

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF DECEMBER 10, 2013

Item 3, Report No. 17, of the Finance and Administration Committee, which was adopted without amendment by the Council of the City of Vaughan on December 10, 2013.

3 THE CONSOLIDATED SIX YEAR WATER FINANCIAL PLAN (2014-2019)

The Finance and Administration Committee recommends approval of the recommendation contained in the following report of the Acting Commissioner of Finance & City Treasurer, the Commissioner of Engineering and Public Works, the Director of Public Works and the Director of Financial Services, dated December 2, 2013:

Recommendation

The Acting Commissioner of Finance & City Treasurer, the Commissioner of Engineering and Public Works, the Director of Public Works and the Director of Financial Services recommend:

1. That the attached Vaughan and Kleinburg Consolidated Six Year Water Financial Plan that demonstrates a viable and sustainable financial plan for the combined distribution systems (Vaughan license 011-102, permit 011-202 and Kleinburg license 011-101, permit 011-201) be adopted; and
2. That a copy of the Vaughan and Kleinburg Consolidated Six Year Water Financial Plan be forwarded to the Ministry of Municipal Affairs and Housing and the Ministry of the Environment

Contribution to Sustainability

This report is consistent with the priorities previously set out by Council in *Green Directions Vaughan*, the Community Sustainability and Environmental Master Plan:

- Goal 1: To significantly reduce our use of natural resources. Water is a valued resource and efforts continue to be made to reduce its consumption to ensure viability for future generations.
- Goal 5: To be leaders on sustainability issues. Vaughan is committed to providing leadership by implementing sustainable best practices in its own municipal operations.

The Six Year Water Financial Plan increases awareness of the importance of financially sustainable water distribution systems in the protection and conservation of this valuable natural resource.

Economic Impact

There is no economic impact as result of this report, however this consolidated six year financial plan will be utilized in the preparation of the 2014 – 2017 Water Operating budget.

Communications Plan

As required by legislation the City's Vaughan and Kleinburg Consolidated Six Year Financial Plan for water will be available to the public on the City's web site.

Purpose

For Council adoption of the City's Vaughan and Kleinburg Consolidated Six Year Water Financial Plan (2014-2019) that provides a financially viable and sustainable water system as required by the Safe Drinking Water Act, 2002, Ontario regulation 453/07 and that a copy of the financial plan be forwarded to the Ministry of Municipal Affairs and Housing and the Ministry of the Environment.

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Background - Analysis and Options

The Safe Drinking Water Act (SDWA) – Licensing Requirements

The Safe Drinking Water Act is comprehensive in its legislative requirements and was enacted to place all legislation and regulations relating to the treatment and distribution of drinking water into one Act. The SDWA expands on existing policy and practices and introduces new regulations to protect drinking water. It includes certification of drinking water system operators and analysts and puts in place certain financial reporting requirements and the need for municipalities to develop financially sustainable water treatment and distribution systems.

Under the Safe Drinking Water Act the City has received a full scope – Entire Accreditation Certificate on July 7th, 2009 for its Drinking Water Quality Management Standards (DWQMS). The City was issued a Drinking Water Works Permit (Permit number 011-201) along with a Municipal Drinking Water Licence (Licence number 011-101) in order to operate. The Municipal Drinking Water Licence expiry date is July 26, 2014. As such, the City is obligated to apply for renewal no later than January 24, 2014.

The Six Year Financial Plan must include:

- Statement of Operations
- Statement of Financial Position
- Statement of Net Financial Assets
- Statement of Cash Flow

The financial plan must be adopted by the Council of the municipality and the resolution must also indicate that the drinking water system is financially viable. The act does not require that a six year financial plan be prepared for wastewater. In addition the above regulation does not require that the six year financial plan be audited

This is the second six year financial plan that has been submitted, the first submission was in 2010 and covered the years 2010 to 2015.

The City's financial plan presented under regulation O.Reg 453/07 is compliant with the new CICA PSAB requirements PS1200 and PS3150. These new accounting standards for the preparation of financial statements provide for full accrual accounting and the inclusion of tangible capital assets. The tangible capital assets of the City include land, buildings, facilities, vehicles, equipment and underground water/ wastewater assets, etc.

Consolidated Six Year Water Forecast - Highlights - 2016 to 2021

Factors and Assumptions

The development of the consolidated six year water financial statements utilized the following documents the 2009 water/wastewater rate study, the 2013 development charges background study, 2013 water/wastewater budget, 2013-16 capital budget, Regional water rate documentation and estimates, the City's consolidated financial statements and other resources. Factors gleaned from the above referenced material included assumptions for growth, inflation, consumption levels, lifecycle capital forecasts, deferred revenues (development charge revenue) and contributed assets.

In certain situations best estimates were used in the development of the forecasted figures when financial information or data was not known. Generally the development of the consolidated six year financial forecast used a conservative approach in terms of consumption levels, inflation, expenditure levels, etc.

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Following are the highlights for the Statement of Operations and Statement of Financial Position that form part of the six year financial plan for the years 2014 to 2019.

Statement of Operations Forecast

Rate Based Revenues

This component of water revenue is based on metered water consumption for residential, commercial and industrial customers. The forecasted water revenues over the reported period will increase from \$52.1m in 2014 to \$76.5m in 2019. Total revenue year over year is increasing as a result of growth in the customer base and also the result of rate increases.

The forecasted revenue figures were developed using a conservative growth pattern of 1.5% for residential and 1.0% for commercial properties. This growth rate is slightly more conservative than the growth used in the DC background study. The revenue forecast also assumes an average year in terms of weather for the six year period.

The estimated water rate increase over this period ranges from 6.8% in 2014 to 6.0% in 2019. The increase in rates over the forecast period will permit the City to maintain service levels over an increasing infrastructure base and to also meet the annual capital requirements. This is evidenced in the paragraph below titled Changes in Net Financial Assets.

Water consumption over the forecasted period shows an increase in total demand as result of continued growth in the customer base and ranges from 37.7m cubic meters in 2014, to 40.0m cubic meters in 2019. On a per household basis water consumption is expected to decline over the forecasted period from 291cm to 288cm, this maintains to a small degree the expected trend in water consumption.

Other Revenues and Interest income

Other revenues range from \$0.6m in 2014 to \$0.7m in 2019. These revenues comprise a number of different services that are provided to the City's customers which include meter sales and installations, temporary meter rentals and other services.

Bank interest earned on cash investments over this period ranges from \$0.5m in 2014 to \$0.8m in 2019. The gradual increase over the forecasted period is the result of the increasing cash balance in the water reserve. The bank rate was conservatively estimated at 1.5% for this period.

Contributions from Developers/Contributed Assets

Contributions from Developers are development charge revenues that are drawn down each year from DC obligatory reserve fund for growth related capital water projects. These forecasted drawdowns for capital projects are based on the DC background study and range in the neighbourhood of \$8.5m per year.

Contributed assets are those tangible capital assets that are assumed by the City from developers through development agreements, or constructed on behalf of the City through capital projects and acquisitions. These assumed asset revenues are estimated to be in the range of \$1.9m to \$2.7m over the forecasted period.

Purchase of Potable Water

The largest expenditure component is the purchase of potable water from the Region of York. Their estimated rate increase for the purchase of water for the years 2014 to 2019 ranges from a

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high of 7.5% down to 5.0%. Both the Regional water rate increase and the City's anticipated growth in terms of consumption have been factored into the total cost of water purchased as shown on the Statement of Operations.

Purchases of potable water over the forecasted period ranges from \$37.2m in 2014 to \$52.8m in 2019. The unmetered water component is also factored in the amount shown above and is forecasted to be in the range of 13% over the six year period.

Expenditures

Operating and maintenance costs represent on going preventative maintenance, general repair activities and other operational expenditures for the City's above and below ground water infrastructure. The operating and maintenance costs range from \$8.5m in 2014, to \$10.9m in 2019. Two factors impacting the expenditure forecast over this period is the increasing size of the water system therefore increased maintenance costs and the impact of annual inflation.

Amortization has increased over the forecasted period as a result of a water system that continues to expand to meet the service demands of the City. Amortization over this period ranges from \$5.0m in 2014 to \$6.1m in 2019. To put this in perspective the net dollar value of the City's water infrastructure as shown on the Statement of Financial Position ranges from \$280.2m in 2014 to \$344.0m in 2019.

The annual amortization expense is based on a straight line approach for each asset component of the infrastructure. The amortization calculation is simply the value of the asset divided by the expected operational life of the asset. As mentioned above the increasing amortization expense over the six year period reflects the growth in size and value of the underground water distribution system.

For the remaining operating expenditures, the same factors inflation and growth have been applied as applicable over the six year period.

Annual Surplus

The annual surplus represents the excess of revenues over expenditures. The surplus ranges over the forecasted period from \$11.7m in 2014, to \$15.9m in 2019. The annual increase in the surplus over this period is the result of a planned approach in setting sufficient rates so that the City can attain full cost recovery in the future and meet the SDWA's requirement of a viable and financially sustainable water system.

Statement of Financial Position Forecast

The SDWA O.Reg. 453/07 requires that the statement of financial position for water be forecasted at a minimum over a six year period. The City's 2012 Consolidated Financial Statements was used as a base for the development of the six year pro forma Statement of Financial Position.

Financial Assets and Liabilities

Financial assets consisting of cash and cash equivalents increase from \$48.0m in 2014 to \$57.6m in 2019. These funds are invested and earn investment income as shown on the Statement of Operations. Water billings receivable and cash balance increases over the forecasted period are the result of growth in the customer base and consumption rate increases.

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The liabilities are comprised of various current accounts payables, long term liabilities such as debentures, future employee benefits and deferred revenue or obligatory reserves (DC funds received). The liabilities total \$26.4m in 2014 and are forecasted over the six year period to reach \$34.0m in 2019. This increase in liabilities over the forecasted period is a reflection of the increasing size of the infrastructure as it relates to both operational maintenance activity and capital project requirements. The forecast assumes no new debt over the six years.

Non-Financial Assets

The tangible capital assets consist of land, booster stations, vehicles, water distribution infrastructure, water meters and capital work in progress. The value of these assets as shown on the Statement of Financial Position is net of amortization. The net value of these assets ranges from \$280.2m in 2014 to \$344.0m in 2019. This increase over six years reflects both the increasing size of the infrastructure and the growth in net value of the City's water distribution system.

Statement of Accumulated Surplus

Accumulated water surplus at the end of the forecasted period 2019 is comprised of three components; net tangible capital assets, amounts to be recovered in the future (debenture costs & employee future benefits) and the accumulated reserve that is earned annually through the operations of the water system. An accumulated surplus as shown below indicates that available net resources are sufficient to provide future water services. Over this period accumulated surplus increases by \$81.9m. Following is a breakdown of the components of accumulated surplus as of 2019:

Investment in tangible capital assets	\$344.0m
Amounts to be recovered	(\$6.5m)
Reserve balance	\$44.0m
Accumulated surplus 2019	\$381.5m

Statement of Changes in Net Financial Assets – (Sustainability)

The attached Statement of Changes in Net Financial Assets (NFA) is a significant document, in that it indicates whether or not sufficient revenues are being generated annually to cover both the operational cost and the annual capital cost of the water system. The annual change in NFA as shown in the schedule begins with a deficit of (\$1.7m) in 2014; however by 2017 the change in NFA is positive at \$0.9m which indicates that sufficient revenues are being generated on an annual basis. The positive change in NFA continues in 2018 \$3.3m and 2019 \$4.8m. This schedule is evidence that the City over time has put in place the appropriate rates to meet its annual financial obligations. It provides an affordable water service to the community and at the same time permits the City to attain the goal of full cost recovery.

The \$37.4m in accumulated net financial assets in 2019 is significant however to put this into perspective the gross value of the City's water infrastructure is forecasted to be \$459.7m in 2019. This is a significant amount of infrastructure that will be required to be maintained and replaced over time.

Conclusion

The six year financial plan for the period 2014 to 2019 as attached demonstrates that the City has developed a financially viable and sustainable drinking water financial plan thereby meeting the requirement of the Ontario regulation 453/07.

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Relationship to Vaughan Vision 2020

The above recommendation is consistent with the City's vision to Ensure Financial and Environmental Sustainability, to Manage Water Corporate Assets while promoting Excellence in Service Delivery to the community.

Regional Implications

No Implications

Conclusion

The attached Consolidated Six Year Water Financial Plan for the years 2014 to 2019 demonstrates a financially sustainable plan for the Vaughan and Kleinburg water distribution systems.

Attachments

Attachment 1: The Consolidated Six Year Water Financial Plan 2014 - 2019 and Notes

Report prepared by:

Barry E. Jackson, CGA
Director of Financial Services Ext. 8272

(A copy of the attachments referred to in the foregoing have been forwarded to each Member of Council and a copy thereof is also on file in the office of the City Clerk.)

THE CONSOLIDATED SIX YEAR WATER FINANCIAL PLAN (2014-2019)

Recommendation

The Acting Commissioner of Finance & City Treasurer, the Commissioner of Engineering and Public Works, the Director of Public Works and the Director of Financial Services recommend:

1. That the attached Vaughan and Kleinburg Consolidated Six Year Water Financial Plan that demonstrates a viable and sustainable financial plan for the combined distribution systems (Vaughan license 011-102, permit 011-202 and Kleinburg license 011-101, permit 011-201) be adopted; and
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The annual amortization expense is based on a straight line approach for each asset component of the infrastructure. The amortization calculation is simply the value of the asset divided by the expected operational life of the asset. As mentioned above the increasing amortization expense over the six year period reflects the growth in size and value of the underground water distribution system.

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Statement of Changes in Net Financial Assets – (Sustainability)

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Conclusion

The six year financial plan for the period 2014 to 2019 as attached demonstrates that the City has developed a financially viable and sustainable drinking water financial plan thereby meeting the requirement of the Ontario regulation 453/07 .

Relationship to Vaughan Vision 2020

The above recommendation is consistent with the City's vision to Ensure Financial and Environmental Sustainability, to Manage Water Corporate Assets while promoting Excellence in Service Delivery to the community.

Regional Implications

No Implications

Conclusion

The attached Consolidated Six Year Water Financial Plan for the years 2014 to 2019 demonstrates a financially sustainable plan for the Vaughan and Kleinburg water distribution systems.

Attachments

Attachment 1: The Consolidated Six Year Water Financial Plan 2014 - 2019 and Notes

Report prepared by:

Barry E. Jackson, CGA
Director of Financial Services Ext. 8272

Respectfully submitted,

John Henry, CMA
Acting Commissioner of Finance & City Treasurer

Paul Jankowski, P. Eng.
Commissioner of Engineering & Public Works

Brian T. Anthony, CRS-S, C. Tech.
Director of Public Works

Barry E. Jackson, CGA
Director of Financial Services



The Corporation of the City of Vaughan

2014 - 2019 Consolidated Water System Financial Plan

Vaughan Water System
Kleinburg Water System



CITY OF VAUGHAN

WATER SYSTEM

STATEMENT OF FINANCIAL POSITION

As at December 31	FORECAST					
	2014	2015	2016	2017	2018	2019
Financial Assets						
Cash and Cash Equivalents	48,084,000	45,426,000	45,834,000	47,796,000	51,836,000	57,659,000
Water Billings Receivable	9,406,000	10,256,000	11,063,000	11,926,000	12,865,000	13,796,000
Total Financial Assets	57,490,000	55,682,000	56,897,000	59,722,000	64,701,000	71,455,000
Liabilities						
Accounts Payable	577,000	593,000	618,000	644,000	679,000	719,000
Accrued Liabilities	11,505,000	12,524,000	13,561,000	14,479,000	15,399,000	16,328,000
Debenture & Other Debt	4,485,000	4,607,000	4,852,000	5,180,000	5,764,000	6,564,000
Deferred Revenue - Obligatory Reserve Funds	9,835,000	9,235,000	9,635,000	10,235,000	10,335,000	10,435,000
Total Liabilities	26,402,000	26,959,000	28,666,000	30,538,000	32,177,000	34,046,000
Net Financial Assets/(Debt)	31,088,000	28,723,000	28,231,000	29,184,000	32,524,000	37,409,000
Non-Financial Assets						
Tangible Capital Assets	280,255,000	294,649,000	308,351,000	320,870,000	332,981,000	344,052,000
Inventory of Supplies	81,000	81,000	81,000	81,000	81,000	81,000
Total Non-Financial Assets	280,336,000	294,730,000	308,432,000	320,951,000	333,062,000	344,133,000
Accumulated Surplus/(Deficit)	311,425,000	323,454,000	336,660,000	350,133,000	365,583,000	381,538,000



CITY OF VAUGHAN

WATER SYSTEM

STATEMENT OF OPERATIONS

As at December 31	FORECAST					
	2014	2015	2016	2017	2018	2019
Revenues						
Rate Based	52,171,000	56,882,000	61,357,000	66,147,000	71,354,000	76,517,000
Other	690,000	700,000	710,000	720,000	720,000	730,000
Contributions from Developers	8,752,000	8,752,000	8,852,000	8,652,000	8,552,000	8,452,000
Contributed / Assumed Assets	2,661,000	1,951,000	2,674,000	1,978,000	2,702,000	1,993,000
Interest Income	528,000	538,000	532,000	651,000	735,000	871,000
Total Revenues	64,802,000	68,823,000	74,125,000	78,148,000	84,063,000	88,563,000
Expenses						
Water Purchases	37,270,000	40,570,000	43,932,000	46,905,000	49,886,000	52,895,000
Operating and Maintenance	8,543,000	8,857,000	9,311,000	9,828,000	10,372,000	10,994,000
Allocated Overhead	1,664,000	1,632,000	1,624,000	1,557,000	1,635,000	1,717,000
Loss of Disposal of TCA	0	0	0	0	0	0
Future Employee Benefits	418,000	481,000	553,000	636,000	731,000	841,000
Interest Expense	65,000	64,000	58,000	58,000	58,000	0
Amortization	5,044,000	5,190,000	5,441,000	5,691,000	5,931,000	6,161,000
Total Expenses	53,004,000	56,794,000	60,919,000	64,675,000	68,613,000	72,608,000
Annual Surplus	11,798,000	12,029,000	13,206,000	13,473,000	15,450,000	15,955,000
Accumulated Surplus, beginning of year	299,627,000	311,425,000	323,454,000	336,660,000	350,133,000	365,583,000
Accumulated Surplus, end of year	311,425,000	323,454,000	336,660,000	350,133,000	365,583,000	381,538,000



CITY OF VAUGHAN
WATER SYSTEM
STATEMENT OF CASH FLOW

As at December 31	FORECAST					
	2014	2015	2016	2017	2018	2019
Cash Provided by (used in):						
Operations:						
Excess Revenues over Expenses	11,798,000	12,029,000	13,206,000	13,473,000	15,450,000	15,955,000
Items not involving Cash:						
Amortization	5,044,000	5,190,000	5,441,000	5,691,000	5,931,000	6,161,000
Loss on disposal of Tangible Capital Assets						
Deferred Charges						
Contributed/Assumed Assets	(11,413,000)	(10,703,000)	(11,526,000)	(10,630,000)	(11,254,000)	(10,445,000)
	5,429,000	6,516,000	7,121,000	8,534,000	10,127,000	11,671,000
Uses:						
Increase in Water Billings Receivable	(625,000)	(849,000)	(807,000)	(864,000)	(939,000)	(931,000)
Decrease in Accounts Payable						
Decrease in Accrued Liabilities						
Decrease in Deferred Revenue	(500,000)	(600,000)	-	-	-	-
	(1,125,000)	(1,449,000)	(807,000)	(864,000)	(939,000)	(931,000)
Sources:						
Decrease in Inventory						
Increase in Accounts Payable	10,000	16,000	25,000	25,000	35,000	40,000
Increase in Accrued liabilities	910,000	1,019,000	1,038,000	918,000	920,000	929,000
Increase in Employee Future Benefits	418,000	481,000	553,000	636,000	731,000	841,000
Increase in Deferred Revenue	-	-	400,000	600,000	100,000	100,000
	1,338,000	1,516,000	2,016,000	2,179,000	1,786,000	1,910,000
Net change in Cash from Operations	5,642,000	6,583,000	8,330,000	9,849,000	10,974,000	12,650,000
Capital:						
Cash used to acquire Tangible Capital Assets	(7,205,000)	(8,882,000)	(7,617,000)	(7,579,000)	(6,788,000)	(6,788,000)
Net change in Cash from Capital	(7,205,000)	(8,882,000)	(7,617,000)	(7,579,000)	(6,788,000)	(6,788,000)
Financing:						
Debenture and Other Debt repaid	(336,000)	(359,000)	(307,000)	(307,000)	(148,000)	(40,000)
Net change in Cash from Financing	(336,000)	(359,000)	(307,000)	(307,000)	(148,000)	(40,000)
Investments:						
Increase in Investments	0	0	0	0	0	0
Net change in Cash from Investments	0	0	0	0	0	0
Net change in Cash and Cash Equivalents	(1,899,000)	(2,658,000)	406,000	1,963,000	4,038,000	5,822,000
Cash and Cash Equivalents, beginning of year	49,984,000	48,084,000	45,427,000	45,835,000	47,798,000	51,837,000
Cash and Cash Equivalents, end of year	48,084,000	45,426,000	45,834,000	47,796,000	51,836,000	57,659,000



CITY OF VAUGHAN

WATER SYSTEM

STATEMENT OF CHANGES IN NET FINANCIAL ASSETS

As at December 31	FORECAST					
	2014	2015	2016	2017	2018	2019
Annual Surplus / (Deficit)	11,798,000	12,029,000	13,206,000	13,473,000	15,450,000	15,955,000
Less: Acquisition of Tangible Capital Assets	(18,617,000)	(19,585,000)	(19,143,000)	(18,210,000)	(18,042,000)	(17,233,000)
Add: Amortization of Tangible Capital Assets	5,044,000	5,190,000	5,441,000	5,691,000	5,931,000	6,162,000
	(1,775,000)	(2,366,000)	(496,000)	954,000	3,339,000	4,884,000
Less: Acquisition of Supplies Inventory	0	0	0	0	0	0
Add: Consumption of Supplies Inventory	0	0	0	0	0	0
	0	0	0	0	0	0
Increase / (Decrease) in Net Financial Assets/Net Debt	(1,775,000)	(2,366,000)	(496,000)	954,000	3,339,000	4,884,000
Net Financial Assets / (Net Debt), beginning of year	32,864,000	31,090,000	28,724,000	28,228,000	29,182,000	32,521,000
Net Financial Assets / (Net Debt), end of year	31,088,000	28,723,000	28,231,000	29,184,000	32,524,000	37,409,000



CITY OF VAUGHAN

WATER SYSTEM

NOTES TO THE CONSOLIDATED FINANCIAL PLAN 2014 - 2019

The City of Vaughan with a population of 311,000 is located in the Regional Municipality of York, Province of Ontario, Canada. The City manages, maintains and distributes drinking water to 80,000 property owners through two water systems, the Vaughan water system and the Kleinburg water system.

1. SAFE DRINKING WATER ACT

Under the Safe Drinking Water Act (SDWA) the City has received a full scope – Accreditation Certificate on July 7th, 2009 for its Drinking Water Quality Management Standards (DWQMS). As a result of receiving the accreditation the City must now under the SDWA regulation 453/07 provide to the Ministry of Municipal Affairs and Housing a six year financial plan for Water.

The City was issued a Drinking Water Works Permit (Permit number 011-201) along with a Municipal Drinking Water Licence (Licence number 011-101) in order to operate. The Municipal Drinking Water Licence expiry date is July 26, 2014. As such, the City is obligated to apply for renewal no later than January 24, 2014.

The six year financial plan must include:

Statement of Operations
Statement of Financial Position
Statement of Net Financial Assets
Statement of Cash Flow

The consolidated six year financial plan must be adopted by the Council of the municipality and the resolution must also indicate that the drinking water system financial plan is sustainable and financially viable.

2. THE SIX YEAR FINANCIAL PLAN – ASSUMPTIONS

The basis for the development of the pro forma consolidated six year water financial statements incorporates key assumptions contained in the 2009 water/wastewater rate study and the 2013 Development Charges Background Study. 2012 actual is the base year for the forecast and 2013 reflects the approved 2013 Water Budget incorporating other assumptions.

These assumptions include growth, inflationary factors, lifecycle capital forecasts and development charge revenues. The cost used for the purchase of potable water over the forecasted period was available from Region of York.

In certain situations best estimates were used in the development of the forecasted figures when financial information or data was not known. Generally the development of the consolidated six year financial forecast used a conservative approach in terms of consumption, inflation, expenditures and estimates.

3. FINANCIAL ASSETS

Financial assets consist of cash, cash equivalents, accounts receivables and billing accruals. Controlled by the City, these economic resources are a result of past transactions or events where future economic benefits are expected to be obtained.

4. LIABILITIES

Liabilities consist of accounts payable, accrued liabilities, long term debt and deferred revenue.

Accounts Payable & Accrued Liabilities

Accounts payable and accrued liabilities represent the costs of goods and services acquired in the period and recognized whether or not payments have been made or invoices received. Forecasted accounts payable and accruals are projected estimates based on historical trends.

Long Term Debt

The City has incurred long term debt which consists of debentures for watermain replacements. Forecasted principal and interest payments are based on existing debentures only and no additional debentures are projected in this forecast period.

Deferred Revenue

Deferred revenue represents special area development charge reserve fund balances which are considered a liability until funds are expended for projects related to growth activity. Forecasts are based on existing projects as outlined in the 2013 Development Charges Background Study. Due to the nature and timing of collections and spending, projections are based on anticipated activity on remaining net project estimates at 2013.

5. NON-FINANCIAL ASSETS

Non-financial assets consist of tangible capital assets (TCA), inventory supplies, and prepaid expenses and are held for use in the provision of services.

Tangible Capital Assets

TCA are physical assets with useful lives extending beyond the current year and are not intended for sale in the ordinary course of operations.

Tangible capital assets are recorded at cost which includes amounts that are directly attributable to acquisition, construction, development or betterment of the asset.

Forecasted capital additions reflect budgeted capital expenditures (2013), special area projects, contributed/assumed assets and work in progress (WIP). Specific details are outlined as follows:

Additions

Capital spending is forecasted for 2013 per the approved capital budget and subsequent years reflect outstanding commitments for the year ended 2012 totaling \$6.5M. Additional capital projects are forecasted for 2014 – 2019 totalling \$43.2M. These expenditures are reflected as tangible capital assets in this forecast period and depreciated accordingly (half year rule applied).

Contributed/Assumed Assets

Contributed assets are those tangible capital assets that are assumed by the City from developers through development agreements or constructed on behalf of the City through capital projects and acquisitions.

Due to the nature and timing of recognizing these assets a conservative approach has been applied. Water meters have been forecasted on the basis of a future growth of 1.5%. Contributed or assumed assets are reflected as revenues on the forecasted statement of operations.

Work in Progress

Work in progress (WIP) primarily consists of special area development charges for this forecast period representing projects that are not completed. Such assets are not depreciated in this forecast period. WIP may also consist of assets contributed, assumed or funded from other sources.

Disposals

Not projected for this forecast period.

Amortization

Tangible capital assets are physical assets with a useful life extending beyond one year that are acquired, constructed or developed.

The cost, less residual value, of the tangible capital assets, excluding land, are amortized on a straight line basis over their estimated useful lives as follows:

Assets	Useful life – Years
Water and Wastewater Infrastructure	80 – 95
Water Booster Stations – Concrete	85
Water Booster Stations – Machinery & Equipment	20 – 35
Water Filling Stations	25
Water Meters	20
Vehicles	7

Annual amortization is charged in the year the asset is available for productive use and in the year of disposal. Assets under construction are not amortized until the asset is available for productive use.

CITY OF VAUGHAN WATER SYSTEM TANGIBLE CAPITAL ASSET SUMMARY

As at December 31	FORECAST					
	2014	2015	2016	2017	2018	2019
Opening TCA Balance (Historical Cost)	348,965,000	367,582,000	387,167,000	406,310,000	424,520,000	442,561,000
Additions	18,617,000	19,585,000	19,143,000	18,210,000	18,042,000	17,232,000
Disposals	0	0	0	0	0	0
Closing TCA Balance (Historical Cost)	367,582,000	387,167,000	406,310,000	424,520,000	442,562,000	459,793,000
Opening Accumulated Amortization	82,283,000	87,328,000	92,517,000	97,958,000	103,649,000	109,580,000
Amortization Expense	5,044,000	5,190,000	5,441,000	5,691,000	5,931,000	6,161,000
Amortization on Disposals	0	0	0	0	0	0
Closing Accumulated Amortization	87,327,000	92,518,000	97,958,000	103,649,000	109,580,000	115,741,000
Net Book Value	280,255,000	294,649,000	308,352,000	320,871,000	332,982,000	344,052,000

6. NET FINANCIAL ASSETS

Net financial assets defined are the difference between financial assets and liabilities and is a key indicator in determining the water system financial ability to replace its infrastructure. As reflected in the statement of changes in net financial assets the City is in a net financial asset position which is an indication that the City has sufficient resources to finance current and future activities. Forecasted net financial assets for the years 2014-2019 are \$31.0M - \$37.4M.

7. ACCUMULATED SURPLUS

Accumulated surplus consists of reserve and reserve fund balances, contributions of tangible capital assets and debt related transactions.

CITY OF VAUGHAN WATER SYSTEM ACCUMULATED SURPLUS

As at December 31	FORECAST					
	2014	2015	2016	2017	2018	2019
Surplus:						
Investment in Tangible Capital Assets	280,255,000	294,649,000	308,352,000	320,871,000	332,982,000	344,052,000
Amounts to be recovered in future years:						
Future Benefits	(3,204,000)	(3,685,000)	(4,237,000)	(4,873,000)	(5,604,000)	(6,444,000)
Debentures	(1,281,000)	(922,000)	(615,000)	(307,000)	(160,000)	(120,000)
	275,770,000	290,042,000	303,500,000	315,691,000	327,218,000	337,488,000
Reserves set aside for specific purposes by Council						
Water	35,655,000	33,411,000	33,163,000	34,445,000	38,369,000	44,054,000
Accumulated Surplus	311,425,000	323,454,000	336,660,000	350,133,000	365,583,000	381,538,000