementation strategy has been incorporated in the 2008 DC study. The implementation strategy includes additional capital and operating costs required to assist the department in keeping pace with the City's growth, changes in technology and changes in fire and rescue demands. In addition to growth related costs, which were included in Growth, the FMP plan includes additional costs directly associated with the Master Fire Plan including the operating costs associated with a Training Tower and additional personnel to support the delivery of Fire Services in accordance with the standards established in the Master Plan.
Human Resource Strategy	<ul style="list-style-type: none"> A number of initiatives related to the Human Resource Strategy have already been incorporated into previous year's budgets. The forecast includes a Learning & Development Specialist position in 2013 and several new positions in 2014 to address Workplace Health & Safety and Absence and Disability Management in accordance with the HR Strategy.
Creative Together: Cultural Plan	<ul style="list-style-type: none"> The overarching purpose of Creative Together is to establish an overall vision and actions to guide cultural development in Vaughan and to integrate cultural planning across municipal departments. The Master Plan forecast expenditures that have been incorporated into the budget including one-time expenditures in 2015-2016 as well as ongoing expenditures to implement the Cultural Plan and to address swings in funding requirements.

Master Plan	Comments
<p>Environmental Master Plan</p>	<ul style="list-style-type: none"> • In April 2009, the Environmental Master Plan: Green Directions was presented to Council to establish the principles of sustainability in Vaughan, which will then be used in the development of other master plans to help achieve a healthy natural environment, vibrant communities and a strong economy. • Green Directions provides two distinct functions and creates a series of sustainability action plans to guide the City’s operational and regulatory functions and it acts as the City’s first Integrated Community Sustainability Plan. • The forecast has incorporated a one-time expenditure to reduce GHG emissions in 2013 and the implementation of a number of the Green Directions actions in 2015-2022. • It is anticipated that further budgetary implications will be incorporated, as information becomes available. For example, areas that have yet to be quantified in terms of capital and operating requirements include energy audit, emissions direction plan, waste audit and an environmental education strategy.
<p>Diversity Strategy</p>	<ul style="list-style-type: none"> • Vaughan Vision 20/20 identified as a strategic initiative to “approve and implement a strategy to engage and support our diverse communities”. • A strategic priority was also identified to support diversity, arts and culture. • The development of a strategy that focuses on Vaughan’s ethnic or culturally diverse community recognizes Vaughan’s diversity as of great importance to Vaughan’s future development and growth. • The “Diversity Strategy” identified some key action items to help foster a community and corporation that protects human rights, promotes equality, inclusiveness and encourages creative cultural expression. • The forecast includes one-time funding to support the diversity strategy implementation plan.
<p>Vaughan Vision 2020</p>	<ul style="list-style-type: none"> • The Vaughan Vision 2020 strategic plan sets out a vision and direction for the City over the next decade and beyond. Planning for the future through the strategic plan will position the City to deal with the many pressing issues impacting the organization such as community safety, access to health facilities, environment, traffic congestion and issues related to growth and the quality of municipal services. • Many initiatives do not have project costs i.e. asset management, performance measurement, VMC, etc. which will need to be built into future forecasts as information becomes available. • As this Vision is continuously re-visited to ensure that the initiatives listed are in line with community requirements, funding for the re-design of the Vision is a five year cycle.

Model 4: Other Requests

The City's Official Plan, Master Plans and its Development Charges studies provide the direction to manage growth and set the course for the future. The previous sections of this report reflect the requirements identified in these plans and their forecasted funding implications. While these plans set the direction that the City plans to take, departments also provided input on how to deliver services and programs in the most effective and efficient manner based on these directions. This section includes information provided by Departments that are recommended to address service delivery gaps and/or enhance or improve the quality of the services and programs being delivered by the City that have not been reflected in the Growth or Master Plans.

As such, this section of the FMP includes the following "Other Requests" (not included in the base, growth or Master Plan models):

- Resource requirements identified by the departments to meet the needs of the community;
- New program and service resources required to address gaps to meet existing service standards (beyond the guidelines permitted in the development of the base budget);
- Resources required to respond to changes in the environment (socio-economic, demographic);

- Some one-time costs such as studies;
- Additional staffing needs that may not have been formally recognized in a Master Plan or that have been identified as part of implementation plans to support Master Plans; and
- Other operational requirements as a result of new initiatives that have garnered Council support.

By separating Other Requests in the forecast, Council is better able to identify the impact of these decisions on the overall budget.



Gross Expenditures—Other Requests—2013-2022

Other Requests (000's)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Community Services	\$ 130	\$ 821	\$ 777	\$ 799	\$ 822	\$ 845	\$ 869	\$ 894	\$ 920	\$ 946
Legal & Administrative Services	\$ 212	\$ 209	\$ 214	\$ 219	\$ 381	\$ 389	\$ 398	\$ 407	\$ 416	\$ 425
Engineering & Public Works	\$ 119	\$ 210	\$ 215	\$ 221	\$ 116	\$ 119	\$ 123	\$ 126	\$ 130	\$ 134
City Manager	\$ -	\$ 179	\$ 197	\$ 188	\$ 193	\$ 198	\$ 203	\$ 221	\$ 214	\$ 219
Finance	\$ -	\$ -	\$ -	\$ 108	\$ 110	\$ 113	\$ 115	\$ 117	\$ 120	\$ 244
Libraries	\$ -	\$ 77	\$ 494	\$ 607	\$ 1,261	\$ 1,374	\$ 1,493	\$ 1,561	\$ 1,685	\$ 1,790
Strategic & Corporate Services	\$ 85	\$ 45	\$ 46	\$ 46	\$ 47	\$ 48	\$ 48	\$ 49	\$ 50	\$ 51
Planning	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total ARRs	\$ 546	\$ 1,541	\$ 1,942	\$ 2,188	\$ 2,931	\$ 3,086	\$ 3,249	\$ 3,375	\$ 3,533	\$ 3,808

The table above forecasts the additional resource requests by Commission, sorted from highest to lowest in terms of expenditure requirements over the next 10 years. On average the annual expenditure requirements to support the other departmental requests is \$2.6 million over the next 10 years. The following summarizes the key assumptions and forecast drivers:

- **Library Services** includes additional resource requirements for the resources and periodical replacements and non-branch library support staff;
- **Community Services** includes additional resource requirements to implement a Diversity & Inclusivity Signage and Communication Program and a number of requirements for parks operations;
- **Legal and Administration** includes temporary resource requirements to undertake a zoning by-law review and real estate support to assist with the 5 year acquisition plan and additional administrative support;
- **Finance** includes additional support in the areas of budgeting, financial planning and technical support in purchasing;
- **City Manager** includes further support for the implementation of the City's communications strategies;
- **Engineering and Public Works** includes the addition of a number of positions to support and enhance program delivery; and
- **Corporate and Strategic Services** includes an On-Line Citizen Public Engagement Forum and Performance Measurement Software Maintenance Cost.

Consolidated Operating Budget Forecast

Total Net Expenditures (000s)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Base Net Expenditures	\$ 146,243	\$ 150,541	\$ 153,916	\$ 161,124	\$ 166,172	\$ 170,773	\$ 181,851	\$ 189,649	\$ 198,790	\$ 206,387	\$ 212,305
Growth Net Expenditures	\$ -	\$ 6,957	\$ 14,375	\$ 16,097	\$ 22,255	\$ 27,113	\$ 37,616	\$ 37,374	\$ 46,600	\$ 47,477	\$ 49,433
Master Plan/New Initiatives Model Net Expenditures	\$ -	\$ 145	\$ 192	\$ 3,332	\$ 5,908	\$ 6,741	\$ 6,581	\$ 6,891	\$ 7,579	\$ 7,693	\$ 8,024
Other Requests Model Net Expenditures	\$ -	\$ 524	\$ 1,511	\$ 1,912	\$ 2,158	\$ 2,901	\$ 3,056	\$ 3,219	\$ 3,345	\$ 3,503	\$ 3,778
Total Forecast Net Levy	\$ 146,243	\$ 158,167	\$ 169,994	\$ 182,464	\$ 196,493	\$ 207,528	\$ 229,104	\$ 237,134	\$ 256,314	\$ 265,059	\$ 273,540
% Change in Net Levy Before Assessment Growth		8.2%	7.5%	7.3%	7.7%	5.6%	10.4%	3.5%	8.1%	3.4%	3.2%
Assessment Growth Revenues	\$ 4,812	\$ 4,307	\$ 4,564	\$ 4,850	\$ 5,523	\$ 5,531	\$ 5,022	\$ 4,382	\$ 4,459	\$ 4,658	\$ 4,658
Assessment Growth Revenues as a % of Net Levy	3.3%	2.7%	2.7%	2.7%	2.8%	2.7%	2.2%	1.8%	1.7%	1.8%	1.7%
Net Levy After Growth	\$ 141,430	\$ 153,860	\$ 165,430	\$ 177,614	\$ 190,971	\$ 201,997	\$ 224,082	\$ 232,752	\$ 251,855	\$ 260,401	\$ 268,882
% Change in Tax Rates		5.2%	4.6%	4.5%	4.7%	2.8%	8.0%	1.6%	6.2%	1.6%	1.4%

The above table consolidates the net expenditures from each of the models to provide the forecast impact on the net levy over the next 10 years. Highlights include:

- The annual net levy increase ranges from 3.2% to 10.4% over the forecast period, taking into consideration Base assumptions, growth, additional departmental request and Master Plans. The increase in 2018 is mainly attributed to Vellore Village Community Centre, new or repositioning of fire station and Engineering and Public Works growth-related expenses. The large increase in 2020 is mainly due to the Vaughan Corporate Community Centre;
- Assessment growth helps to offset, in part, the increases in the net levy. The average annual assessment growth is 2.3% over the forecast period which helps to offset property tax rate increases; and
- The average annual forecast tax increase, taking into consideration the Base assumptions, growth, additional departmental request and Master Plans/New Initiatives is 4.1%.

Summary Operating Budget Forecast

The table on the previous page summarizes the tax increases that would be required over the projected 10 year period. These impacts assume no mitigation efforts have been made to reduce the projected net funding requirements, however, as discussed; there are also a number of risks associated with the forecast that may create additional challenges:

- Assumes there would be a surplus each year of \$2.5 million which may not materialize;
- Assumes a \$2.8 million transfer from the Tax Stabilization Reserve which may not be sustainable;
- The financial implications for a number of Master Plans have not been included in the forecast as information is not yet available;
- Does not address the existing infrastructure gap; and
- Does not factor in a plan for a pay-as-you go strategy for post-retirement benefits.

After taking into consideration assessment growth, the average annual tax increase over the forecast period is 4.1%. As shown on the previous page, the tax rate increase is not smooth and further efforts will be required to address this situation. By 2022, the City's net levy would be \$269 million compared to the existing levy of \$146 million. The assessment growth helps to offset in part the increases related to growth. The forecast shows that the City is facing significant financial pressures as it addresses inflationary and other cost pressures, infrastructure deficits as well as the requirement to provide services to a growing community. These pressures will challenge Council and the administration to make decisions related to program delivery, priorities, service levels, user fees and tax rates. The final section of the report (**Recommendations**) section of the forecast provides strategies, recommended policies and action plans to address the above noted challenges and risks, with options for further consideration by Council.

The next section of the report provides a summary of the capital requirements, reserves and debt position.

Capital Requirements

Capital Requirements Introduction

The existing Capital Plan includes requirements related to **growth, infrastructure replacement and new initiatives**. The City of Vaughan continues to grow at an unparalleled pace, adding new facilities, fleet, parks, and transportation networks on an annual basis. Initially, these items are funded primarily by the development industry, with future renewal costs becoming the responsibility of the City. At the same time, the City of Vaughan is experiencing challenges to meet the replacement requirements for the existing capital assets and infrastructure. As discussed earlier in the report, the City has in excess of \$1 billion in infrastructure (excluding land and water/wastewater) and an historical funding gap of approximately \$42 million related to an under-contribution toward the replacement of existing assets.

As Vaughan ages, infrastructure renewal requirements will accumulate at a pace similar to which they were constructed. Consequently, it is vital to enhance Vaughan's current plan for this eventuality and further develop funding policies to protect and sustain the foundation of the community.

Vaughan has a long standing history as it relates to financial planning and developing fiscally prudent policies. These include establishing financial performance metrics for debt and reserve balances to ensure that the City maintains financial flexibility and is operating in a financially prudent manner. As illustrated in the Financial Health section of the report, Vaughan is ahead of most municipalities as it relates to reserve balances and cash position, however, infrastructure renewal is a major challenge.

The following summarizes the key financial performance metrics that the City uses to support financial sustainability:

- **Discretionary Reserve Ratio** - This represents the reserves available to fund capital, program specific requirements, unanticipated events and corporate liabilities in relation to own source revenues. The City has set a minimum threshold of 50%. This also ensures that sufficient cash flows are available in the event of economic downturns. However, as will be shown in this section of the report, this policy will prove to be particularly challenging if the City is to meet growth related and replacement requirements over the next decade while at the same time maintaining a competitive property tax environment;
- **Working Capital Reserve Ratio** - To ensure that there is sufficient cash flow available, the City's policy is to maintain at least 10% in the Working Capital Reserve as a percentage of own source revenues. As will be shown in this section of the report, the forecast using the existing assumptions results in the ratio falling below the policy threshold;
- **Debt Ratio** - The City's debt policy ensures that the City retains financial flexibility by avoiding over-reliance on long term debt. This is accomplished by establishing a ceiling of 10% of debt charges in relation to own source revenues. The forecast reflects significant debt room and adherence to this threshold; and
- **Contributions to Reserves for New Infrastructure** - To avoid increasing the infrastructure funding gap, the City implemented a policy to make annual contributions to the Infrastructure Sustainability Reserves as new assets are added.

The existing forecast does not address the infrastructure funding gap or the post-retirement benefits liability. This would result in additional property tax rate increases beyond those reflected in the previous section of the report. As such, further strategies and the need to assess capital priorities are required to address the funding gap. Additional strategies will be reflected in the **Recommendations** section of the report.

The purpose of this section of the report is to provide an understanding of:

- Capital replacement requirements over the next 10 years;
- Capital growth requirements over the next 10 years;
- New initiative capital requirements over the next 10 years;
- Sources of financing based on existing Council approved policies; and
- Issues and potential opportunities that will need to be addressed and incorporated into future financial strategies.

Capital Plan Assumptions

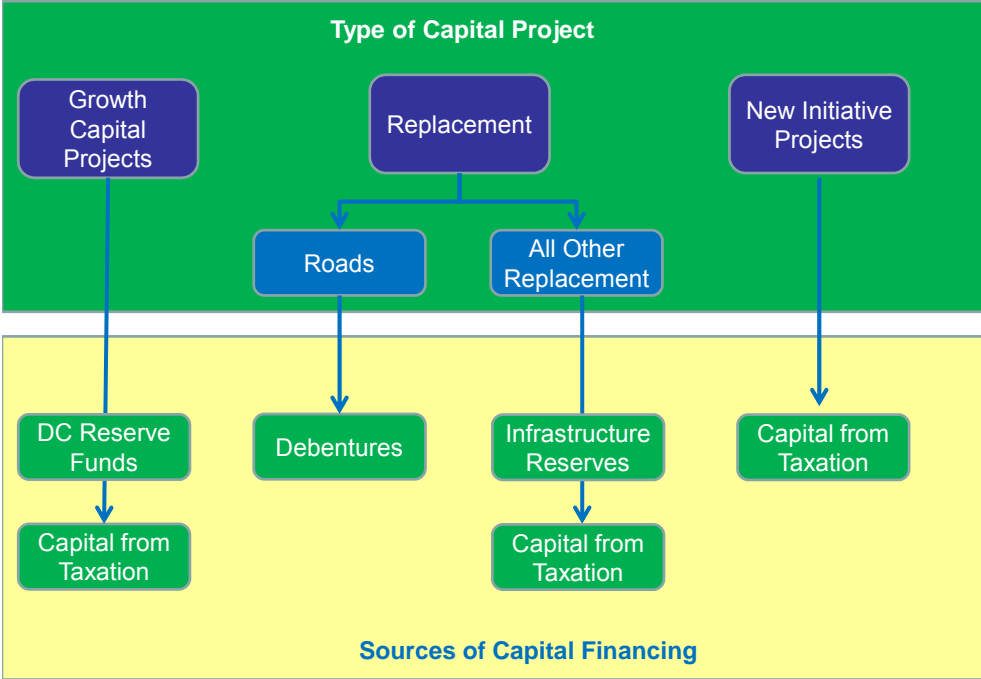
The capital plan includes a number of assumptions:

- Infrastructure replacement requirements are based on the underlying age and useful life of the assets to determine the timing and cost of capital replacement requirements;

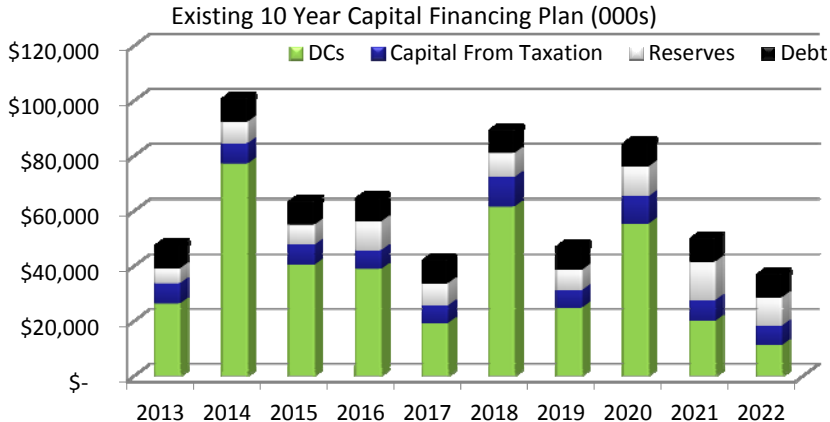
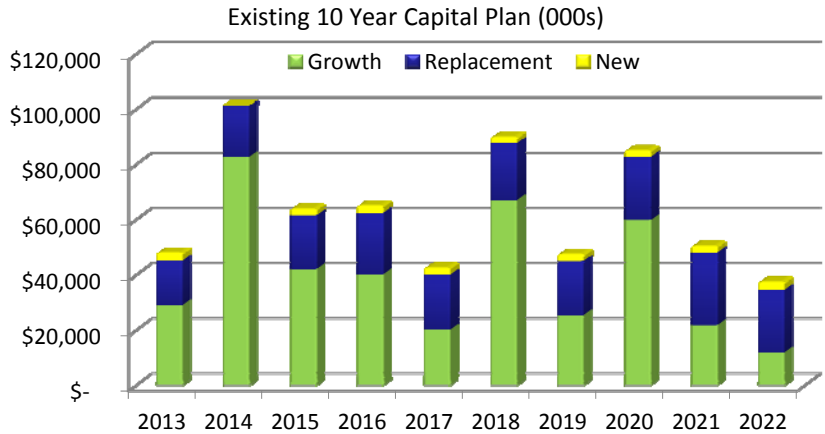
- Growth-related capital requirements are based on the DC Background Study, with modifications, as required, based on new information that has become available since the time the study was undertaken;
- Master Plans have been incorporated where information is available;
- Growth-related projects are funded to the full extent as available and permitted through the Development Charges Act from development charge revenues. The remainder of the requirements (e.g. 10%) is funded from operating budget contributions (Capital from Taxation);
- Roads replacement program includes \$9 million annually which is financed through the issuance of debt;
- Replacement of existing infrastructure is funded from the City's various Infrastructure Sustainability Reserves. Annual contributions are made to the reserves to help support the program;
- Where infrastructure has no underlying reserve, replacement projects are financed through contributions from the operating budget as Capital from Taxation;
- New initiatives are funded from Capital from Taxation; and
- The plan does not address the capital backlog which currently exists (estimated at \$42.3 million).

Summary of Capital Projects and Sources of Financing

The following chart reflects the City's existing policies with respect to the various types of capital projects and how they are financed.



Existing 10 Year Capital Plan



Capital Expenditures			Capital Financing				
Capital Expenditures (000s)	10 Year Capital	10 Year Capital % of Total	DCs	Capital From Taxation	Reserves	Debt	Total
Growth	\$ 398,512	63.2%	\$ 372,831	\$ 25,682			\$ 398,512
New Initiatives	\$ 22,873	3.6%		\$ 22,873			\$ 22,873
Replacement of Existing Assets	\$ 208,690	33.1%		\$ 28,567	\$ 90,123	\$ 90,000	\$ 208,690
Total Capital Requirements	\$ 630,075		\$ 372,831	\$ 77,121	\$ 90,123	\$ 90,000	\$ 630,075

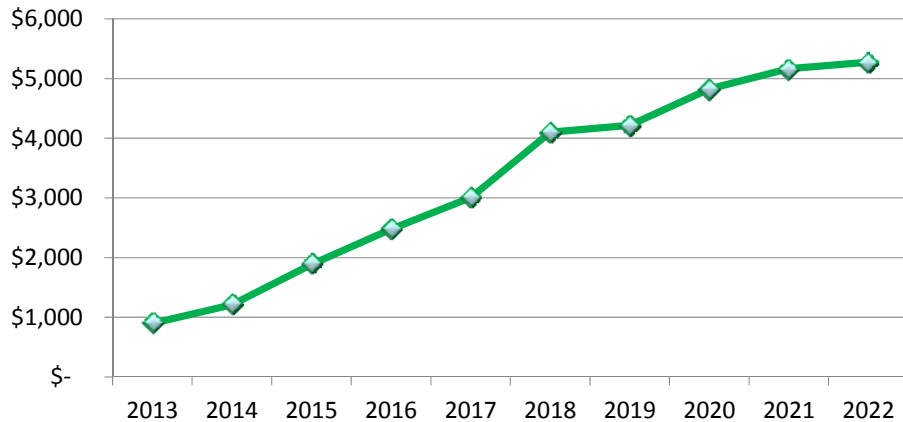
The following provides highlights with respect to the capital budget:

- Growth-related capital accounts for approximately 63% of the total capital expenditures over the next 10 years (\$398.5 million). DC Reserve Funds are the main source of funding (\$372.8 million), with the remainder of the growth-related capital requirements funded from transfers from the operating budget;
- The capital plan includes the replacement of \$208.7 million of infrastructure which is funded through the issuance of debt (\$90 million for the roads), Infrastructures Sustainability Reserves (\$90 million) and through operating budget transfers (\$28.6 million); and
- New initiatives account for less than 4% of the capital plan which is financed from operating budget transfers.

Growth –Related Capital Project Summary

Growth-Related Capital Expenditures (000s)	Forecast Year										10 Year
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
City-Wide Engineering	\$10,362	\$14,623	\$24,219	\$22,509	\$13,136	\$10,902	\$11,622	\$13,796	\$15,648	\$4,383	\$141,200
Indoor Recreation (Community Centres)	\$1,060	\$47,116	\$0	\$750	\$0	\$47,116	\$0	\$37,932	\$0	\$480	\$134,454
Park Development	\$10,874	\$4,712	\$12,042	\$4,720	\$2,364	\$6,176	\$3,866	\$4,208	\$4,394	\$5,193	\$58,549
Libraries	\$1,377	\$14,200	\$4,590	\$7,596	\$871	\$871	\$6,184	\$2,521	\$871	\$871	\$39,954
Fire	\$3,359	\$0	\$0	\$3,199	\$0	\$600	\$2,759	\$326	\$0	\$0	\$10,244
General Government	\$1,244	\$1,244	\$600	\$750	\$600	\$600	\$600	\$750	\$600	\$600	\$7,588
Fleet - Vehicles	\$573	\$573	\$573	\$573	\$573	\$573	\$167	\$167	\$167	\$167	\$4,107
Public Works (excl. fleet)	\$0	\$0	\$0	\$0	\$2,416	\$0	\$0	\$0	\$0	\$0	\$2,416
Total Growth Related Capital Projects	\$28,849	\$82,468	\$42,025	\$40,098	\$19,960	\$66,839	\$25,198	\$59,700	\$21,681	\$11,694	\$398,512

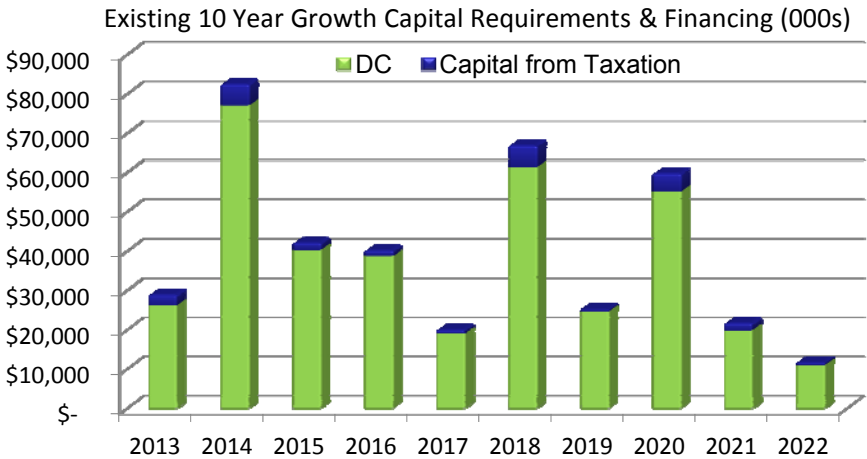
Contributions to Infrastructure Sustainability Reserves – Growth
(000s)



- The City is forecast to continue its growth, adding new facilities, parks, and transportation networks on an annual basis. Preliminary estimates based on the DC Background Study and various Master Plans reflect a need to spend over \$398 million on new infrastructure over the next 10 years.
- The Growth Capital Program is largely driven by engineering requirements, the addition of community centres and parks development.
- In accordance with the existing policy, as new assets are added to the City’s inventory, to ensure that there is replacement funding for new assets, the City has included in the FMP Operating Budget projections, annual contributions toward the replacement of these assets. As shown in the graph to the left, in 2013, the contribution to reserves for new assets is \$0.9 million and as new assets are added, by 2022, the contribution to the Infrastructure Reserves is \$5.3 million, adding \$33 million in total to the reserves.

Growth-Related Capital Financing Summary

Growth-Related Capital Financing (000s)	Forecast Year										10 Year
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
DC Reserves	\$26,107	\$76,999	\$40,244	\$38,659	\$18,960	\$61,305	\$24,648	\$55,142	\$19,802	\$10,963	\$ 372,831
Capital From Taxation	\$ 2,742	\$ 5,469	\$ 1,781	\$ 1,439	\$ 1,000	\$ 5,534	\$ 550	\$ 4,558	\$ 1,878	\$ 731	\$ 25,682
Total Growth Financing	\$28,849	\$82,468	\$42,025	\$40,098	\$19,960	\$66,839	\$25,198	\$59,700	\$21,681	\$11,694	\$ 398,512



- Growth capital projects are funded primarily from DC Reserve Funds which are collected through development charge fees
- Capital from Taxation is used to fund the portion of growth that is not eligible under the Development Charge legislation.
- Capital from Taxation varies in accordance with the projected growth and ranges from \$550,000 to \$5.5 million (averaging \$2.6 million annually). Capital from Taxation also funds non-growth related projects where no reserve is available.
- Consideration should be given to adding a capital from taxation reserve to smooth the 10% co-funding requirement.

New Initiatives Capital Summary

New Initiatives, Regulatory Requirements & Studies (000s)	Forecast Year										10 Year
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
New Initiatives - Infrastructure & Other	\$432	\$150	\$1,010	\$1,051	\$1,072	\$1,093	\$1,115	\$1,137	\$1,160	\$1,183	\$9,403
IT New Initiatives & IT Facility Requirements	\$2,085	\$0	\$796	\$1,037	\$966	\$600	\$867	\$611	\$623	\$1,244	\$8,829
Accessibility & Other Regulatory Studies	\$361	\$0	\$330	\$343	\$350	\$357	\$364	\$372	\$379	\$387	\$3,243
	\$0	\$0	\$160	\$166	\$170	\$173	\$177	\$180	\$184	\$187	\$1,398
Total	\$2,877	\$150	\$2,296	\$2,597	\$2,558	\$2,224	\$2,523	\$2,301	\$2,346	\$3,001	\$22,873
Capital Financing											
Capital From Taxation	\$2,877	\$150	\$2,296	\$2,597	\$2,558	\$2,224	\$2,523	\$2,301	\$2,346	\$3,001	\$22,873

As shown above, the capital plan includes new initiatives, IT, accessibility and other regulatory requirements over the next 10 years in the amount of \$22.9 million. As there are no Infrastructure Sustainability Reserves, these are funded from Capital from Taxation.

Replacement Capital Project Summary

Replacement Capital Expenditures (000s)	Forecast Year										10 Year	
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		
Roads	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$ 9,000	\$ 90,000
Buildings	\$609	\$2,982	\$3,272	\$4,650	\$3,782	\$2,077	\$3,341	\$4,574	\$4,696	\$ 5,818	\$ 5,818	\$ 35,801
Non-Reserve Replacement	\$ 1,768	\$ 1,768	\$ 3,208	\$ 2,811	\$ 2,869	\$ 2,975	\$ 3,321	\$ 3,142	\$ 3,338	\$ 3,366	\$ 3,366	\$ 28,567
Parks	\$2,203	\$2,258	\$1,636	\$1,484	\$2,021	\$1,919	\$3,408	\$5,014	\$3,253	\$ 1,555	\$ 1,555	\$ 24,752
Fleet	\$1,620	\$2,067	\$1,051	\$1,226	\$685	\$1,598	\$576	\$1,193	\$2,935	\$ 1,557	\$ 1,557	\$ 14,507
Fire	\$682	\$332	\$1,010	\$1,057	\$1,179	\$2,694	\$35	\$0	\$2,345	\$ 858	\$ 858	\$ 10,191
Streetscapes	\$82	\$0	\$11	\$86	\$389	\$441	\$0	\$4	\$747	\$ 499	\$ 499	\$ 2,259
Heritage	\$189	\$201	\$0	\$1,891	\$0	\$0	\$0	\$0	\$0	\$ -	\$ -	\$ 2,281
Uplands	\$0	\$0	\$279	\$0	\$0	\$0	\$0	\$0	\$0	\$ -	\$ -	\$ 279
City Playhouse	\$0	\$0	\$0	\$53	\$0	\$0	\$0	\$0	\$0	\$ -	\$ -	\$ 53
Total Replacement Capital	\$16,152	\$18,607	\$19,467	\$22,258	\$19,925	\$20,704	\$19,681	\$22,928	\$26,314	\$22,653	\$ 208,690	

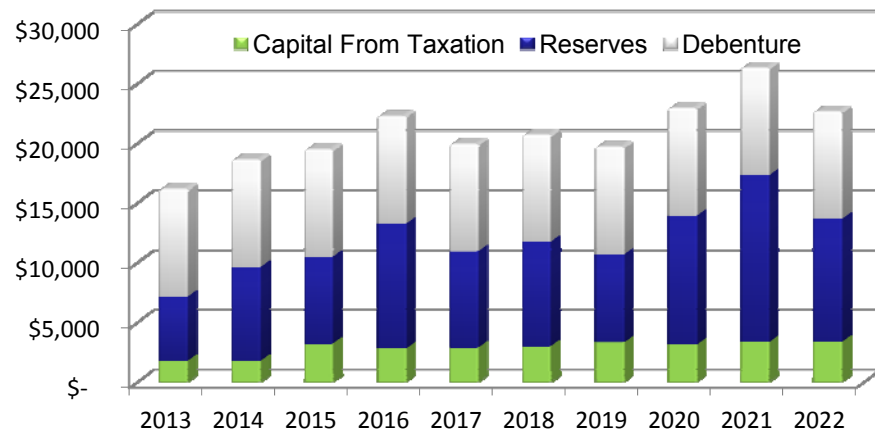
As shown above:

- The FMP includes the replacement of \$208.7 million of existing infrastructure over the next 10 years. This is based on replacing existing assets as they reach the end of their theoretical useful life. The replacement capital requirements reflected above does not include the existing backlog of \$42 million;
- Roads represent the largest capital requirements over the forecast period (\$90 million) which is fully funded from the issuance of \$9 million in debt annually;
- Based on the estimation of the useful life of the assets, there are \$35.8 million in building and facility related capital replacement/ refurbishment requirements over the 10 year forecast period. These requirements are funded from the reserves; and
- The forecast includes \$28.6 million in capital replacement requirements where no supporting Infrastructure Reserve is available (streetlighting, IT and traffic and tree programs) which are funded from Capital from Taxation.

Replacement Capital Financing Summary

Replacement Capital Financing (000s)	Forecast Year										10 Year
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Capital From Taxation	\$1,768	\$1,768	\$3,208	\$2,811	\$2,869	\$2,975	\$3,321	\$3,142	\$3,338	\$3,366	\$28,567
Infrastructure Sustainability Reserves	\$5,384	\$7,839	\$7,259	\$10,447	\$8,055	\$8,729	\$7,360	\$10,786	\$13,976	\$10,287	\$90,123
Debenture	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$90,000
Total Replacement Capital Financing	\$16,152	\$18,607	\$19,467	\$22,258	\$19,925	\$20,704	\$19,681	\$22,928	\$26,314	\$22,653	\$208,690

Existing 10 Year Replacement Capital Requirements & Financing (000s)

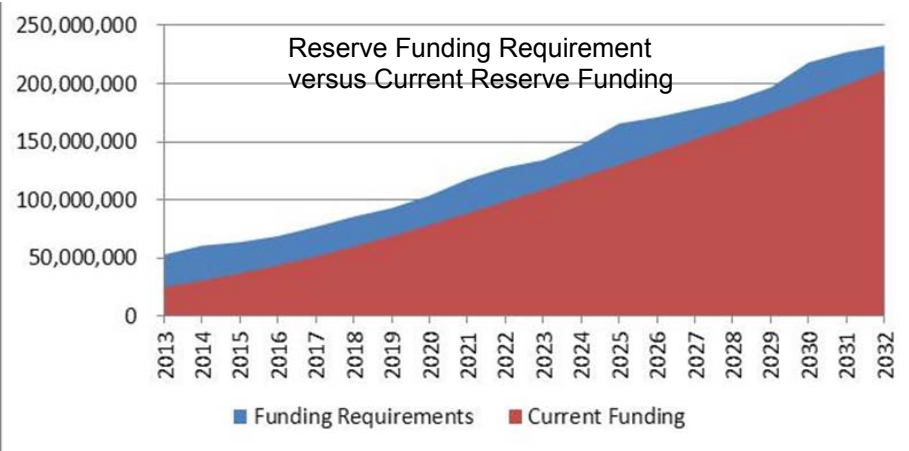


- As illustrated above, the replacement of existing infrastructure is financed from three sources; Capital from Taxation \$28.6 million, Infrastructure Sustainability Reserves \$90.1 million and \$90 million in debt (roads program).
- The forecast shows annual transfers to the various Infrastructure Sustainability Reserves, based on existing policies and practices. By 2022, the contribution to the Infrastructure Sustainability Reserves is \$5.4 million, considerably lower than what is required to meet the replacement needs as will be shown on the next page.

Capital Replacement Requirements

A number of issues with respect to infrastructure repair and replacement have been identified that must be addressed.

- **Backlog**—A considerable amount of infrastructure is currently past their estimated useful life (\$42 million).
- **Underfunded Capital Program**—There is a funding gap over the next 10 years to support the replacement of infrastructure and assets as shown in the following graph.



- The above graph includes the backlog and the spending of all reserve balances. Based on the forecast for the replacement of capital assets, taking into consideration the existing assets that are beyond their useful life, the annual contributions to the Infrastructure Sustainability Reserves and opening reserve balances, there is a funding gap of \$25.8 million by 2022, as illustrated in the next table.

(000's)	Beginning Reserve Balance 2013	Backlog	10 Year Contributions	Interest	10 Year Requirements	Ending Balance
Building and Facilities	\$ 13,515	\$ 13,189	\$ 31,868	\$ 4,217	\$ 35,801	\$ 611
Parks	\$ 207	\$ 15,257	\$ 13,245	\$ -	\$ 24,752	\$ (26,557)
Fleet (Vehicles)	\$ 2,658	\$ 6,005	\$ 1,788	\$ 63	\$ 13,119	\$ (14,615)
Artificial Soccer Turf	\$ 316	\$ -	\$ 1,400	\$ 275	\$ 1,388	\$ 602
Fire	\$ 3,491	\$ 3,963	\$ 14,091	\$ 1,886	\$ 10,191	\$ 5,314
Streetscape	\$ 325	\$ 2,317	\$ 12,343	\$ 1,609	\$ 2,259	\$ 9,701
Heritage	\$ 475	\$ 797	\$ 2,278	\$ 66	\$ 2,281	\$ (258)
City Playhouse	\$ 30	\$ 80	\$ 150	\$ 24	\$ 53	\$ 71
Uplands	\$ (1,132)	\$ 763	\$ 1,500	\$ 0	\$ 279	\$ (675)
Total	\$ 19,886	\$ 42,372	\$ 78,664	\$ 8,139	\$ 90,123	\$ (25,805)

- There are significant issues in the Parks and Fleet reserves where contributions to reserves are significantly underfunded.
- This means that the requirement to maintain a 50% discretionary reserve balance in the reserves is not being adhered to. In order to comply with the policy of maintaining discretionary reserves of 50% of own source revenues will reduce funds available for infrastructure replacement as balances will be held for recession resiliency and financial flexibility. To maintain the 50% policy would greatly inhibit the use of these reserves.

Contributions to Capital vs. Amortization Expense

The following table summarizes the net operating budget contributions to the capital program over the forecast period for tax-related programs (excluding roads).

Capital Contributions to Replace Infrastructure (000's)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Infrastructure Reserve Contribution - Replacement	\$ 4,198	\$ 4,274	\$ 4,352	\$ 4,432	\$ 4,513	\$ 4,595	\$ 4,679	\$ 4,765	\$ 4,853	\$ 4,943
Infrastructure Reserve Contribution - New Assets	\$ 899	\$ 1,210	\$ 1,890	\$ 2,476	\$ 3,005	\$ 4,101	\$ 4,215	\$ 4,824	\$ 5,167	\$ 5,274
Capital From Taxation - Replacement	\$ 4,645	\$ 1,918	\$ 5,218	\$ 4,902	\$ 5,002	\$ 5,151	\$ 5,540	\$ 5,406	\$ 5,647	\$ 5,721
Total Capital Contributions to Replace Assets	\$ 9,742	\$ 7,403	\$ 11,461	\$ 11,810	\$ 12,519	\$ 13,847	\$ 14,435	\$ 14,996	\$ 15,667	\$ 15,937
Historical Amortization Expense	\$ 19,909	\$ 20,808	\$ 22,018	\$ 23,908	\$ 26,384	\$ 29,389	\$ 33,490	\$ 37,705	\$ 42,529	\$ 47,696
Annual Funding Gap	\$ (10,168)	\$ (13,405)	\$ (10,557)	\$ (12,099)	\$ (13,865)	\$ (15,542)	\$ (19,056)	\$ (22,709)	\$ (26,863)	\$ (31,759)
Accumulated Amortization (net of Reserves)	\$ (151,401)	\$ (161,569)	\$ (174,974)	\$ (185,531)	\$ (197,630)	\$ (211,495)	\$ (227,037)	\$ (246,093)	\$ (268,802)	\$ (295,665)
Cumulative Funding Gap	\$ (161,569)	\$ (174,974)	\$ (185,531)	\$ (197,630)	\$ (211,495)	\$ (227,037)	\$ (246,093)	\$ (268,802)	\$ (295,665)	\$ (327,423)

The following provides highlights with respect to capital contributions in relation to amortization expenses:

- Prudent asset management principles suggest that, at minimum, annual contributions to the capital program for the replacement of assets and infrastructure should be at least equivalent to the historical amortization expense. In addition there should be provisions for any prior missed contributions. As illustrated above, Vaughan's accumulated amortization, net of available reserve balances) reflects a funding gap of \$151.4 million 2012;
- While the City has implemented a policy to make annual contributions for new assets and infrastructure, additional strategies are required to increase the contributions for existing assets; and
- Based on the existing policies and practices, the existing funding gap of \$161.5 million in 2013 would more than double to \$327.4 million by 2022.

Strategies to Address the Infrastructure Gap

Strategies to Address the Infrastructure Gap

Financial sustainability requires that a municipality ensure that there are sufficient resources to support the delivery of services for which the City bears responsibility. The City has implemented strategies to ensure that as new infrastructure is developed, annual contributions are made to the reserves based on lifecycle replacement principles. However, as shown in the analysis, the City, along with the vast majority of municipalities across Canada has an infrastructure deficit related to existing assets. If left unaddressed, this infrastructure gap will grow which will burden future generations.

Given the need and benefit for further infrastructure investment in order to protect, sustain, and maximize the use of Vaughan's infrastructure assets, a number of options and strategies have been considered.

Strategy 1: Utilize a Portion of the Assessment Growth

The City is forecast to experience annual assessment growth of 2.4%, on average, over the next 10 years; additional infrastructure is a direct result of growth. Utilizing a portion of the assessment growth annually toward the replacement of capital infrastructure will help to fund the infrastructure gap. For example, a 10% allocation of the growth-related revenues annually over the next 10 years would reduce the infrastructure gap by \$26.5 million

Strategy 2: Recreation User Fee Surcharge

A number of municipalities have helped to address the replacement/refurbishment requirements of recreation facilities and equipment by adding a capital fee surcharge to the fees. This money would then be available in the future to ensure that the assets are well maintained. For example, the addition of a 5% user fee surcharge to recreation to support the future replacement of the facilities would generate \$11.4 million over the 10 year period. Further study is required.

Strategy 3: Special Infrastructure Levy

Another option that could be implemented is to establish a special infrastructure levy for the replacement of existing infrastructure. For example, a special infrastructure annual levy of 1% annual levy increase would generate approximately \$106 million which would be directed toward the capital program.

Strategy 4: Reserve Reallocation

There is the potential within the discretionary reserve group to add approximately \$5.7 million to the infrastructure Sustainability Reserve through a reserve reallocation strategy from areas that have surplus revenues to areas of greatest need.

Strategy 5: Rethinking Infrastructure

There is the potential to reduce infrastructure costs by determining the most cost-effective options for all capital programs for new or rehabilitated infrastructure by pursuing life cycle costing analysis. Note that the impact is yet to be determined.

Strategy 6: Advocacy

It is well established that the condition of Canada's municipal infrastructure is one of the keys to underpinning, maintaining and enhancing Canada's economic productivity and competitiveness. It is therefore clearly in the national and provincial interests for the federal and provincial government to institute permanent and sustainable infrastructure funding. Note that the impact is yet to be determined.



Impact Analysis—Strategies to Address the Infrastructure Gap

The strategies presented to address the infrastructure gap can be modified, but have been included to provide an illustration of the many variations and alternative scenarios that could be implemented. These scenarios are not intended to definitively quantify the anticipated impact of a proposed strategy. They are instead intended to provide insights into the magnitude of change associated with each of the options. The outcomes of these strategies have been included below.

Strategies (000's)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
Addressing Capital Infrastructure Gap											
Strategy 1: 10% Assessment Growth	\$ 431	\$ 887	\$ 1,372	\$ 1,924	\$ 2,478	\$ 2,980	\$ 3,418	\$ 3,864	\$ 4,330	\$ 4,795	\$ 26,479
Strategy 2: 5% Recreation User Fee Surcharge	\$ 886	\$ 915	\$ 979	\$ 1,033	\$ 1,109	\$ 1,188	\$ 1,216	\$ 1,245	\$ 1,335	\$ 1,426	\$ 11,332
Strategy 3: 1% Special Levy	\$ 1,538	\$ 3,193	\$ 4,969	\$ 6,881	\$ 8,903	\$ 11,147	\$ 13,478	\$ 16,000	\$ 18,607	\$ 21,299	\$ 106,015
Strategy 4: Reserve Reallocation	\$ 5,700										\$ 5,700
Total Available to Address Infrastructure Gap	\$ 8,555	\$ 4,995	\$ 7,320	\$ 9,838	\$ 12,490	\$ 15,315	\$ 18,112	\$ 21,109	\$ 24,272	\$ 27,520	\$ 149,526

As shown above, the strategies presented would reduce the infrastructure gap by \$149.5 million over the 10 year period. The following table summarizes the impact of the above noted strategies on addressing the infrastructure gap.

Impact Analysis - Closing the Infrastructure Gap	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
Annual Infrastructure Gap	\$ (10,168)	\$ (13,405)	\$ (10,557)	\$ (12,099)	\$ (13,865)	\$ (15,542)	\$ (19,056)	\$ (22,709)	\$ (26,863)	\$ (31,759)	
Existing Infrastructure	\$ (151,401)										
Available Infrastructure Funds (Strategies 1-4)	\$ 8,555	\$ 4,995	\$ 7,320	\$ 9,838	\$ 12,490	\$ 15,315	\$ 18,112	\$ 21,109	\$ 24,272	\$ 27,520	\$ 149,526
Infrastructure Gap/Surplus	\$(153,014)	\$ (8,410)	\$ (3,237)	\$ (2,261)	\$ (1,375)	\$ (227)	\$ (944)	\$ (1,600)	\$ (2,591)	\$ (4,239)	
Cumulative Gap/Surplus	\$(153,014)	\$(144,604)	\$(141,367)	\$(139,106)	\$(137,731)	\$(137,504)	\$(136,560)	\$(134,960)	\$(132,369)	\$(128,130)	

As shown above, the implementation of the proposed strategies would reduce the cumulative funding gap (as shown on page 95) from \$327.4 million to \$128.1 million.

The impact on the levy varies depending on the decisions of Council. The following table helps explain the options and the impact on the tax levy. As shown below, by utilizing 10% of the assessment growth revenues toward capital, the levy would increase 0.3% annually unless mitigation tactics are applied. The implementation of a 5% recreation surcharge would have no impact on the levy as the revenues would be directed toward the capital program through a transfer to Infrastructure Sustainability Reserves. A 1% special infrastructure levy would have a 1% annual increase on the levy. It is yet to be determined the impact of decisions on rethinking the infrastructure and the future success of government advocacy.

Levy Impact	
Strategy 1: 10% Assessment Growth	0.3% annual impact
Strategy 2: 5% Recreation User Fee Surcharge	No impact as revenues would be directed to capital
Strategy 3: 1% Special Levy	1% annual impact
Strategy 4: Reserve Reallocation	No impact
Strategy 5: Rethinking Infrastructure	TBD
Strategy 6: Advocacy	TBD

Recommendations

Introduction—Recommendations

The City of Vaughan's Strategic Plan 2020 sets out a vision and direction for the City over the next decade and beyond. As stated in the Strategic Plan, "Planning for the future through the strategic plan will position the City to deal with the many pressing issues impacting the organization such as community safety, access to health facilities, environment, traffic congestion and issues related to growth and the quality of municipal services".

As previously outlined, the City of Vaughan is facing a number of challenges to provide services and infrastructure given increasing demands and limited revenues. This will require long-term strategic thinking about how best to accommodate and make the most of new opportunities. As a result of these pressures, the existing principles and practices governing municipal finance must be monitored and revised, as required, to ensure that the City continues to provide the services expected and valued by citizens as set out in the strategic plan without jeopardizing its financial sustainability.

Financial sustainability must be a primary consideration in light of cost escalations, growth, infrastructure requirements to maintain existing assets and to set aside sufficient funds for future liabilities. Financial sustainability is supported through the adoption of a long-term framework built on prudent financial philosophies, financial policies, actions and strategies.

As a result of the effort undertaken, 22 recommendations organized into 4 classifications, Future based Organization, Sustainability, Infrastructure and Post-Retirement Benefits, and Administration, are provided. These *recommendations* are intended as high level principle actions the City should endorse and move towards.

A priority rating is applied to assist with managing the above recommendations. A's are the most important, followed by B's, C's and D's. It should also be noted the City is currently undertaking a number of corporate initiatives and where appropriate the term "underway" has been included. Other City initiatives are substantially complete and due to recent progress, further work may be required at later date. These items may be assigned a lower priority. For example, the Financial Master Plan may be an A priority, but once delivered the future document update might fall in priority, allowing other initiatives to move forward. The A priority recommendations for the City are as follows:

- Prioritization;
- Performance Measurement;
- Asset Management Strategies; and
- Infrastructure Financing.

To assist decision makers understand the nature of the recommendation and effort involved, each recommendation is complemented by *Suggested Steps to Implement*. These steps are intended as a starting point and reference piece to support future discussion and review on a more detailed and specific implementation plan. On the next page are parameters, which will be assigned to each suggested step to provide a clearer indication of the associated priority, duration, complexity, and cost. *Caution is advised*, as assignments are estimates and intended to illustrate the order of magnitude and are not absolute factors.

Before undertaking a recommendation, further study, planning and costing will be required to more precisely understand the full requirements of desired recommendations and assess their priority in relation to the City's existing resourcing capacity.

The actions have include a number of parameters:

Priority	Explanation
Short Term	Within one year
Medium Term	One to two years
Long Term	Beyond two years

Duration	Explanation
In Months	Time to Complete

Priority	Explanation
A	Top Level Priority
A _{underway}	Top Level Priority
B	High Level Priority
B _{underway}	High Level Priority
C	Mid Level Priority
D	Lower Level Priority

Complexity	Explanation
High	Action is considered highly complex
Med	Action is medium complexity
Low	Action is low complexity

Complexity	Explanation
Corp.	This requires corporate involvement
Dept	This requires department involvement

Cost	Explanation
\$	\$0-\$20,000 to implement
\$\$	\$20,000-\$80,000 to implement
\$\$\$	\$80,000-\$250,000 to implement
\$\$\$\$	\$250,000-\$1 million to implement
\$\$\$\$\$	Greater than \$1 million to implement

Recommendations

The following provides an overview of the Recommendations:

Future Based Organization

- *A.1 Prioritization*
- *A.2 Performance Measurement*
- *A.3 Build Financial Relationships into Strategic, Corporate and Master Planning*
- *A.3 Continuous Improvement and Innovation*
- *A.5 Public Education/Engagement*
- *A.6 Financial Planning*

Infrastructure and Post-Retirement Benefits

- *C.1 Infrastructure Financing*
- *C.2 Asset Management Strategies*
- *C.3 Post-Retirement Benefits*

Sustainability

- *B.1 Intensification*
- *B.2 Fund Balances and Financial Position*
- *B.3 Surplus/One-Time Funding*
- *B.4 Operating Liquidity & Cash Flow*
- *B.5 Financial Sustainability/Recession Resiliency*
- *B.6 Users Fees*
- *B.7 Municipal Price Index (MPI)*

Administration

- *D.1 Reserve Policy & Framework Classification*
- *D.2 Full Cost Allocation*
- *D.3 Financial Policy Review*
- *D.4 Debt Management*
- *D.5 Deferred Revenue*

*Future Based Organization
Recommendations*

Subject: A.1 Prioritization (A)

What Is It?

Budget prioritization is the activity of evaluating funding requests and allocating scarce resources i.e. (People, Time, and Money). It is also about balancing strategic priorities and community service demands against the community’s collective willingness to pay for services.

Recommendations

It is recommended that the City *continue to develop a service prioritization framework that can be fully integrated into the City’s strategic, corporate, and departmental processes*. Resources can then be allocated to services based on value through a blend of community importance, overall performance, and available long-term funding. A critical element is to ensure engagement of elected officials, the public, senior staff and employees in the process.

Rationale & FMP Relevance

The City has a number of strategic, corporate, and departmental initiatives planned or underway. Most of these initiatives will require additional staff time, funds or other resources above and beyond the tax pressures quantified in this report’s financial forecast. Per the residents’ survey, it is also apparent that the community has indicated its wishes to hold the line regarding levy increases. Further developing a common framework for determining which services and initiatives move into action will assist in providing the most value for the community’s willingness to pay. An added benefit is it provides additional justification, support and the ability to better articulate to the public the basis for service and funding choices, including any need to defer initiatives or reduce/eliminate lesser valued services to hold the tax line. GFOA (Government Finance Officers Association) promotes the use of priority based budgets as a best practice, which provides further rationale behind this recommendation.

		Suggested Steps to Implement	Approximate Range					
			Priority	Duration	Complexity		Cost	
A.1	1	Undertake a study to determine an prioritization common framework & methodology that can be integrated into the corporate planning process	ST	A	06-12	High	Corp	\$\$\$
A.1	2	Complete work regarding program review, performance measures, and master plan costing, etc. that will support the methodology	ST	A	06-18	High	Corp	\$\$\$
A.1	3	Determine and implement the system requirements to capture, integrate, and report information for decision assessment and making	MT	A	06-12	High	Corp	\$\$\$
A.1	4	Compare results and run long-term scenarios based on decision parameters and determine best action	LT	A	00-06	Low	Corp	NA
A.1	5	Monitor and adjust as required	LT	A	∞	Low	Corp	NA

Background

The City of Vaughan is in the midst of a significant transformation and is currently undertaking a number of value added corporate projects including: Citizen Surveys, Program Review, Corporate Planning Process, Performance Measurement, Asset Management, Operational reviews, Multi-Year Budgeting, Master Plans, etc. This is an ambitious undertaking and a tremendous body of work is being prepared in a relatively short period of time given that a single initiative can span multiple years to implement. Clear, articulate business cases and priority planning is required to ensure these initiatives are resourced.

The City is currently on a path towards prioritization and it has embedded prioritization elements within its corporate processes. The City has a vision and strategic plan. Recently, the city implemented a corporate planning process. In addition the Budget process utilizes available information to prioritize new funding requests. While the City has made great strides in moving towards prioritization, opportunities exist to build a corporate wide prioritization framework which is integrated with corporate business planning and budget processes. This would lay the foundation for results based business planning and performance based budgeting.

There are two specific main challenges to overcome before the evolution of prioritization processes can continue. The first challenge is the dependency on City information that is unavailable, but currently under development through recent preferred initiatives. The efforts associated with citizen surveys, program review, performance measurement, operational reviews, etc. will play a significant role in validating the City's priorities. The second challenge is developing a fully integrated city wide system that takes the above information and synthesizes it into meaningful results for decision making.

A successful city wide prioritization process is achieved when these components work together to determine which programs and initiatives are provided for any given budget assignment with general consensus from the public, Council, and staff.



Subject: A.2 Performance Measurement (A_{underway})**What Is It?**

Performance measurement is how organizations measure the effectiveness and efficiency of their services and achievement towards organizational goals. This information could be used to drive program budgets and budget assignments, which is typically referred to as “Performance Based Budgeting”. Performance measurement plays an important role in:

- Establishing an understanding of the expected results;
- Tracking progress towards results;
- Highlighting areas of risk and determining areas for priority attention; and
- Assessing resource requirements.

Recommendations

It is recommended for the City to **expand the use of performance measures for planning, accountability, budgeting, communication and management purposes**. To best assess performance it is suggested that a range of financial and non-financial measures be used to evaluate and monitor new initiatives, budget results, and resource allocation. Further an effective performance measurement system includes a combination of output, outcome, and efficiency metrics which reflect various factors that contribute to performance.

A number of measures are provided in the front section of this report, which could be considered. Of great importance is to relate inputs to outputs/outcomes in order to develop a sense of community return for taxpayer investment. This will help decision making, support prioritization and drive budgets and resource allocations. Incorporating logic models during the decision making process with assist in this endeavor.

A logic model identifies the linkages between the activities of a program and the achievement of its outcomes. It succinctly clarifies the set of activities that make up the program and the sequence of outcomes that are expected to flow from these activities. As such, a logic model serves as a “roadmap”, showing the chain of results connecting activities to the final outcomes and, thus, identifying the steps that would demonstrate progress toward their achievement.

The logic model serves as tool with multiple uses. It can be used to:

- Clarify for managers, staff and Council the linkages between activities, outputs and the expected outcomes of the program (in so doing it serve to identify the expected outcomes and final outcomes);
- Communicate externally about the rationale, activities and expected results of the program;
- Test whether the program “makes sense” from a logical perspective; and
- Provides the fundamental backdrop on which the performance measurement and evaluation strategies are based (i.e. determining what would constitute success).

Rationale & FMP Relevance

The City is facing financial pressure to hold the tax line on providing current service levels, while undertaking a significant number of strategic, corporate, and departmental initiatives. Performance goals and measures play a vital role in ensuring that services are provided efficiently and effectively. It can be a very powerful tool, in the context of budgeting and financial planning as it is the first step in establishing relationships between outcomes for inputs, which better illustrate what residents receive for their financial investments. Performance measurement is also a critical key ingredient in the prioritization of limited resources and ties directly in to results based business planning and performance based budgeting.

Caution: It is important to note that the design of a performance measurement system needs to be cost effective in order to minimize significant resourcing commitments. Consideration should be given to select measures that are practical and useful for key service activities.

Background

Public officials are becoming increasingly committed to demonstrating what is accomplished with tax dollars. Ontario municipalities are moving from an approach where budgets and programs & services are evaluated based solely on cost control, to an approach that focuses on the City’s ability to achieve specific goals or outcomes. The City currently utilizes a level of performance measurement and incorporates this into the budget process, but more/better measures, greater buy-in, and increased engagement is required to move toward a performance based financial planning and prioritization environment. Vaughan’s commitment to productivity, cost effectiveness and innovation is demonstrated by its inclusion as a goal in the City’s strategic plan and the City is undertaking a performance measurement initiative, which addresses this concern. The results of this initiative will help move Vaughan forward in this area.

			Approximate Range					
			Priority		Duration	Complexity		Cost
A.2	1	Establish a framework, policy, and process implementation plan	ST	A _{underway}	00-06	Med.	Corp.	\$
A.2	2	Continue with the City’s performance measurement initiative e.g. developing KPIs which encompass quantity, quality, and costs of programs and services (output) in order to achieve certain effects, implementing robust systems and obtaining agreement/consensus from stakeholders	ST	A _{underway}	12-24	High	Corp.	\$\$\$
A.2	3	Invest/upgrade budget systems to link the use of performance measures	MT	A _{underway}	06-12	Med	Dept.	\$\$\$
A.2	4	Implement results based business planning and performance based budgeting	LT	A _{underway}	12-24	Med.	Corp.	\$\$

Subject: A.3 Build Financial Relationships into Strategic, Corporate and Master Planning (B)

What Is It?

Strategic, corporate, and master planning (Higher Level Planning) is the exercise of assessing the organization’s situation through “Bigger Picture Thinking” and typically results in setting overall direction and specific initiatives to arrive there. Included in these exercises is a purposeful effort to understand the immediate and long term implications to ensure they are achievable and aligned to the long-term resourcing interests.

Recommendations

It is recommended the City further *incorporate financial and resource capacity relationships into strategic, corporate, master planning and new initiative processes*. This will further help to set realistic boundaries on priorities and what can be reasonably accomplished. Incorporating financial planning as part of the overall planning cycle will support decision based processes, assist in managing overall expectations, and aid in setting priorities.

Rationale & FMP Relevance

As illustrated within this report, the City is undertaking a significant number of strategic, corporate, and master plan initiatives. However, the resourcing implications for many of these initiatives have not been established, resulting in a trend to approve initiatives in principle. This situation can create confusion regarding the timing of expected results or inadvertently pre-commit City time and efforts without adequate resources to complete plans. There is a need to strengthen and enhance the relationships between initiatives and resource planning to ensure sustainability.

				Approximate range					
		Suggested Steps to Implement		Priority		Duration	Complexity	Cost	
A.3	1	Use financial planning as an input for strategic discussions and develop a feedback look into the corporate planning cycle		ST	B	06-12	High	Corp.	\$\$\$
A.3	2	Require master plans, new initiatives and items to have a financial planning element and relate to multi-year budgets and financial planning		ST	B	06-18	High	Corp.	\$\$\$
A.3	3	Implement a Finance review process to ensure consistency in presentation and full cost identification		ST	B	00-06	High	Corp	NA

Background

Senior Management has implemented a corporate planning process as well as multi-year budgeting to streamline and better align higher level planning with resource allocation. These are excellent initiatives, but further work is required to determine the resource implications of current and future initiatives so they can be discussed in the context of existing multi-year financial plans before setting them into action. Doing so will help the City consider a range of possible future outcomes, examine financial and capacity considerations and then determine the most appropriate course of action. Results should then be fed back into Strategic, corporate, and master planning efforts to better align expectations and deliverables.



Subject: A.4 Continuous Improvement & Innovation (C)

What Is It?

A cornerstone of an effective organization is its ability to identify and implement opportunities to improve through innovative programs and service delivery strategies. These evaluation efforts can seek "incremental" service improvements over time or "breakthrough" service improvements all at once and potentially result in financial and efficiency savings.

Recommendations

Continue to support efforts for continuous improvement and innovation.

Rationale & FMP Relevance

With cost pressures being inevitable the City will be forced to look at alternative and different methods of providing service to the community. However, innovation typically requires upfront investment before savings or efficiencies are realized.

For this reason, the City is encouraged to re-invest a portion of any surplus funds towards innovation. The City is also encouraged to expand operational review efforts, so all departments can benefit from operational assessments to ensure services are provided efficiently and effectively.

Background

Innovation and continuous improvement is an area Vaughan is accustomed to as demonstrated by its strong reference in the City’s vision and strategic initiatives. It is also evident through the City’s recent organizational review which resulted in the development of a new department titled “Innovation and Continuous Improvement”. The City is undertaking a series of operational reviews to assess selected program effectiveness and efficiency, which also includes looking at alternative service delivery models, performance measurement and business process transformation.

Caution: It is important that innovation and continuous improvement is viewed primarily as an opportunity to make things better with the potential for cost savings or benefits. Using this approach will improve engagement.

			Approximate range					
Suggested Steps to Implement			Priority		Duration	Complexity		Cost
A.4	1	Expand operational reviews to all City departments on a revolving basis over each term of Council	MT	C	48	Med.	Corp.	\$\$\$
A.4	2	Establish an Innovation Reserve Fund to provide seed money for innovation or improvement efforts. Funding should be provided through a portion of future surpluses and unused year-end expenditure reserve projects. Projects would be granted based on business case assessment and their ability to return funds, for other initiative purposes, through future cost savings or efficiencies.	MT	C	∞	Low	Dept.	NA

Subject: A.5 Public Education/Engagement (C)

What Is It?

Public education/engagement is a key element in generating a common understanding, initiating reform, sustaining change, and building "ownership". For successful public engagement to occur, people need information, an understanding about the data available, and instructions as to how to participate and be involved in the decisions surrounding their community. Doing so will ensure municipal decisions are better understood, accepted, and ideally supported.

Recommendations

The City of Vaughan is undergoing significant transformation and change. It is recommended the City *continue its community education, outreach and engagement efforts regarding the financial pressures facing the City and associated alternatives*. These efforts should be complimented with new and emerging practices to extend a deeper reach into the community. There is a cost to community engagement and depending on the level it can be expensive.

This will assist in:

- Bringing together multiple points of view to create informed decisions;
- Create legitimacy and a sense of shared responsibility; and
- Stimulating awareness, acceptance, and momentum for change.

Rationale & FMP Relevance

The City has a number of challenges to contend with and a variety of alternatives. It would be prudent to engage the communities on significant challenges to ensure municipal decisions are better understood, accepted, and ideally supported. In addition, in our society, public decision making can be influenced by the domain of special interest groups, highly visible personalities, and field experts. To ensure a more holistic approach that better reflects the general community; a broader community cross section can be utilized as a vital resource or partner in problem solving or gauging the general sense and direction of the community.

		Approximate range								
		Suggested Steps to Implement			Priority	Duration	Complexity		Cost	
A.5	1	Develop guidelines regarding public education and engagement			MT	C	06-12	High	Corp.	\$
A.5	2	Develop processes and tools to foster community engagement and education(i.e. Focus Groups, Constituent Pools, Surveys, Community conversations)			MT	C	06-12	High	Corp.	\$\$\$
A.5	3	Develop a system to track, report and incorporate feedback into decision making			MT	C	06-12	Med.	Corp.	\$\$

Subject: A.6 Financial Planning (D)

What Is It?

Financial planning (multi-year budgeting & long-range planning) is the activity of identifying and planning the City’s future financial requirements and extending the budget horizon from an annual process to five, ten or more years. The primary reason for financial planning is to identify emerging challenges that may potentially impact the City’s ability to meet its goals and objectives, and allow the City to adapt and/or plan to meet the challenges created by these trends before they become more severe. In addition, financial planning can create an important venue to discuss policy choices, validate corporate strategies, and communicate the timing of major initiatives to the community.

Recommendations

It is recommended for the City to *continue with fostering financial planning efforts.*

Rationale & FMP Relevance

As illustrated in the Financial Master Plan, the City is facing a number of longer term challenges that would not have been identified if not for financial planning efforts. The City of Vaughan is becoming increasingly more sophisticated with each passing year and there is a need to broaden the budget and financial planning horizon. This provides decision makers with added foresight and the ability to proactively grasp future opportunities, address future challenges, and reduce blind spots by understanding the longer-term financial implications of present and past decisions.

				Approximate range					
		Suggested Steps to Implement		Priority		Duration	Complexity		Cost
A.6	1	Continue to develop a 4 year budget plan		ST	D	00-06	High	Corp	NA
A.6	2	Identify and implement requirements to further automate and integrate operating, capital and reserve planning		MT	D	06-18	High	Corp	\$\$\$
A.6	3	Review Financial Master Plan recommendations and determine desired courses of action		ST	D	06-12	Med	Corp	Var
A.6	4	Extend capital plans to a 10 year horizon		MT	D	12-24	Med	Corp	\$\$
A.6	5	Identify and implement software solutions allow for longer term financial planning		LT	D	06-12	Low	Corp	\$\$
A.6	6	Update the Financial Master Plan (preferably with a one year time lag after the completion and adoption of the Development Charges Background Study)		LT	D	12-24	High	Multi	\$\$\$

Background

The need for a long-range financial plan with supporting policies was recognized by the City as early as 1994. Since then, the City has implemented a number of financial policies designed to guide the municipality and ensure that the City maintains its financial sustainability. City Staff has provided a number of longer-range financial reports to Council to identify challenges that the City is facing as well as strategies to mitigate risks. For 2013, the City has extended its budget to a four year operating and capital plan, in addition to coming forward with an updated Financial Master Plan.

The City utilizes a traditional budget software tool for operating and capital and relies on complex Excel spreadsheets to forecast requirements over a long range planning horizon. These models have evolved over the years to respond to the increased complexity of the decisions and to reflect the robust financial implications. Over the years, the functionality and the linkages have proven to be a challenge. With increased complexity in decision-making and a need to run multiple scenarios to compare options and alternatives, it may be an appropriate time to reconsider the existing financial forecast tools and investigate alternative platforms to reduce administrative time and to support advanced decision-making and reporting.



*Sustainability
Recommendations*

Subject: B.1 Intensification (B)

What Is It?

Intensification is the development of a municipal area at a higher density than currently exists, through development, redevelopment, infill and expansion or conversion of existing buildings.

Recommendations

It is recommended for the City to *further investigate the transition pressures and timing implications associated with land use intensification in order to plan accordingly for upfront advance infrastructure investment for future population growth.*

Rationale & FMP Relevance

Intensification is a natural evolution for most municipalities and the assumption is that economies of scale will eventually occur generating financial benefits. However, the reality is there will be transition points where upfront investment or changes in processes may be required before they are fully supported by planned growth in the general assessment base. These timing tipping points can significantly burden a municipality before the benefits of intensification are realized i.e. investment in transit, policy studies, upgrading infrastructure, waterway alignment, process adjustment.

Given that Vaughan is an extremely high growth municipality and the levy pressures illustrated within this report it is crucial for Vaughan to thoroughly understand these transition implications to be able to adequately prepare financially.

Background

Vaughan is positioned to continue as one of the premier growth engines in the GTA, which will be supported by significant investments in infrastructure. The form of growth is changing, in large part driven by provincial policy and future growth will primarily occur as intensification within the urban boundary. Intensification is relatively new to Vaughan and it will require the City to rethink its approach and policies. Recently the City has undergone the development of a new official plan and as part of that exercise is developing a downtown core called the Vaughan Metropolitan Centre. As a result of intensification, Vaughan has started to experience some notable pressures, for example:

- A need to align fee structures to the change in complexity of development planning fees activity;
- Upfront financing requirement associated with the proposed Black Creek alignment; and
- A number of planning/engineering policies study requirements studies i.e. strata parking, streetscape, storm water management planning and over sizing, etc.

			Approximate range					
Suggested Steps to Implement			Priority		Duration	Complexity		Cost
B.1	1	Undertake a study to determine common pressures associated with intensification (using larger population municipal references)	MT	B	00-06	High	Corp	\$\$
B.1	2	Review the Official Plan for timing of major infrastructure changes related to population growth to determine future cost implications and economy of scale lags	MT	B	06-12	High	Multi	\$\$

Subject: B.2 Fund Balances and Financial Position (C)

What Is It?

The municipal position on the City’s consolidated statement of financial position – its balance sheet – represents the difference between the City’s fund balances (including reserves, reserve funds and equity in business enterprises) and liabilities. This relationship means that sustaining reserve and reserve fund balances serves to protect the City’s municipal position.

Recommendations

It is recommended that the City **continue monitoring its financial position, taking into consideration forecast changes that would impact the assets and liabilities of the corporation.** There are a number of recommendations dealing with reserves and debt contained in other sections of this report that, if approved, would improve Vaughan’s financial position.

Rationale & FMP Relevance

Maintaining a strong financial position today and in the future is a critical part of a municipality’s FMP. Credit rating agencies consider a municipality’s trend and overall position in terms of assets in relation to liabilities. A ratio of 1:1 or better is recommended by credit rating agencies, meaning that there is at least one dollar of financial assets for every dollar of financial liabilities.

Background

Vaughan’s financial position (assets in excess of liabilities) decreased in 2009 primarily as a result of \$60 million in hospital funding but increased again in 2011. The City’s assets increased by \$48.3 million from 2006-2011 but the liabilities increased \$127.0 million. The main reason for the decrease was due to a swap between financial assets to tangible capital assets (i.e. City Hall, Hospital Land).

		Approximate range							
Suggested Steps to Implement		Priority		Duration	Complexity		Cost		
B.2	1	Monitor and forecast the City’s financial position and report annually		ST	C	06-12	Med	Dept	NA

Subject: B.3 Surplus/One-Time Funding (C)

What Is It?

Surpluses arise as a result of unexpected events that could not be planned for during the regular budget process. These activities may result in a surplus or expense that is not expected to be sustained in future periods, and will therefore, not be considered as part of the base requirements of the City.

Recommendations

It is recommended that the City **not use any operating surplus (revenues exceed operating expenses) to fund ongoing operating budget expenditures** as this results in annual revenues which may not materialize in future years. It is recommended that the policy regarding surpluses and one time funding be revisited to address emerging needs.

Rationale & FMP Relevance

Reliance on one-time surpluses for ongoing budgetary support runs the risk of significant property tax increases, user fee increases or reductions in expenditures in future years should the surplus not materialize.

Background

The City adopted a policy in 1994 that prior year surpluses would be brought forward to assist in reducing the current year budget impact to a maximum of \$2.5 million. Any surplus amount in excess of this amount is evenly allocated to the Tax Rate Stabilization Reserve and Working Capital Reserve. In fact, the existing budget assumes that \$2.5 million in operating surplus will be available annually. The recommended planning philosophies and strategies eliminate the reliance on surplus as an ongoing funding source for the operating budget as these are unpredictable. The strategy is to utilize surpluses to providing funding to any one-time funding requirement, with any remaining funds to be allocated in areas where there is insufficient funding such as the Employee Benefits and Infrastructure Sustainability Reserves.

				Approximate range					
		Suggested Steps to Implement		Priority		Duration	Complexity		Cost
B.3	1	Develop and implement a phase out strategy for the \$2.5 million carryforward in the budget		MT	C	00-120	Low	Corp	\$\$
B.3	2	Develop a policy addressing the process for: * Allocation of any surpluses *Funding of one-time requirements		MT	C	06-16	Low	Dept	NA

Subject: B.4 Operating Liquidity and Cash Flow (C)

What Is It?

Operating liquidity measures the ability of a municipality to pay expenses when they become due. If current assets are less than current liabilities, a municipality has an operating liquidity deficit. Maintaining positive operating liquidity is required to ensure that a municipality is able to continue its operations and that it has sufficient funds to satisfy upcoming operational expenses. Cash flow forecasting and variance analysis provides an early identification of the need for potential policies and strategies to help ensure sufficient liquidity.

Recommendations

It is recommended that the City *prepare cash flow forecasts and monitor cash requirements to help ensure Vaughan has sufficient cash on hand to meet its liabilities.* The cash flow forecast should be used to:

- Determine appropriate levels of working capital;
- Identify the value and timing of investments to maximize returns;
- Assess internal borrowing and debt prepayment opportunities; and
- Minimize overdraft and other finance charges (i.e. penalties).

Based on the findings of cash flow analysis and forecasting, it is recommended that an updated cash flow policy be established to maintain a minimum of cash and temporary investment balance as a percentage of total revenues. It is further recommended that the Treasurer provide Council with a financial status report annually regarding City’s forecasted cash balances, requirements, etc.

		Suggested Steps to Implement	Approximate range					
			Priority		Duration	Complexity		Cost
B.4	1	Identify participants from departments to be involved in developing reasonable expectations of timing and amounts of planned expenditures and revenues.	MT	C	06-12	Low	Dept	Nil
B.4	2	Review the existing Working Capital Reserve, Tax Stabilization Reserve and Discretionary Reserve policies in conjunction with the completion of the cash flow analysis and amend if necessary	MT	C	12-18	Med	Dept	Nil
B.4	3	Analytical software will be explored to maintain historical data and provide an enhanced ability to forecast future cash flows and liquidity needs.	LT	C	06-12	Low	Dept	\$\$

Rationale & FMP Relevance

In the absence of maintaining and monitoring cash flow forecasts, there is the potential to hold excess cash balances to ensure requirements are met which reduces the City's ability to maximize returns and address infrastructure requirements. The benefits of cash flow forecasting include:

- Assisting in making the most appropriate investment decisions, thereby maximizing annual investment returns while at the same time ensuring that there is sufficient liquidity to cushion unexpected events;
- Reducing short-term borrowing to meet cash flow needs; and
- Improving the management of internal cash transfers between funds.

Maintaining appropriate financial liquidity requires regular reviews and adjustments to meet operating and contingent liabilities. Cash flow analysis tracks actual income against outflows of cash to identify patterns, providing insight into the municipality's ability to meet expenditure obligations and make the appropriate adjustments.. Working capital and cash flow analysis can also highlight patterns that might affect the long-range financial position. The ultimate goal of a cash flow forecast is to mitigate the need for short-term borrowing or liquidation of securities (investments) before maturity. Cash forecasting should take into consideration all organization-wide portfolios and funds such as water and wastewater and obligatory reserves such as development charges. This allows spending patterns to be coordinated to mitigate potential shortfalls and balance the flow of funds.

Background

The City has implemented a detailed investment policy. The development of a cash flow forecast will assist in determining the amount of cash available for longer term higher yield investments.



Subject: B.5 Financial Sustainability/Recession Resiliency (D)

What Is It?

Financial Sustainability/Recession Resiliency is the process for determining the risks a municipality could be faced with in a recession and determining the appropriate amount of flexibility required in the event of an economic downturn.

Recommendations

The availability of Discretionary Reserves and Reserve Funds provides a sound basis for financial planning. Continued use and control of such reserves and reserve funds is a critical element of meeting the City’s objectives of financial sustainability/recession resiliency. To support these objectives, it is recommended that the City:

- **Continue with the discretionary reserve ratio of 50% of Own Source Revenues;**
- **Continue with the Tax Stabilization Reserve at a target balance of 10% of Own Source Revenues;**

- **Continue with the Working Fund Reserve at a target of 10% of Own Source Revenues;**
- **Revisit these ratios at a later date; and**
- **Maintain a minimum balance equivalent to one years future spending requirements in the Infrastructure Sustainability Reserves to ensure funds remain to sustain replacement.**

Rationale & FMP Relevance

Vaughan has an extremely strong tax base, high labour force participation rate, relatively low unemployment rate, strong construction activity and a high average gross and disposable household income, good managerial policies and low debt. These are all indicators of a strong capacity to meet financial commitments.

The City’s existing policy of maintaining a combined discretionary reserve balance of a minimum of 50% of Own Source Revenues (Excluding Working Funds) and a separate policy of maintaining a minimum of 10% in the Working Capital Reserve limits the ability to utilize reserves, especially the Infrastructure Sustainability Reserves.

			Approximate Range					
		Suggested Steps to Implement	Priority	Duration	Complexity		Cost	
B.5	1	Develop a phase-out strategy for Operating Budget contributions from the Tax Stabilization Reserve	ST	D	00-06	Med	Dept	\$\$
B.5	2	Transfer funds between the various Reserve classifications based on fund adequacy and recommendations	ST	D	00-06	Med	Dept	Nil
B.5	3	Should reserve balances exceed targets, review and prioritize capital backlog requirements	MT	D	00-06	Med	Corp	Nil

GFOA recommends that municipalities maintain Financial Sustainability Reserves (Tax Stabilization and Working Funds) within a target range of 5%-15% of Own Source Revenues. This practice provides sufficient liquidity and protection against unforeseen events.

Currently the City contributes \$2.8 million from the Tax Rate Stabilization to the Operating Budget. The Tax Rate Stabilization Reserve has no on-going sustainable source of revenue, therefore, if this policy were to continue, the Tax Rate Stabilization Reserve would be in a negative position by 2020.

Background

The City's Discretionary Reserve Policy was established in 1996 and has served the City well in building reserves. The policy was not intended to remain static, but was to evolve as additional information became available.

Subject: B.6 User Fees (D)

What Is It?

Municipal user fees are described as a charge to the user for a specific municipal service, activity or product, or for the use of municipal property. *Part XI1 of the Municipal Act, 2001* provides the authority to impose municipal user fees and charges and requires that user fees be approved by Council and enacted in a by-law. User fees are charged for the use of many municipal services and provide funding of municipal services that benefit defined users by collecting fees and service charges that are at, or approaching full cost recovery. User fees assist a municipality to ensure better use of its resources and evaluate the use of a specific good or service.

Recommendations

It is recommended for the City to *continue with its current user fee practices and complement them by developing a policy which illustrates the appropriateness of user fees, the basis for development, levels of recovery, frequency of review, price escalation, etc.*

Rationale & FMP Relevance

User fees are in place to fund services/programs where specific individual benefits are received. By passing the cost of specific services to the consumer, only those individuals or groups that utilize the service pay for the cost of providing it, rather than taxpayers in general. Setting fees at cost recovery levels leads to efficient production and consumption of the service, and better allocations of the service when operating at capacity. This provides an opportunity to reduce pressures on the overall tax levy. However, if recovery levels are not maintained additional tax levy pressure could be experienced.

Background

The majority of revenue generating departments in Vaughan has conducted in-depth studies, which have resulted in varying degrees of recovery. However, there should be a consistent approach to all fees and a policy to provide direction on where fees should be applied and how they should be set. Based on best practice research, the full cost of providing a service should be determined and then a recovery rate or level of subsidization set.

			Approximate Range					
Suggested Steps to Implement			Priority	Duration	Complexity		Cost	
B.6	1	Coordinate and consolidate existing fee by-law updates under one common process	ST	D	12-18	Low	Corp	NA
B.6	2	Establish a policy regarding the consistent use of user fees, basis for developing fees, cost recovery/taxation subsidy principles, appropriate increase assumptions, etc.	MT	D	12-18	High	Multi	\$\$
B.6	3	Review services based on the policy to determine if fees can be applied	MT	D	12-18	Low	Multi	\$\$
B.6	4	Perform fee reviews on a rotating basis, incorporating full cost and volume impact analysis	LT	D	06-12	Med	Dept	\$\$

In addition, as part of the budgeting process, City departments review user fees and service charges, increasing fees and charges in relation to related annual cost and volume increases; incorporating a net full cost benefit in fees for external inter-municipal services; and submitting new user fee and service charge opportunities.

Subject: B.7 Municipal Price Index (D)

What Is It?

A Municipal Price Index (MPI) measures changes to the price of a basket of goods and services that are consumed by a municipality. The nature of the price index is determined by the composition of the specific basket and how spending is distributed among the components of the basket. An MPI is similar to a consumer price index (CPI) but represents the specific composition of goods and services consumed by a municipality which differs from a household consumer.

Recommendations

It is recommended for the City to *continue to develop an MPI and incorporate the MPI into the budgeting process*. Base operating budget increases should be measured against the MPI to gage the ability of the corporation to manage its costs against this anticipated increase. Growth related operating budget increases should not be factored into this measure, but should be measured against assessment growth. New service levels and initiatives should be treated as pure levy additions as they have no relation to volume increases or pressures on price. Framing the budget in this manner will provide good representation of what is generating levy pressure.

Rationale & FMP Relevance

As illustrated in the Financial Master Plan, price increases are inevitable. In isolation of growth or any new initiatives, tax rate increases would be required solely to fund inflation. Failing to do so would inadvertently and indirectly compromise service levels through funding reductions. Furthermore, unlike an average Canadian household, municipal expenses are very labour, contract and material intensive and municipal inflation has generally exceeded the Consumer Price Index (CPI). In 2009, the Federation of Canadian Municipalities (FCM) requested that Statistics Canada create and publish MPIs for use by its members. The GFOA also encourages every municipality to establish inflation indices based on the expenditure category and associated weighting.

In addition, Vaughan is an extremely high growth municipality and future costs will be encountered as a result. To balance the tax rate, increasing costs related to growth should be compared to assessment growth and user fee volume increases in order to gage the net impacts on the levy. Doing so will provide better insight into the true cost of growth. Lastly, financial impacts associated with new initiatives should be funded through a combination of levy, user fees, or reallocated savings as a result of priority changes.

			Approximate Range					
Suggested Steps to Implement			Priority		Duration	Complexity		Cost
B.7	1	Formalize the Municipal Price Index and adopt	ST	D	06-12	Med	Dept	NA
B.7	2	Present budget components between MPI, growth and new initiative elements to illustrate the pressures	MT	D	06-12	Med	Dept	NA

Background

An MPI is currently presented as part of the City's budget package. Vaughan's MPI has floated from 3% to 4% and consistently exceeds the Toronto area Consumer Price Index (Vaughan is not alone in this regard). However, the City's historical tax increases for price, growth, and new initiative pressures have remained close to or slightly above CPI. This indicates that there is the potential that funding levels may be lower than the service requirements to meet existing service levels, implement new initiative and support growth.

*Infrastructure and Post-Retirement Benefits
Recommendations*

Subject: C.1 Infrastructure Financing (A)

What Is It?

Constructing new and replacement infrastructure requires the deployment of large sums of capital.

Recommendations

A number of recommendations have been made with respect to *infrastructure financing including:*

- *Strategy 1: Transferring 10% of the additional revenues associated with assessment growth to the Infrastructure Sustainability Reserves;*
- *Strategy 2: Establishing a 5% recreation user fee surcharge to assist in funding the replacement and maintenance of recreation facilities;*
- *Strategy 3: Establishing a 1% special infrastructure levy which will be used to fund infrastructure;*
- *Strategy 4: Transferring any surplus in the capital from taxation related to non-growth to the Infrastructure Sustainability Reserves to fund asset replacement;*
- *Strategy 5: Rethinking infrastructure to reduce costs by determining the most cost-effective options for all capital programs for new or rehabilitated infrastructure by pursuing life cycle costing analysis; and*
- *Strategy 6: Advocating for the institution of permanent and sustainable funding from other levels of government.*

In addition, the following summarizes the City's ongoing initiatives:

- *Continuing to use Infrastructure Sustainability Reserves to fund the replacement of existing assets;*
- *Making annual contributions to the Infrastructure Sustainability Reserves at least equivalent to the historical annual amortization charge of capital assets;*
- *Ensuring that the infrastructure gap does not widen by continuing to make annual contributions to reserves as new assets are added to the City's infrastructure;*
- *If assets are funded through debt, making annual contributions to the reserves once the debt repayments have been completed;*
- *For greater transparency, separating the operating fund contribution to capital (capital from taxation) into two accounts, one for new growth and the other for capital replacement; and*
- *Transferring any surplus in the capital from taxation related to growth to a new reserve to fund growth-related projects.*

Rationale & FMP Relevance

The FMP identified a number of issues with respect to infrastructure repair and replacement:

- Infrastructure spending requirements are significantly underfunded;
- A considerable amount of infrastructure is currently past its estimated useful life. It is conservatively estimated that there is in excess of \$42 million of assets that are beyond their theoretical useful life;
- Infrastructure reserve balances are not adequate to sustain future requirements;
- Replacement costs are increasing;
- Accumulated amortization exceeds the funds that have been set aside for asset replacement;
- The risk of failure and service disruption of infrastructure continues to climb; and
- While the City has implemented a policy to make annual contributions for new assets, additional strategies are required to increase the contributions for existing assets.

Background

The replacement of Vaughan’s existing infrastructure requirements is estimated to be \$209 million over the next 10 years and is funded from three sources; Capital From Taxation, Infrastructure Sustainability Reserves and debt. New infrastructure is funded from Capital From Taxation (10% co-payment) and development charges. The Capital From Taxation account can fluctuate widely depending on growth need and infrastructure replacement needs.



				Approximate Range					
Suggested Steps to Implement				Priority	Duration	Complexity		Cost	
C.1	1	Implement the strategies to address the infrastructure gap.		ST	A	06-12	Med	Dept	\$\$\$\$\$
C.1	2	Monitor and report on the infrastructure gap annually and modifying the strategies should the gap widen.		MT	A	06-12	Med	Dept	Nil

Subject: C.2 Asset Management (A_{underway})

What Is It?

Asset management is a systematic process of maintaining, upgrading and operating physical assets cost effectively. Vaughan’s asset funding requirements continue to increase as existing infrastructure and equipment ages, new infrastructure is constructed and subdivisions are assumed by developers.

Recommendations

The City will effectively maintain and manage their infrastructure and assets in a state of good repair by implementing life cycle costing and developing and maintaining:

- **An Asset Management Framework and Systems;**
- **An Asset Management Plan; and**
- **An Asset Management Funding Strategy.**

Rationale & FMP Relevance

Vaughan has made significant investment to provide a wide range of capital infrastructure, facilities and vehicles to service the community and will continue to expand this asset base as the community grows. Protecting these assets through regular rehabilitation, renewal and replacement is vital to sustaining the municipality’s financial stability. The City has established a range of capital reserve funds and makes significant contributions to capital from taxation in order to provide for future asset protection. Debt financing of road rehabilitation and reconstruction requirements have also been used.

The analysis carried out as part of this FMP indicates that additional funding is required to fully meet future needs.

			Approximate Range					
Suggested Steps to Implement			Priority	Duration	Complexity		Cost	
C.2	1	Develop and implement a comprehensive framework for Asset Management	ST	A _{underway}	12-24	High	Corp	\$\$
C.2	2	Clearly define and document business processes needs and systems related to asset management (repair, maintenance, replacement)	MT	A _{underway}	06-12	High	Corp	\$\$
C.2	3	Implement systems to connect information e.g. work order systems, inventory tracking, maintenance algorithms, PSAB reporting, capital plans, etc.	MT	A _{underway}	24-36	High	Corp	\$\$\$\$
C.2	4	Undertake asset condition assessments and develop a needs requirement plan	MT	A _{underway}	12-48	Med	Dept	\$\$\$\$
C.2	5	Update the funding requirements & strategies	LT	A _{underway}	ongoing	Med	Corp	TBD

By adopting a formal approach to asset management, the City will benefit in a number of areas, namely:

- Better information sharing across divisions, departments and branches and enable more coordinated planning and decision making;
- Allow the City to make more informed decisions about how to best manage the City's assets; and
- Better communication with external stakeholders, Council, and taxpayers on levels of services, cost of services, risk and the state of its assets.

Background

Vaughan's infrastructure network is the lifeblood of its economy; it affects productivity, economic growth, prosperity and the standard of living. Failure to maintain the City's infrastructure not only limits the ability to serve a growing population, it creates safety issues to the current residents.

Overtime, Vaughan has put significant effort into financial planning, focusing on infrastructure requirements, which have highlighted significant resources that will be required to repair and replace its infrastructure. The City of Vaughan invests a considerable portion of its resources in the maintenance and replacement of its assets, but will require more. One challenge is that Vaughan currently does not have a comprehensive integrated asset management framework and strategy.

Vaughan's strategic plan recognizes the importance of asset management and has included the following goals, supported by key initiatives including:

- Ensuring the development of a corporate asset management strategy;
- Developing and implementing an Infrastructure Management System (IMS);
- Evaluating and assessing the long-term municipal repair and reconstruction strategy; and
- Developing, operating and monitoring and continually improving the asset management system to support the City's very large and diverse asset portfolio. Therefore, the City should develop, operate, monitor and continually improve an asset management system.

The FMP endorses the City's continued efforts in this regard.

Subject: C.3 Post-Retirement Benefits (B)

What Is It?

A post-retirement benefit is a legal commitment a municipality has made to pay benefits to its employees at some point in the future. All employees who retire from the City of Vaughan that have a minimum of 5 years’ service and retirees under the OMERS pension plan are eligible for post-retirement non-pension benefits. The City pays 100% of the cost of benefits with the exception of part-time library employees, whereby the City pays 50% of the cost of benefits.

Recommendations

Future actuarial valuations should include a strategy to ensure that sufficient funds are provided in the Operating Budget for post-retirement benefits and avoid significant fluctuations in the Operating Budget. It is anticipated that a **phase-in strategy may be required to gradually address the unfunded liability over a period of 5-10 years**. Depending on the extent of the liability, **annual contributions should be made to the reserve, reflective of historical and forecast requirements to ensure that the liability does not continue to grow**.

In the interim, until such time as the actuary has provided a funding strategy, Vaughan should **maintain the reserve to liability ratio of at least 20% (existing ratio is 17%)**. **Benefit programs for new employees should be reviewed**.

			Approximate Range					
Suggested Steps to Implement			Priority		Duration	Complexity		Cost
C.3	1	Undertake an actuary study to determine forecasted annual funding requirements	MT	B	00-12	High	Dept	\$\$
C.3	2	Review implications of benefit programs	MT	B	00-12	Med	Dept	\$\$
C.3	3	Develop a phase-in strategy, as required and identify budget implications	LT	B	06-12	Low	Dept	TBD
C.3	4	Update actuarial report every three years taking into account fairness across generations and whether benefits and/or funding should be changed	LT	B	00-12	High	Dept	\$\$

Rationale & FMP Relevance

Based on the January 1, 2011 actuarial review of Post-Employment Benefits, the total liability for post-retirement benefits was \$66.3 million, an increase of \$26.5 million (66%) over the 2008 actuarial liability (\$8.8 million average annual increase).

As more employees become entitled to benefits and as the cost of benefits grow with inflation, post-retirement costs can become a large fixed cost to the Operating Budget. There are two basic ways to fund post-retirement liabilities:

1. Set up a special fund and fully fund benefits as they are accrued (“full funding”).
2. “Pay-as-you-go” which involves making only current post-retirement payments as they become due. Many municipalities choose the pay-as-you-go method because it involves less spending from the Operating Budget.

The pay-as-you-go method may seem successful as long as the money is available when needed. Deferral, however, may create a more serious problem than the problem it avoids, especially if accrued benefits are rapidly increasing at a rate faster than revenues.

The existing practice in Vaughan is to make the current payments as they come due. It is financially prudent to have sufficient reserves to cover associated liabilities and this is in fact the practice in the City of Vaughan. Vaughan also has a Post-Retirement Reserve balance of \$11 million.

There is no dedicated or planned source of funding for this reserve (currently funded from annual surpluses in employee benefits accounts). The current reserve to liability ratio is 17%

Background

Based on a review of municipal corporate reserve funds, post-employment benefits is an area where unfunded liabilities exist in a number of municipalities, including Vaughan. The City's current practice of using a pay-as-you-go approach with a small reserve runs the risk that the benefits for current workers would be paid largely from future tax levies.

The age demographics of Vaughan's workforce will likely result in significantly higher costs. Continuing to fund post-retirement benefits on a pay-as-you-go basis will mean imposing an increasing financial burden on future taxpayers.

*Administration
Recommendations*

Subject: D.1 Reserve Policy and Classification Framework (B_{underway})

What Is It?

Reserves and reserve funds are a critical component of the City’s long range financial planning. They are used to provide the following:

- Tax rate stability by smoothing the effect of variable or unanticipated financial events;
- Funding for corporate or specific programs;
- Future replacement or acquisition of capital assets; and
- Acquisitions resulting from growth, etc.

A reserve policy and framework classification provides direction regarding the use, balance targets, limitations, etc.

Recommendations

It is recommended that the City *develop a consolidated reserve policy and framework which will provide guidance and reference regarding all reserves e.g. reserve intent, target balances, limitations etc.* Where applicable, policies should be supported by financial plans identifying contributions and planned uses. It is also recommended that *reserves be grouped into the following classifications for easier identification and general monitoring:*

- **Financial Sustainability Reserves**—funding to mitigate economic risk and smooth fluctuations;
- **Infrastructure Sustainability Reserves**—funding to renew aging assets;
- **Functional (Corporate) Sustainability Reserves**—(e.g. insurance, WSIB employee benefits, etc.);
- **Program Specific Reserves**—(e.g. the Keele Valley Landfill and Senior Citizens Bequests, etc.); and
- **Obligatory Reserves**—(DC and other obligatory reserves).

			Approximate range					
Suggested Steps to Implement			Priority		Duration	Complexity		Cost
D.1	1	Develop a consolidated Reserve Policy	ST	B _{underway}	00-06	Med	Corp	Nil
D.1	2	Redistribute Reserve balances exceeding targets to underfunded infrastructure balances	ST	B _{underway}	00-06	Med	Corp	Nil
D.1	3	Develop a financial plan for each reserve	ST	B _{underway}	00-06	Med	Corp	Nil
D.1	4	Prepare an annual reserve report	MT	B _{underway}	00-06	Med	Corp	Nil
D.1	5	Review and update reserve policy at the beginning of each council term	LT	B _{underway}	00-06	Med	Corp	Nil

Rationale & FMP Relevance

The City maintains a number of reserves and reserve funds, of which many are supported by a wide range of sources (e.g. by-laws, items or policies) dating back as far as the 1980's. In developing the City's forecast, occasional difficulty was encountered in finding current policy direction. However, information was obtained and reserve forecasts were developed generating interesting policy discussions and funding issues. A reserve policy is very important as it not only provides direction on the intent, collection, and use of funds, it can also support the City's higher level strategies and goals i.e. prioritizing where funds go to meet the City's important needs i.e. infrastructure funding.

Background

The City of Vaughan maintains numerous discretionary and obligatory reserves/reserve funds and has a long history of maintaining prudent reserve policies to support financial sustainability. The City is also a leader with regard to financial planning and has forecasts for each reserve. The next phase will be to review policies in relation to forecasts and update them accordingly.

Subject: D.2 Full Cost Allocation (C)

What Is It?

Municipal governments have overhead and administrative costs that are an essential part of operating the municipality and providing services to the public. It is a best practice for local governments to determine the direct and indirect costs associated with providing each program and service. Only when the full costs of providing a service are calculated, can a local government determine whether it wishes to support that service in full, or in part, with fees. Full cost should be considered in assessing any new service levels or new initiatives.

Recommendations

All costs associated with the full cost of program and service provision should be identified in the budget to increase transparency.

Rationale & FMP Relevance

Municipal best practices suggest that the full cost of providing a service should be determined for the purposes of decision making. Full cost incorporates direct and indirect costs, including operations and maintenance, overhead and charges for the use of capital facilities. Examples of overhead costs include: payroll processing, accounting services, accommodation charges, legal, computer usage and other central administration services.

As municipalities continue to struggle with the challenge of limited financial resources, a formal and well documented indirect cost allocation plan can help assure that all programs and services contribute their fair share of a municipality's administrative and overhead costs. A formal indirect cost allocation plan can help a municipality identify the actual cost of all services for decision making and calculate cost-based user fees for municipal services where the user pays all or part of the costs.

Background

Since Bill 124, the City has endeavored to develop an activity based costing model for the purpose of defining department fee policies and overall department recovery levels. These efforts have been applied to licensing, planning, and building standards, and the Committee of Adjustment. The basis for allocating indirect costs is City-wide and based on a multitude of cost drivers. The model is currently based in Excel and is updated annually. Currently, recovery targets are based on departmental direct costs only. By not taking into consideration indirect costs, the full cost of service and the degree of taxpayer subsidization is not known.

			Approximate range					
		Suggested Steps to Implement	Priority		Duration	Complexity		Cost
D.2	1	Categorize the departments and activities as direct or indirect services; identify within indirect service departments any distinct program areas of service (e.g. payroll, accounts payable) and identify any indirect services provided by direct service departments and vice-versa (e.g. public works or parks providing facilities and grounds maintenance activities for all buildings)	MT	C	06-12	Low	Corp	\$
D.2	2	Compile the total costs related to indirect services as described in the most recent budget or actual expenditures	MT	C	06-12	Low	Corp	\$
D.2	3	Form the basis for allocating indirect service costs gathering the most recent available data sets or easily estimated workload measures consistent with the expenditure year, such as square footage or number of full time equivalent positions. (Key point: Only use data sets that can be easily gathered in subsequent updates to keep the allocation plan current.)	MT	C	12-18	Low	Corp	\$\$
D.2	4	Allocate indirect costs based on each department’s proportionate share based on the workload measures/allocation factor for each indirect cost pool	MT	C	12-18	Low	Corp	\$

Subject: D.3 Financial Policy Review (D)

What Is It?

Policies and plans give direction to the City regarding the types of services and level of services to be provided and the manner in which the programs and services will be funded, including capital assets. Financial policies should be reviewed regularly to align with the City’s broad goals and its service and capital needs.

Recommendations

It is recommended that *all financial policies be reviewed and amended, as necessary, but at a minimum annually as part of the budget process.*

Rationale and FMP Relevance

Financial policies are required to address the following objectives:

- Keep the municipality in a fiscally sound position;
- Maintain sufficient financial liquidity;
- Maintain existing infrastructure and capital assets;
- Provide a prudent framework for debt management; and
- Directing the City’s resources toward meeting the goals of the City.

Background

The City has a number of long-standing financial policies related to reserves, debt, cash flows and operating surpluses that have ensured that the City maintains sufficient financial flexibility to meet its obligations. Contained within this FMP are recommendations to reconsider some of the existing policies to meet all goals and objectives of the City. A regular review of the existing financial policies and future opportunities will ensure that the City is operating efficiently and effectively.

Financial policies should be consistent with broad government goals and should be the outcome of sound analysis. Policies also should be consistent with each other and relationships between policies should be identified. Financial policies should be an integral part of the development of service, capital and financial plans and the budget.

			Approximate range					
Suggested Steps to Implement			Priority		Duration	Complexity		Cost
D.3	1	Review financial policies	MT	D	06-12	Med	Corp	Nil
D.3	2	Identify resources to develop or refine policies and forecasts	MT	D	06-12	Med	Corp	Nil
D.3	1	Review financial policies	MT	D	06-12	Med	Corp	Nil

Subject: D.4 Debt Management (D)

What Is It?

A debt management policy improves the quality of decisions, identifies policy goals and demonstrates a commitment to long-term financial planning, including a multi-year plan. Adherence to a debt management plan signals to rating agencies and capital markets that the municipality is well managed and should meet its obligations in a timely manner.

Recommendations

The City’s *present conservative debt control policy of not exceeding 10% of Own Source Revenues should be maintained*. The following additional policies are recommended:

- *Long-term debt to be used only for purchase, construction, or replacement of assets excluding vehicles, machinery and equipment with long useful lives that provide a benefit for future taxpayers;*
- *The term of the debt repayment should match or be less than the expected useful life of the asset;*

- *Long-term debt for replacement and refurbishment of existing capital assets be used as a last resort;*
- *Before borrowing for growth-related capital projects, all developer related advanced financing arrangements that are in accordance with the Development Charges legislation should be exhausted; and*
- *When new debt is approved, to phase in increases, 50% of the annual debt charge should be included in the current year budget and any portion not required for actual debt charges be established as a budgeted transfer to the Infrastructure Sustainability Reserves.*

Rationale & FMP Relevance

The Province regulates the amount of debt municipalities issue by setting an annual repayment limit for each municipality. This is the maximum amount by which a municipality may increase its debt. The repayment limit is set at 25% of a municipality’s net own source revenues. This is the upper limit. If the City were to reach the limit, future operating budgets would be severely constrained or tax or other revenues would have to increase significantly.

			Approximate range					
Suggested Steps to Implement			Priority		Duration	Complexity		Cost
D.4	1	Develop an annual report illustrating the City’s forecasted debt needs and adherence to the City’s financial policies	ST	D	00-06	Low	Dept	\$
D.4	2	Review opportunities for developer related advanced financing	MT	D	00-06	Med	Multi	\$

Background

GFOA recommends that municipalities adopt policies to identify the maximum amount of debt and debt service that should be outstanding at any time. This is, in fact, the case in the City of Vaughan where policy limits have been established for tax supported debt. Credit rating agencies consider debt charges as a percentage of own source revenues of 5% or lower to be very good reflecting strong pay-as-you-go policies and 10% is considered acceptable. This is consistent with the City's policy whereby a 10% limit has been established for tax supported debt.



When municipalities issue debentures, they enter into a long-term commitment that requires them to make timely principal and interest payments over the life of the debentures. The primary debt issuance objectives include:

- Future debt service payments can be made in full and on time, without jeopardizing the provision of essential services;
- Ensure long-term flexibility;
- Outstanding debt obligations will not threaten long-term financial stability of the municipality;
- The amount of outstanding debt will not place undue burden on residents and businesses; and
- Minimize long-term cost of financing.

Subject: D.5 Deferred Revenue (D)

What Is It?

Deferred revenue is a liability because it refers to revenue that has not been earned, but represents a product or services that are owed to the customer. As the product or service is delivered over time, it is recognized as revenue.

Recommendations

Operating departments should make the determination of revenue or deferred revenue based on Generally Accepted Accounting Principles.

Rationale & FMP Relevance

In accordance with Generally Accepted Accounting Principles, payments received for activities or services occurring in future years are recognized when the goods or services are provided.

Background

Vaughan receives upfront revenues for activities or services to be provided in the future. For example, fees for planning applications, building permits, and engineering applications are collected at application stage; however, the underlying costs associated with these fees may extend beyond a fiscal period. If the fee is recorded in the current fiscal period and expenses are in the following fiscal period, these would have the effect of overstating revenues and creating a deficit in the following period.

			Approximate range					
Suggested Steps to Implement			Priority		Duration	Complexity		Cost
D.5	1	Prepare a revenue recognition policy consistent with Generally Accepted Accounting Principles	ST	D	00-06	Low	Corp	Nil
D.5	2	Provide guidance and support to departments	ST	D	00-06	Low	Corp	Nil

Summary of Recommendations

The consolidated table reflects a summary of recommendations, their priorities and the cost ranges.

Recommendation	Priority	Low	High	Median
Prioritization	A.1 A	\$240,000	\$750,000	\$495,000
Infrastructure Financing	C.1 A	\$1,000,000	\$1,000,000	\$1,000,000
Performance Measurement	A.2 A _{underway}	\$180,000	\$600,000	\$390,000
Asset Management	C.2 A _{underway}	\$1,290,000	\$2,160,000	\$1,725,000
Build Financial Relationships into Strategic, Corporate and Master Planning	A.3 B	\$160,000	\$500,000	\$330,000
Intensification	B.1 B	\$40,000	\$160,000	\$100,000
Post-Retirement Benefits	C.3 B	\$60,000	\$240,000	\$150,000
Reserve Policy and Classification Framework	D.1 B _{underway}	\$0	\$0	\$0
Continuous Improvement & Innovation	A.4 C	\$80,000	\$250,000	\$165,000
Public Education/Engagement	A.5 C	\$100,000	\$350,000	\$225,000
Fund Balances and Financial Position	B.2 C	\$0	\$0	\$0
Surplus/One-Time Funding	B.3 C	\$20,000	\$80,000	\$50,000
Operating Liquidity and Cash Flow	B.4 C	\$20,000	\$80,000	\$50,000
Full Cost Allocation	D.2 C	\$20,000	\$140,000	\$80,000
Financial Planning	A.6 D	\$200,000	\$660,000	\$430,000
Financial Sustainability/Recession Resiliency	B.5 D	\$20,000	\$80,000	\$50,000
User Fees	B.6 D	\$60,000	\$240,000	\$150,000
Municipal Price Index	B.7 D	\$0	\$0	\$0
Financial Review Policy	D.3 D	\$0	\$0	\$0
Debt Management	D.4 D	\$0	\$40,000	\$20,000
Deferred Revenue	D.5 D	\$0	\$0	\$0

Note: The cost estimates are to be used as a reference point to aide in decision making. Further work will need to be completed as decisions are made as to which recommendations are to proceed.

Consolidated Table of Suggested Steps to Implement Recommendations

The following table summarizes the suggested steps to implement the recommendations, with short term, medium and long term priorities summarized.

Suggested Steps to Implement		Approximate Range							
		Priority	Duration	Complexity		Cost			
A.1	1	Prioritization: Undertake a study to determine an prioritization common framework & methodology that can be integrated into the corporate planning process		ST	A	06-12	High	Corp	\$\$\$
C.1	1	Infrastructure Financing: Implement the strategies to address the infrastructure gap.		ST	A	06-12	Med	Dept	\$\$\$\$
A.1	2	Prioritization: Complete work regarding program review, performance measures, and master plan costing, etc. that will support the methodology		ST	A	06-18	High	Corp	\$\$\$
A.2	1	Performance Measurement: Establish a framework, policy, and process implementation plan		ST	A _{underway}	00-06	Med.	Corp.	\$
C.2	1	Asset Management: Develop and implement a comprehensive framework for Asset Management		ST	A _{underway}	12-24	High	Corp	\$\$
A.2	2	Performance Measurement: Continue with the City’s performance measurement initiative e.g. developing KPIs which encompass quantity, quality, and costs of programs and services (output) in order to achieve certain effects, implementing robust systems and obtaining agreement/consensus from stakeholders		ST	A _{underway}	12-24	High	Corp.	\$\$\$
A.3	1	Building Financial Relationships into Strategic, Corporate and Master Planning: Use financial planning as an input for strategic discussions and develop a feedback loop into the corporate planning cycle		ST	B	06-12	High	Corp.	\$\$\$
A.3	2	Building Financial Relationships into Strategic, Corporate and Master Planning: Require master plans, new initiatives and items to have a financial planning element and relate to multi-year budgets and financial planning		ST	B	06-18	High	Corp.	\$\$\$
A.3	3	Building Financial Relationships into Strategic, Corporate and Master Planning: Implement a Finance review process to ensure consistency in presentation and full cost identification		ST	B	00-06	High	Corp	NA
D.1	1	Reserve Policy & Classification Framework: Develop a consolidated Reserve Policy		ST	B _{underway}	00-06	Med	Corp	Nil
D.1	2	Reserve Policy & Classification Framework: Redistribute Reserve balances exceeding targets to underfunded infrastructure balances		ST	B _{underway}	00-06	Med	Corp	Nil
D.1	3	Reserve Policy & Classification Framework: Develop a financial plan for each reserve		ST	B _{underway}	00-06	Med	Corp	Nil
B.2	1	Fund Balances & Financial Position: Monitor and forecast the City’s financial position and report annually		ST	C	06-12	Med	Dept	NA
A.6	1	Financial Planning: Continue to develop a 4 year budget plan		ST	D	00-06	High	Corp	NA
B.5	1	Financial Sustainability/Recession Resiliency: Develop a phase-out strategy for Operating Budget contributions from the Tax Stabilization Reserve		ST	D	00-06	Med	Dept	\$\$
B.6	1	User Fees: Coordinate and consolidate existing fee by-law updates under one common process		ST	D	12-18	Low	Corp	NA
B.7	1	Municipal Price Index: Formalize the Municipal Price Index and adopt		ST	D	06-12	Med	Dept	NA
D.4	1	Debt Management: Develop an annual report illustrating the City’s forecasted debt needs and adherence to the City’s financial policies		ST	D	00-06	Low	Dept	\$
D.5	1	Deferred Revenue: Prepare a revenue recognition policy consistent with Generally Accepted Accounting Principles		ST	D	00-06	Low	Corp	Nil
B.5	2	Financial Sustainability/Recession Resiliency: Transfer funds between the various Reserve classifications based on fund adequacy and recommendations		ST	D	00-06	Med	Dept	Nil
D.5	2	Deferred Revenue: Provide guidance and support to departments		ST	D	00-06	Low	Corp	Nil
A.6	3	Financial Planning: Review Financial Master Plan recommendations and determine desired courses of action		ST	D	06-12	Med	Corp	Var

Suggested Steps to Implement		Approximate Range						
		Priority		Duration	Complexity		Cost	
C.1	2	Infrastructure Financing: Monitor and report on the infrastructure gap annually and modifying the strategies should the gap widen.	MT	A	06-12	Med	Dept	Nil
A.1	3	Prioritization: Determine and implement the system requirements to capture, integrate, and report information for decision assessment and making	MT	A	06-12	High	Corp	\$\$\$
C.2	2	Asset Management: Clearly define and document business processes needs and systems related to asset management (repair, maintenance, replacement)	MT	A _{underway}	06-12	High	Corp	\$\$
A.2	3	Performance Measurement: Invest/upgrade budget systems to link the use of performance measures	MT	A _{underway}	06-12	Med	Dept.	\$\$\$
C.2	3	Asset Management: Implement systems to connect information e.g. work order systems, inventory tracking, maintenance algorithms, PSAB reporting, capital plans, etc.	MT	A _{underway}	24-36	High	Corp	\$\$\$\$\$
C.2	4	Asset Management: Undertake asset condition assessments and develop a needs requirement plan	MT	A _{underway}	12-48	Med	Dept	\$\$\$\$
B.1	1	Intensification: Undertake a study to determine common pressures associated with intensification (using larger population municipal references)	MT	B	00-06	High	Corp	\$\$
C.3	1	Post-Retirement Benefits: Undertake an actuary study to determine forecasted annual funding requirements	MT	B	00-12	High	Dept	\$\$
B.1	2	Intensification: Review the Official Plan for timing of major infrastructure changes related to population growth to determine future cost implications and economy of scale lags	MT	B	06-12	High	Multi	\$\$
C.3	2	Post-Retirement Benefits: Review implications of benefit programs	MT	B	00-12	Med	Dept	\$\$
D.1	4	Reserve Policy & Classification Framework: Prepare an annual reserve report	MT	B _{underway}	00-06	Med	Corp	Nil
A.4	1	Continuous Improvement & Innovation: Expand operational reviews to all City departments on a revolving basis over each term of Council	MT	C	48	Med.	Corp.	\$\$\$
A.5	1	Public Education/Engagement: Develop guidelines regarding public education and engagement	MT	C	06-12	High	Corp.	\$
B.3	1	Surplus/One-time Funding: Develop and implement a phase out strategy for the \$2.5 million carryforward in the budget	MT	C	00-120	Low	Corp	\$\$
B.4	1	Operating Liquidity & Cash Flow: Identify participants from departments to be involved in developing reasonable expectations of timing and amounts of planned expenditures and revenues.	MT	C	06-12	Low	Dept	Nil
D.2	1	Full Cost Recovery: Categorize the departments and activities as direct or indirect services; identify within indirect service departments any distinct program areas of service (e.g. payroll, accounts payable) and identify any indirect services provided by direct service departments and vice-versa (e.g. public works or parks providing facilities and grounds maintenance activities for all buildings)	MT	C	06-12	Low	Corp	\$
A.4	2	Continuous Improvement & Innovation: Establish an Innovation Reserve Fund to provide seed money for innovation or improvement efforts. Funding should be provided through a portion of future surpluses and unused year-end expenditure reserve projects. Projects would be granted based on business case assessment and their ability to return funds, for other initiative purposes, through future cost savings or efficiencies.	MT	C	?	Low	Dept.	NA
A.5	2	Public Education/Engagement: Develop processes and tools to foster community engagement and education(i.e. Focus Groups, Constituent Pools, Surveys, Community conversations)	MT	C	06-12	High	Corp.	\$\$\$
B.3	2	Surplus/One-time Funding: Develop a policy addressing the process for: * Allocation of any surpluses *Funding of one-time requirements	MT	C	6-16	Low	Dept	NA
B.4	2	Operating Liquidity & Cash Flow: Review the existing Working Capital Reserve, Tax Stabilization Reserve and Discretionary Reserve policies in conjunction with the completion of the cash flow analysis and amend if necessary	MT	C	12-18	Med	Dept	Nil

Suggested Steps to Implement			Approximate Range					
			Priority		Duration	Complexity		Cost
D.2	2	Full Cost Recovery: Compile the total costs related to indirect services as described in the most recent budget or actual expenditures	MT	C	06-12	Low	Corp	\$
A.5	3	Public Education/Engagement: Develop a system to track, report and incorporate feedback into decision making	MT	C	06-12	Med.	Corp.	\$\$
D.2	3	Full Cost Recovery: Form the basis for allocating indirect service costs gathering the most recent available data sets or easily estimated workload measures consistent with the expenditure year, such as square footage or number of full time equivalent positions. (Key point: Only use data sets that can be easily gathered in subsequent updates to keep the allocation plan current.)	MT	C	12-18	Low	Corp	\$\$
D.2	4	Full Cost Recovery: Allocate indirect costs based on each department's proportionate share based on the workload measures/allocation factor for each indirect cost pool	MT	C	12-18	Low	Corp	\$
D.3	1	Financial Review Policy: Review financial policies	MT	D	06-12	Med	Corp	Nil
A.6	2	Financial Planning: Identify and implement requirements to further automate and integrate operating, capital and reserve planning	MT	D	06-18	High	Corp	\$\$\$
B.6	2	User Fees: Establish a policy regarding the consistent use of user fees, basis for developing fees, cost recovery/taxation subsidy principles, appropriate increase assumptions, etc.	MT	D	12-18	High	Multi	\$\$
B.7	2	Municipal Price Index: Present budget components between MPI, growth and new initiative elements to illustrate the pressures	MT	D	06-12	Med	Dept	NA
D.3	2	Financial Review Policy: Identify resources to develop or refine policies and forecasts	MT	D	06-12	Med	Corp	Nil
D.4	2	Debt Management: Review opportunities for developer related advanced financing	MT	D	00-06	Med	Multi	\$
B.5	3	Financial Sustainability/Recession Resiliency: Should reserve balances exceed targets, review and prioritize capital backlog requirements	MT	D	00-06	Med	Corp	Nil
B.6	3	User Fees: Review services based on the policy to determine if fees can be applied	MT	D	12-18	Low	Multi	\$\$
A.6	4	Financial Planning: Extend capital plans to a 10 year horizon	MT	D	12-24	Med	Corp	\$\$
A.1	4	Prioritization: Compare results and run long-term scenarios based on decision parameters and determine best action	LT	A	00-06	Low	Corp	NA
A.1	5	Prioritization: Monitor and adjust as required	LT	A	?	Low	Corp	NA
A.2	4	Performance Measurement: Implement results based business planning and performance based budgeting	LT	A _{underway}	12-24	Med.	Corp.	\$\$
C.2	5	Asset Management: Update the funding requirements & strategies	LT	A _{underway}	ongoing	Med	Corp	TBD
C.3	3	Post-Retirement Benefits: Develop a phase-in strategy, as required and identify budget implications	LT	B	06-12	Low	Dept	TBD
C.3	4	Post-Retirement Benefits: Update actuarial report every three years taking into account fairness across generations and whether benefits and/or funding should be changed	LT	B	00-12	High	Dept	\$\$
D.1	5	Reserve Policy & Classification Framework: Review and update reserve policy at the beginning of each council term	LT	B _{underway}	00-06	Med	Corp	Nil
B.4	3	Operating Liquidity & Cash Flow: Analytical software will be explored to maintain historical data and provide an enhanced ability to forecast future cash flows and liquidity needs.	LT	C	06-12	Low	Dept	\$\$
B.6	4	User Fees: Perform fee reviews on a rotating basis, incorporating full cost and volume impact analysis	LT	D	06-12	Med	Dept	\$\$
A.6	5	Financial Planning: Identify and implement software solutions allow for longer term financial planning	LT	D	06-12	Low	Corp	\$\$
A.6	6	Financial Planning: Update the Financial Master Plan (preferably with a one year time lag after the completion and adoption of the Development Charges Background Study)	LT	D	12-24	High	Multi	\$\$\$

Appendix A: SWOT Analysis—Current Financial Health of the City

SWOT Analysis—Current Financial Health of the City

Internal Strengths

- The City of Vaughan has developed numerous strategic planning documents to address the challenges of growth. These include the Official Plan, the Transportation Master Plan, Active Together Master Plan, Employment Sectors Strategy, Human Resource Master Plan, etc.
- Through planned processes and the development of land use policies, Vaughan is well positioned to accommodate more intensive forms of development in the future as the community matures and major investments are made in transit and other urban infrastructure. Vaughan's significant supply of developable employment lands has also contributed to non-residential development.
- Departmental business plans are prepared annually identifying business planning objectives and performance measures to enhance transparency and resident awareness of service delivery and performance pressures.
- The City implemented a multi-year budget (2011) to help facilitate long range forecasting and to allow taxpayers in the City the ability to plan for the future.
- The City undertook a detailed Corporate Structure Review (2011) to support the City's Strategic Plan and to enhance the City's ability to capitalize on challenges and opportunities as they emerge over the next decade.
- The City currently has many processes in place that encourage and foster improved effectiveness and efficiency (i.e. internal audit, operational studies, suggestion programs, etc.). In addition, a program review will be implemented.
- An Ipsos Reid Citizen Survey undertaken (2012) explored citizen's feedback to ensure that the City aligns the programs and services with taxpayer expectations. Residents rate the overall quality of life in the City as very high. Citizens also believe that the City is providing better value for tax dollars in relation to other municipalities.
- The City maintains several stabilization reserves to offset extraordinary and unforeseen expenditure requirements, revenue shortfalls and to manage cash flows. These reserves are healthy and are, in fact, above industry benchmarks.
- The City implemented a funding philosophy for the ultimate renewal of new infrastructure coming on board which focuses ensuring that annual contributions based on lifecycle replacement principals will be made for all new assets.
- Vaughan's tax debt ratio has remained well below an internal ceiling of 10% over the past five years.
- Vaughan's tax receivable ratio has remained below the credit rating limit of 8% which is an indicator of the economic health of the community as well as the City's receivable policies.

- Through sound budgeting guidelines, the City has been able to deliver a budget with increases at a level lower than the MPI adjusted percentage guide; clearly illustrating Vaughan is continuously improving and providing the taxpayer with value.
- Vaughan's combined regional and municipal levy per \$100,000 of assessment was amongst the lowest in the peer comparator group which provides an indication of the levy in relation to the assessment base upon which taxes are raised.
- Vaughan's levy per capita increase over the past five years was amongst the lowest in the survey of peer municipalities, despite having one of the fastest population growths. This again reinforces the City's success in holding the line on expenditure increases.

Internal Weaknesses

- While the City's tax discretionary reserves ratio remained above 50% which is the City's existing target, over the past five years, the ratio has declined by approximately 10%.
- Vaughan's capital reserves as a percentage of accumulated amortization is 18.5% (lowest in the peer group), representing an historical underfunding of infrastructure (or an infrastructure gap). In 2011, there was an annual infrastructure funding gap of \$17 million (difference between the annual amortization and the contributions to capital). Strategies are already in place in the City of Vaughan to avoid any growth in the funding gap.

- In addition to the annual infrastructure gap, the City, like virtually every Ontario municipality has an historical under-funding of assets which has resulted in an infrastructure deficit of \$42 million.
- As of 2010 year end, there are \$53 million in post-employment liabilities. The 2011 year-end balance in the reserve to support these liabilities was \$14 million. Because the liabilities do not come due at the same time, to avoid significant budget fluctuations, it is prudent to identify what is a reasonable level of reserves based on expected or forecast requirements.
- Vaughan is operating at a surplus based on its cash flow requirements, however, amortization is a non-cash expense, which means that it does not correspond to a cash outflow. Amortization instead reflects the annual allocation of a prior capital expenditure.
- In 2010, Vaughan had a tax operating deficit ratio of 9.5% which further illustrates the under contribution to reserves. This is not unique to the City where all but one of the peer municipalities had an operating deficit in 2010.
- Vaughan's financial position (assets in excess of liabilities) has been trending downward since 2008 and the City has the lowest financial assets to liability ratio, but is still at a reasonable level.

External Opportunities

- Vaughan is well positioned to continue as one of the premier growth engines in the GTA which will be supported by substantial investments in new infrastructure.
- Municipalities with higher employment rates are likely to have higher standards of living, other things being equal. The employment participation rate in Vaughan significantly exceeds the Ontario average and has increased from 2006-2011.
- From 2006-2011 unemployment in Vaughan remained significantly lower than the Ontario average.
- Employment in the City has nearly doubled over the last 10 years. During this time, the City's employment base has grown at a compound annual rate of nearly 7%, much faster than the Greater Toronto Area and Hamilton (GTAH) as a whole over the same period.
- Within York Region, Vaughan's share of employment growth from 2006 to 2031 is forecasted at 33%, the highest share for any municipality in the Region and Vaughan will remain the largest employment base for the Region.
- Vaughan has a large, relatively young, diverse and skilled labour force and as the City continues to experience residential growth, the labour force will expand representing the potential to attract the brightest and the best
- A balanced mix of residential and business construction growth and development will provide the basis for Vaughan's continued fiscal sustainability.

- Over the past seven years, residential/non-residential construction activity (on a \$ of construction) is a 65/35 split, in the City of Vaughan, representing a good balance between residential and non-residential development.
- Vaughan's assessment base per capita is the second highest in the peer municipal comparison reflecting a strong assessment base upon which to raise taxes.
- From 2006-2011, the change in assessment in Vaughan exceeded the peer municipal average and, in fact, was either the highest or second highest in each year.
- Vaughan's residential/non-residential assessment base split of 75/25 compared with the peer average of 80/20. It is more desirable to have a larger share of non-residential assessment as the municipal cost of service is generally lower than residential.
- Average household gross and disposable income in the City of Vaughan is higher than peer municipalities as well as the GTA and Ontario average.
- Average dwelling values in Vaughan are second highest in the survey of peer municipalities reflecting the strength of the local economy and the housing stock.
- Taking into consideration income levels, municipal property taxes in Vaughan in relation to disposable income are 3.9% which is at the survey average.

- Vaughan, as well as the other York municipalities, has very competitive non-residential property taxes as a result of low tax ratios in the commercial and industrial classes. This reflects strong economic development strategies.

External Threats

- The form of residential growth is changing, in large part driven by provincial policy. Much of the future residential growth will occur as intensification within the existing urban boundary. As intensification is relatively new in Vaughan it will require the City to rethink its approach and policies compared with the traditional development that the City has experienced in the past.
- Consistent with the situation across Ontario, from 2006 to 2011, there has been an increase in the unemployment in Vaughan.
- The City has a higher percentage of residents that are 14 years of age which can increase the cost of municipal programs and services.
- While a higher relative gross income is a positive indicator of the overall local economy, a higher gross income tends to lead to greater expectations for quality programs (i.e. streetscapes, artificial soccer turfs) which impacts the cost of municipal programs and services which poses challenges in terms of balancing desired levels of services with a willingness to pay for these services.

- There are many factors that impact the cost of municipal programs and services which are increasing at a rate faster than inflation including:
 - Additional services to meet growth demands
 - Additional services to meet corporate and new initiatives
 - Infrastructure repair and replacement costs
 - Costs to meet new legislative requirements
 - Costs that exceed inflation such as salaries, wages, professional contracts, utilities
- Based on the latest Ipsos Reid survey, slightly more residents believe that the City should hold the line on increased taxes or user fees even if it means reductions in service, compared to those that would support an increase in taxes or users fees to maintain existing services.
- According to the latest Ipsos Reid survey, 20% of residents cite taxation and municipal government spending as the most important issue facing their community, an increase of six points since 2011.
- Similar to other municipalities and organizations, the City of Vaughan faces multiple pressures annually to help reduce the increases experienced due to growth and uncontrollable factors. As expenditure demands increase, the City's options to meet those demands are restricted to efficiencies, user fees, and lastly taxation.

Appendix B: Discretionary Reserve and Reserve Fund Details

Summary of Discretionary Reserves

		2007	2008	2009	2010	2011
Financial Sustainability (Stabilization) Reserves & Reserve Funds						
	General Working Capital	\$20,559,024	\$22,970,855	\$24,173,665	\$26,856,909	\$28,284,260
	Tax Rate Stabilization	\$15,783,609	\$17,948,271	\$19,656,235	\$21,757,165	\$23,120,445
	Engineering	\$16,868,154	\$18,317,951	\$17,708,766	\$15,203,178	\$13,122,114
	Winter Reserve	\$3,564,601	\$3,754,703	\$3,742,752	\$5,799,184	\$6,013,419
	Planning Reserve	\$385,072	\$923,150	\$929,555	\$937,332	\$949,108
	Year End Surplus	\$1,058,182	\$1,412,694	\$1,873,857	\$2,794,495	\$3,090,148
	Building Continuity	\$11,615,794	\$15,428,038	\$17,303,458	\$18,519,398	\$17,667,352
Financial Sustainability Reserve Total		\$69,834,436	\$80,755,662	\$85,388,288	\$91,867,661	\$92,246,846
Functional (Corporate) Sustainability Reserves						
		2007	2008	2009	2010	2011
	Election	\$601,889	\$848,708	\$1,054,680	\$383,255	\$477,697
	Employee Benefits	\$5,097,106	\$6,931,666	\$8,187,358	\$10,526,956	\$11,198,981
	Insurance	\$1,365,255	\$1,628,431	\$1,621,533	\$1,282,306	\$1,668,466
	WSIB	\$239,137	\$403,648	\$481,495	\$560,641	\$642,802
Corporate Sustainability Reserve Total		\$7,303,387	\$9,812,453	\$11,345,066	\$12,753,158	\$13,987,946

Summary of Discretionary Reserves

	2007	2008	2009	2010	2011
Infrastructure Sustainability (Capital) Reserves					
Vehicle Replacement	\$6,385,568	\$3,726,845	\$2,144,729	\$1,678,476	\$2,980,108
Fire Equipment Replacement	\$1,462,085	\$1,483,948	\$1,427,254	\$2,567,339	\$2,657,815
City Playhouse	\$19,046	\$43,535	\$58,919	\$74,528	\$43,718
Building & Facilities Infrastructure	\$11,565,822	\$12,793,446	\$11,966,699	\$12,910,005	\$13,288,181
Heritage Fund	\$96,276	\$360,044	\$257,686	\$396,695	\$419,919
Road Infrastructure	\$6,460,401	\$7,749,533	\$6,417,756	\$6,651,174	\$4,775,556
Parks Infrastructure	\$2,110,382	\$2,114,169	\$598,868	\$490,826	\$408,658
Artificial Soccer Turf	\$0	\$0	\$0	\$159,342	\$172,831
Streetscapes	\$0	\$0	\$0	\$0	\$0
Transportation Reserve	\$760,760	\$0	\$0	\$0	\$0
Debenture Payment	\$16,749,437	\$17,965,881	\$17,795,485	\$21,186,223	\$23,713,576
Uplands - Capital Improvement	\$69,230	\$94,377	\$105,135	\$35,125	(\$990,313)
Uplands	\$136,688	\$224,038	\$384,424	\$529,100	\$572,522
Infrastructure Sustainability Reserve Total	\$45,815,695	\$46,555,816	\$41,156,955	\$46,678,833	\$48,042,570

	2007	2008	2009	2010	2011
Specific Purpose Reserves					
Keele Valley Landfill	\$903,082	\$618,787	\$861,848	\$284,903	\$456,400
Senior Citizens Bequests	\$183,080	\$190,957	\$192,282	\$193,890	\$196,326
Kleinburg CIL Parking	\$59,256	\$61,805	\$62,234	\$42,724	\$43,260
Cemetery	\$21,910	\$13,342	\$13,342	\$13,342	\$13,342
Suggestion Program	\$33,302	\$33,302	\$33,302	\$33,302	\$33,302
Garnet Williams CC Day Centre	\$187,616	\$240,717	\$288,301	\$338,798	\$367,886
Industrial Development	\$25,018	\$26,188	\$26,370	\$26,591	\$26,925
Management ByLaw	\$87,150	\$90,899	\$91,529	\$92,296	\$93,455
Specific Purpose Reserve Total	\$1,500,414	\$1,275,997	\$1,569,208	\$1,025,846	\$1,230,898

Appendix C: Operating Budget Assumptions

Expenditure	General Description	Assumptions % increase	Assumptions Components	Average Annual Increase Over Next 10 years
<p>CAPITAL RELATED EXPENSES</p> <p>10.6% of Gross Expenditures</p>	<ul style="list-style-type: none"> • Capital from Taxation – the 2012 budget includes a \$5.1 million contribution to the capital program, excluding growth. Projects that are funded from Capital from Taxation include: <ul style="list-style-type: none"> • ITM hardware/software replacement program • ITM hardware requirements for new libraries • Non-Reserved replacements, such as: <ul style="list-style-type: none"> ○ Street lighting program (replace street poles) ○ Walkway hard surface replacement ○ Various studies to be carried out by the City ○ Accessibility initiatives ○ New Infrastructure - Contributions vary based on replacement requirements. 		Varies annually	\$0.06 million
	<ul style="list-style-type: none"> • Infrastructure Sustainability Reserve Contributions –Contribution to the various Infrastructure Sustainability Reserves includes a small inflationary increase. 	1.5%	1.5%	\$0.04 million
	<ul style="list-style-type: none"> • Debt Payments - Based on the City’s practices funding for the City’s roads management program is primarily funded through long-term debentures. Future price or inflationary pressures related to debt are largely driven by interest rates issued on new debt. The forecast assumes debt will be issued at an interest rate of 5% and an additional \$9 million for the roads program will be issued annually. 			\$0.3 million

Expenditure	General Description	Assumptions % increase	Assumptions Components	Average Annual Increase Over Next 10 years																				
<p>UTILITIES</p> <p>3.4% of Gross Expenditures</p>	<ul style="list-style-type: none"> Includes natural gas, hydro and water/wastewater Rates fluctuate in accordance with market conditions Assumptions are based on historical CPI price trends for these items on a weighted average basis <table border="1" data-bbox="575 581 1234 834"> <thead> <tr> <th>Utility</th> <th>% of Total Utility</th> <th>100 yr Avg. Rate Increase</th> <th>Avg Annual % Increase of</th> </tr> </thead> <tbody> <tr> <td>Hydro</td> <td>70%</td> <td>3.00%</td> <td>2.10%</td> </tr> <tr> <td>Water</td> <td>11%</td> <td>10.00%</td> <td>1.15%</td> </tr> <tr> <td>Gas</td> <td>19%</td> <td>8.18%</td> <td>1.52%</td> </tr> <tr> <td>Total</td> <td>100%</td> <td></td> <td>4.77%</td> </tr> </tbody> </table>	Utility	% of Total Utility	100 yr Avg. Rate Increase	Avg Annual % Increase of	Hydro	70%	3.00%	2.10%	Water	11%	10.00%	1.15%	Gas	19%	8.18%	1.52%	Total	100%		4.77%	4.77%	Annually from 2015 onward	\$0.5 million
Utility	% of Total Utility	100 yr Avg. Rate Increase	Avg Annual % Increase of																					
Hydro	70%	3.00%	2.10%																					
Water	11%	10.00%	1.15%																					
Gas	19%	8.18%	1.52%																					
Total	100%		4.77%																					
<p>CONTRACT COSTS</p> <p>9.6 % of Gross Expenditures</p>	<ul style="list-style-type: none"> 86.5% of contract costs relate to Engineering & Public Works Contracted services have predefined pricing and typically span two to three years with extension options Road and winter maintenance - 5% renewal increase every three years with a two year option at a cost of 3% per year Waste collection – 5% every 4-5 years 13% of total contract costs relate to Parks Operations—parks maintenance 0.5% of the total contract costs reside in all other departments 	0-5% 2%	Public Works based on contract renewal every 3-5 years All other contracts	\$0.4 million																				

Expenditure	General Description	Assumptions % increase	Assumptions Components	Average Annual Increase Over Next 10 years
CORPORATE EXPENSES 2.6% of Gross Expenditures	<ul style="list-style-type: none"> • Insurance - The City's insurance policy was renewed in 2011 resulting in a 20% increase. Additional savings have been incorporated into the 2013-2014, with an inflationary increase from the remainder of the forecast • Other Contingencies – Contingency items include anticipated expenses that have uncertain values and timing. No increase is assumed in the forecast • Election – an annual transfer is made to the Election Reserve for election related expenses. No increase is assumed in the forecast 	2%	Annually	\$0.03 million
MATERIALS & SUPPLIES 2.1% of Gross Expenditures	<ul style="list-style-type: none"> • Public Works accounts for 65% of the City's materials and supplies costs <ul style="list-style-type: none"> ○ Winter control salt purchases accounts for 90% of the Public Works costs – assumed average 4% annually ○ Roads related expenditures – 2% annually • All other City material and supply expenditures have no forecasted increase in accordance with the City's budget policy to approve annually as additional requests. 	4%	Annually	\$0.15 million
		0%	Annually	
BUILDING MAINTENANCE 1.7% of Gross Expenditures	<ul style="list-style-type: none"> • Maintenance of City facilities. Statistics Canada publishes the Non-Residential Institutional Building Construction Price Index which measures the changes in contractors' selling prices of non-residential building construction, excluding land, design, etc. The 7 year historical average of 3.1% was used in the forecast. 	3.1%	Annually	\$0.11 million
MISCELLANEOUS EXPENSES 11.8% of Gross Expenditures	<ul style="list-style-type: none"> • Includes tax adjustments, joint servicing agreements, OMB hearing expenses • Majority of costs have been forecast at inflation or lower 	0-2%	0-2%	\$0.2 million

Base Budget Revenue Assumptions

The following table summarizes the key assumptions used to develop the Base 10-year forecast for revenues.

Revenues	General Description	Assumptions % increase	Assumptions Components	Average Annual Change Over Next 10 years
FEES & CHARGES 16.0% of Gross Revenues	<ul style="list-style-type: none"> Recreation - Over 51% of the City fees & charges are related to recreation activities. The recreation department is mandated to recover 95% of its department operating costs, exclusive of overhead and facility costs, through program fees. 	2%	Annually	\$0.6 million
	<ul style="list-style-type: none"> Planning and Building – approximately 30% of the City’s fees and charges are related to planning and building permit fees. While the City is still forecast to experience further growth, the pace of growth is lower than current levels and as such revenue forecasts reflect lower permit revenues. Building revenues in the Base Model are forecast to decline from \$6.9 million in 2012 to \$4.5 million in 2022. Planning Development revenues are also forecast to decline by \$1 million over the same timeframe. 			(\$0.3 million)
	<ul style="list-style-type: none"> Legal % Administration account for almost 11% of the fees generated Engineering and Public Works account for approximately 5% of the City’s fees and charges The remainder of the fees and charges are generated from the other departments, accounting for approximately 3% of total fees and charges 	1%	Legal & Admin	\$0.06 million
		2%	All others	

Revenues	General Description	Assumptions % increase	Assumptions Components	Average Annual Change Over Next 10 years
<p>CORPORATE REVENUES</p> <p>7.9% of Gross Revenues</p>	<ul style="list-style-type: none"> Investment income is forecast to increase at a conservative level of 2% annually commencing in 2016. Investment income available for operating budget purposes is forecast to decline from 2012-2015 as a result of a realignment of interest income between operating and capital but is then forecast to increase by 2% annually Fines and penalties (\$4.8 million in 2012) are forecast to increase by approximately 2.5% annually based on historical activities All other corporate revenues are forecast to increase by approximately 2% annually 	0-2.5%	Annually	\$0.4 million
<p>RESERVE REVENUES</p> <p>7.3% of Gross Revenues</p>	<ul style="list-style-type: none"> Reserve Revenues - The City utilizes a number of reserved funds to help smooth and subsidize the operating budget. The largest source of reserve revenue is from Building and Engineering, Tax Rate Stabilization, Finance from Capital and Debenture Contributions. The Base Model assumes the availability of \$4.3 million annually from the Tax Rate Stabilization and Finance from Capital which may not be sustainable. Debenture Contributions have been used extensively from 2012-2016 to minimize the impact related to increases in debt payments. From 2017-2022 this is no longer required and results in a reduction in contributions from Reserves. Funding from the Engineering and Building standards reserves are heavily related to development activity. Due to a slowdown in growth, there are no forecast reserve transfers beyond 2017 in Engineering and reserve transfers for Planning and Building end in 2019. 	0%	<p>Annually for most</p> <p>Decline in Engineering and Building Reserves</p>	(\$0.6 million)

Revenues	General Description	Assumptions % increase	Assumptions Components	Average Annual Change Over Next 10 years
TAXATION SUPPLEMENTAL REVENUES 1.8% of Gross Revenues	<ul style="list-style-type: none"> Based on growth forecast 	2%	Annually	\$0.06 million
GRANTS AND PILS 1.2% of Gross Revenues	<ul style="list-style-type: none"> Conservatively assumes no increase in grants or PIL revenues over the forecast period 	0%	0%	
SURPLUS CARRY FORWARD 1.1% of Gross Revenues	<ul style="list-style-type: none"> Assumes the ongoing ability to utilize \$2.5 million annually from prior year surpluses which may not materialize 	0%	0%	

Appendix D: 10 Year Addition of Facilities, Parks and Infrastructure

Year of Operation	Libraries	Fire	Community Centres	Public Works	Parks - HA additions	Parks - Structure additions	Roads Related (DC)	Roads Related (Subdivision)
2013		Engine (Stn 7-8)	Patheo Emmao Sullivan & Vailoro Village Fitness Expansions (2012)	New Yard (Northeast Quadrant) (2012)	31	Sports Fields - 2 Sports Courts - 4 Water Facility - 1 Playgrounds - 2 Skateboard - 1	Roads - 7 lane KM Traffic/Pedestrian Signals - 9 Streetlights - 3,346 lineal M Studies - \$2,799	Roads - 34 lane KM Streetlights - 279 lineal M Sidewalks - 47 KM
2014		Reposition Station 7-3 & Engine 781 - Recco (Stn 7-8)			6	Sports Fields - 3 Sports Courts - 7 Water Facility - 1 Playgrounds - 4 Skateboard - 1	Roads - 9 lane KM Traffic/Pedestrian Signals - 9 Streetlights - 3,346 lineal M Vailoro/Cerville Parking Bays Block 99 Overpass Studies - \$4,919	Roads - 35 lane KM Streetlights - 200 lineal M Sidewalks - 33 KM
2015	New Resource Library - Civic Centre (2012)				29	Sports Fields - 12 Sports Courts - 4 Playgrounds - 4 Skateboard - 1	Roads - 6 lane KM Traffic/Pedestrian Signals - 9 Streetlights - 3,346 lineal M Studies - \$2,039	Roads - 36 lane KM Streetlights - 200 lineal M Sidewalks - 34 KM
2016	Cerville (Block 11) (2015)	Reposition Station 7-4 & Heavy Rescue 789 - McLeary (Stn 7-8)	Cerville - Block 11 (2014)		6	Sports Fields - 9 Sports Courts - 3 Water Facility - 1 Playgrounds - 7 Skateboard - 1	Roads - 6 lane KM Traffic/Pedestrian Signals - 9 Streetlights - 3,346 lineal M Studies - \$2,340	Roads - 37 lane KM Streetlights - 200 lineal M Sidewalks - 39 KM
2017	Vailoro (Urban Village 1) (2016)					Sports Fields - 2 Sports Courts - 6 Water Facility - 1 Playgrounds - 7 Skateboard - 1	Roads - 6 lane KM Traffic/Pedestrian Signals - 9 Streetlights - 3,346 lineal M Studies - \$2,089	Roads - 13 lane KM Streetlights - 200 lineal M Sidewalks - 38 KM
2018				NorthWest Satellite Yard - 33mm Salt Dome & May 17 Satellite Yard (Prov. For Bays and Fuel Tanks) (2017)	11	Sports Fields - 8 Sports Courts - 1 Water Facility - 1 Playgrounds - 6	Roads - 2 lane KM Traffic/Pedestrian Signals - 9 Streetlights - 3,346 lineal M Studies - \$1,209	Roads - 14 lane KM Streetlights - 229 lineal M Sidewalks - 37 KM
2019	New Library or Expansion Beyond DC Period (2017)	Station 7-11 (Kirby)			11	Sports Courts - 1 Playgrounds - 7	Roads - 2 lane KM Traffic/Pedestrian Signals - 7 Streetlights - 10,933 lineal M	Roads - 14 lane KM Streetlights - 79 lineal M Sidewalks - 13 KM
2020			Vailoro Village - Block 40/41/42 (2018)		11	Sports Fields - 1 Sports Courts - 2 Playgrounds - 7	Roads - 2 lane KM Traffic/Pedestrian Signals - 7 Streetlights - 10,933 lineal M	Roads - 14 lane KM Streetlights - 79 lineal M Sidewalks - 14 KM
2021					11	Sports Fields - 1 Water Facility - 1 Playgrounds - 7	Roads - 2 lane KM Traffic/Pedestrian Signals - 7 Streetlights - 10,933 lineal M	Roads - 14 lane KM Streetlights - 79 lineal M Sidewalks - 14 KM
2022			Post DC Period - Vaughan Corporate Centre (2020)		11	Sports Fields - 1 Sports Courts - 2 Playgrounds - 7	Roads - 2 lane KM Traffic/Pedestrian Signals - 7 Streetlights - 10,933 lineal M	Roads - 9 lane KM Streetlights - 79 lineal M Sidewalks - 14 KM