Town of Hanover Drinking Water System Financial Plan Update

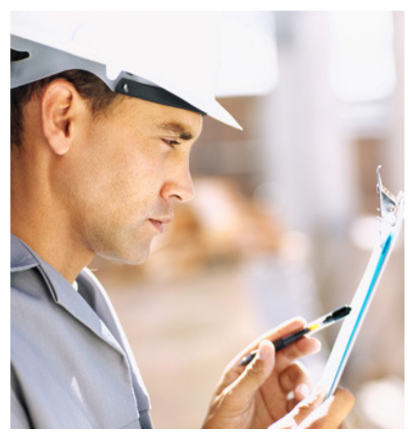
Project No. 121-18623-00

FINAL

June 26, 2012

FINAL REPORT

GENIVAR



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GENIVAR

121-18623-00

June 26, 2012

Mr. Ron Cooper
Director of Public Works
Hanover Civic Centre
341 10th Street,
Hanover, ON N4N 1P5

Re: **Town of Hanover Drinking Water System Financial Plan Update**
Final Report

Dear Mr. Cooper:

We are pleased to submit our final report on the Financial Plan for the Town of Hanover Water System for compliance with the requirements set out in the Safe Drinking Water Act, Regulation 453/07.

We trust that this report meets your requirements and we look forward to any comments you may have.

By way of this letter, we are also sending one (1) report directly to the Ministry of Municipal Affairs and Housing.

Yours truly,

GENIVAR Inc.

Rakesh Sharma, P. Eng.
Designated Consulting Engineer
Director – Linear Infrastructure

/jb /vm

Cc: Mr. Jim Gordon, Ministry of Municipal Affairs and Housing

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1. Introduction

1.1 Background

As a result of the Justice O'Connor's Part II Walkerton Inquiry Report (2000) and the passing of Ontario's Safe Drinking Water Act (2002), the Province has introduced and is implementing a new Municipal Drinking Water Licensing Program. The Ministry has established the following licensing requirements:

- Certificate of Approval for their Drinking Water Facilities – which will be referred to in the future as a Drinking Water Works Permit
- A Permit to Take Water - mandated under the Ontario Water Resources Act
- An approved Operational Plan - in compliance with the Drinking Water Quality Management Standard (DWQMS)
- An approved Financial Plan – as required under the Financial Plans Regulation (O. Reg. 453/07)
- Accreditation as an Operating Authority – which requires the auditing of the Operational Plan by a third party Accreditation Body

The preparation of a Financial Plan is one of the elements which must be put in place for a licence to be issued. However, in the case of the first licence for an existing drinking water system, the Financial Plan will be required through a condition of the licence. The Town of Hanover received their licence on August 1st, 2011; the Financial Plan for their Drinking Water System is a requirement through a condition of this licence.

1.2 Study Area

The Town of Hanover is located at the heart of Georgian Lakelands on the boundary of Bruce and Grey Counties.

The water system draws raw water from Ruhl Lake and two deep wells. The components within the Hanover Drinking Water System can be generally summarized as follows:

- → Pumping Station, inground reservoir, and pressure watermain
- → Two Deep Wells, and two Elevated Storage Tanks
- → Distribution System

1.3 Study Objective

The Town of Hanover owns and operated the Hanover Drinking Water System. GENIVAR was retained by the Town to prepare a Financial Plan for its drinking water system to fulfill the requirements of the municipal drinking water licence.

The objective of this report is therefore to present the Financial Plan for the Town of Hanover Drinking Water System, which meets the requirements of the Financial Plan Regulation (O. Reg. 453/07) under the Safe Drinking Water Act (2002).

2. Financial Plan Requirements and Guidelines

2.1 Financial Plan Regulation

The key points of the Financial Plan Regulation (O. Reg. 453/07) are described in the following subsections.

2.1.1 General Requirements

The following general requirements are outlined in O. Reg. 453/07 and apply to both new and existing systems:

- Declaration: The Financial Plan must include a statement that the financial impacts of the drinking water system have been considered.
- Projection Length: The Financial Plan shall be for a period of at least six years.
- Public Transparency: The Financial Plan must be made available, on request and without charge, to the members of the public that are served by the water system. If the system owner maintains a website, then the Financial Plan must be made available on the website without charge. The owner must provide a notice informing the public of the availability of the Financial Plan, in a manner that the Owner deems fit to bring the notice to the attention of the members of the public that are served by the water system.
- Approval: The Financial Plan must be approved by a council resolution that indicates that the drinking water system is financially viable.
- Submission: A copy of the Financial Plan, along with the resolution must be submitted to the Ministry of Municipal Affairs and Housing.
- Update: The Financial Plan should be updated and approved prior to applying for a licence renewal (i.e. every five years). However, the Regulation does not prevent the Plan from being amended more regularly.

2.1.2 New System Requirements

In addition to the general requirements, the Financial Plan must include details of the projected financial operations, itemized by:

- Total revenues (water rates, user charges, and other revenues)
- Total expenses (amortization expenses, interest expenses, and other expenses)
- Annual surplus or deficit
- Accumulated surplus or deficit

2.1.3 Existing System Requirements

In addition to the above requirements, the Financial Plan of an existing system must include the following details:

- Details of the projected financial position, itemized by:
    a. Total financial assets
    b. Total liabilities
    c. Net debt

d. Non-financial assets that are tangible capital assets, tangible capital assets under construction, inventories of supplies, and prepaid expenses

e. Changes in tangible capital assets that are additions, donations, write downs, and disposals

Items a, b, and c apply only if the information is known to the owner at the time when the Financial Plan is prepared.

- Details of the projected gross cash receipts and payments, itemized by:

  a. Operating transactions that are cash received from revenues and paid for operating expenses and finance charges

  b. Capital transactions that are proceeds on the sale of tangible capital assets and cash used to acquire capital assets

  c. Investing transactions that are acquisitions and disposal of investments

  d. Financing transactions that are proceeds from the issuance of debt and debt repayment

  e. Changes in cash and cash equivalents during the year

  f. Cash and cash equivalents at the beginning and end of the year

Items a, c, e, and f apply only if the information is known to the owner at the time when the Financial Plan is prepared.

The first year to which the Financial Plan must apply is the year in which the existing licence expires, or in the case of a condition to licence, the first year is the latest of 2012 and the year in which the first licence was issued.

If two or more drinking water systems are solely owned by the same owner, then the Financial Plan can be prepared by treating those systems together as if they were one drinking water system.

2.2 Financial Plan Guidelines

To assist municipalities in preparing the Financial Plan under O. Reg. 453/07, the Ministry of Environment released a document titled “Toward Financially Sustainable Drinking-Water and Wastewater Systems” (August, 2007). This document applies to wastewater systems as well. However, a Financial Plan for a wastewater system is only encouraged and not mandatory.

These guidelines set out the following nine principles to help develop this Financial Plan:

1. Ongoing public engagement and transparency can build support for, and confidence in the Financial Plans and their corresponding system(s).
2. An integrated approach to planning among water, wastewater, and stormwater systems is encouraged considering the inherent relationship among these systems.
3. Revenues collected for the provision of water and wastewater services should ultimately be used to meet the needs of those services.
4. Life-cycle planning with mid-course corrections is preferable to short-term planning or no planning at all.
5. An asset management plan is a key input to the development of a Financial Plan
6. A sustainable level of revenue allows for reliable service that meets or exceeds environmental protection standards, while ensuring sufficient resources for future rehabilitation and replacement needs.

7. Ensuring users pay for the services they are provided leads to equitable outcomes and can improve conservation. In general, metering and the use of rates can help ensure users pay for services received.
8. Financial Plans are documents that require continuous updates and improvement. Improved planning for the future can be achieved by comparing the accuracy of financial projections with actual results.
9. Financial Plans can benefit from the close collaboration of various groups, including engineers, accountants, auditors, utility staff, and municipal council.

2.3 Public Sector Accounting Board (PSAB) Requirements

The Public Sector Accounting Board (PSAB) of the Canadian Institute of Chartered Accountants (CICA) approved new municipal financial accounting and reporting standards in June 2006. The new standards require full accrual accounting for 2009 and future years, as well as accounting of tangible capital assets in the financial statements.

The accrual accounting method recognizes revenues and expenses in the same period as the activities that give rise to them regardless of when the payment was actually made. Since the exchange of cash is not necessary to report a financial transaction, the accrual method provides a more accurate picture of the town's financial position. Tangible capital assets will be capitalized so as to create an inventory of the assets owned and to account for their ability to provide future benefits.

3. Approach

The Financial Plan guidelines were used to select the approach for preparing the Town of Hanover Drinking Water System Financial Plan.

The following steps summarize the general approach:

- Determine current period expenses and forecast future period expenses
- Determine and forecast capital expenditure needs
- Identify all sources of current revenues and forecast revenues with a minimal increase of 3% to show some growth
- Assess the suitability of the existing revenues (with an increase of 3%)
- Identify funding requirements and determine the required (new) revenues
- Prepare the following statements based on the required (new) revenues:
    - Statement of Operations
    - Statement of Cash Flow
    - Statement of Financial Position

4. Expenses

4.1 Data Sources and Assumptions

Expenses were divided into three categories: operating, interest, and amortization. The operating expenses information for the entire reporting period was provided by the Town.

The current period operating expenses were determined from the Town's 2011 budget, which also included expense details for the years 2009 and 2010. The list of operating expenses and the budget details provided by the Town is available in Appendix A.

The future period operating expenses were assumed to increase by the assumed rate of inflation, which is 3% per annum.

Since there are no current loans or debts, it was assumed that no debt would be incurred in the future and thus there would be no interest expenses for future periods.

The annual amortization expenses were based on the historic cost of assets, which was apportioned over the useful life of the asset using the straight-line depreciation method. The historic cost and useful lives were based on the PSAB information provided by the Town. Appendix B lists all assets and associated details that were considered in this financial plan.

4.2 Operating Expenses

Operating expenses are generally ongoing expenses related with providing service. These are items that need to keep the operation running on a day-to-day basis. Items included in operating expenses typically include wages, benefits, materials, supplies, maintenance, pagers, equipment fuel, utilities, mileage, etc. A list of the operating expenses is provided in Appendix A.

The projected operating expenses are shown in Figure 4.1. As previously mentioned, the operating expenses have been projected based on 3% inflation per year.

Figure 4.1 Projected Operating Expenses

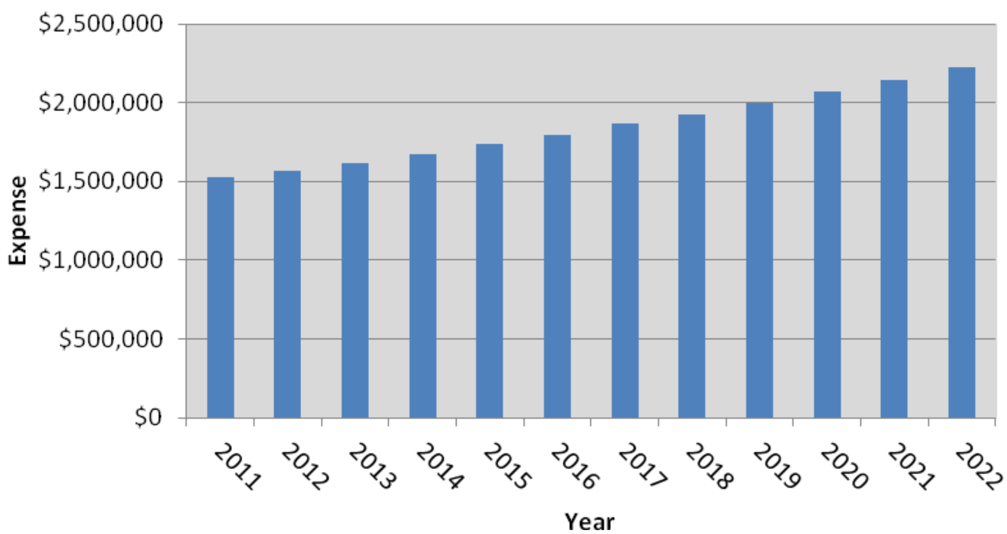


Figure 4.1 shows that the operating expenses are projected to increase from approximately $1,525,761 in 2011 to $2,223,900 in 2022, based on an increase of 3% per year due to inflation.

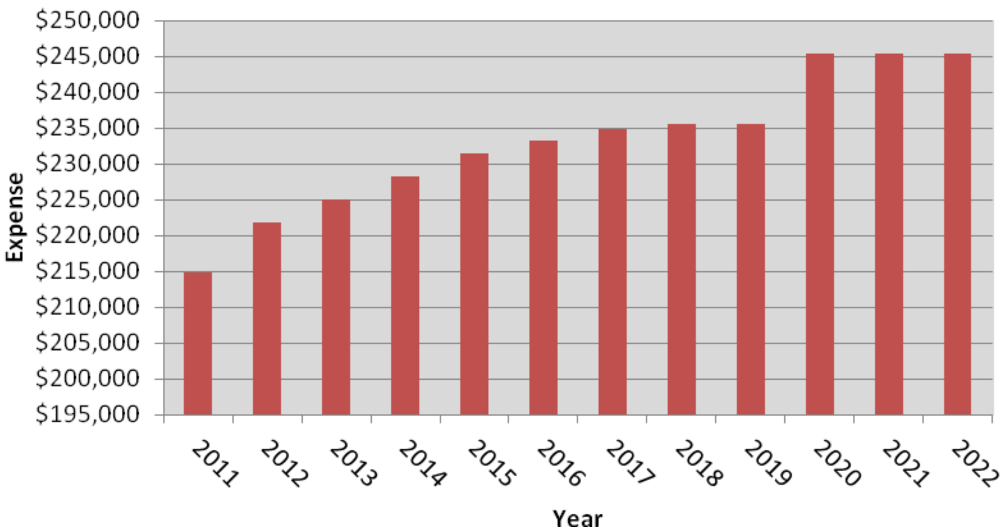
Each year, the municipality provides additional funding under "operating expenses", as an allowance for excesses, if any. However, these funds are generally not utilized and are therefore annulled by adding the same value to "operating revenues" under accounts "Transfers from Capital Fund" and "Transfer from Reserve Fund".

4.3 Amortization Expenses

Amortization is a non-cash expense, which indicates the gradual wear of tangible capital assets (TCAs). The annual expense is based on the asset's historic cost, and apportioned over the useful life of the asset using a straight-line depreciation method. It is important to note that the old municipal accounting practice was different, as it recorded expenditures on TCAs as current period expenditures, and then disappeared from subsequent financial statements.

The projected amortization expenses are shown in Figure 4.2. These yearly projections are also listed in Appendix B.

Figure 4.2 Projected Amortization Expenses



The yearly variations in amortization expenses shown in Figure 4.2 are due to the replacement of assets or acquisitions of new assets. In the year in which an asset is replaced, there is no amortization expense for that asset for that year. With regards to acquisitions of new assets, there is an increase of amortization expense following the year in which a new asset is acquired.

4.4 Total Expenses

The total expenses are the sum of the operating, amortization, and interest expenses. The projected total expenses i.e. including operating, amortization, and interest are shown in Figure 4.3.

Figure 4.3 Projected Total Expenses

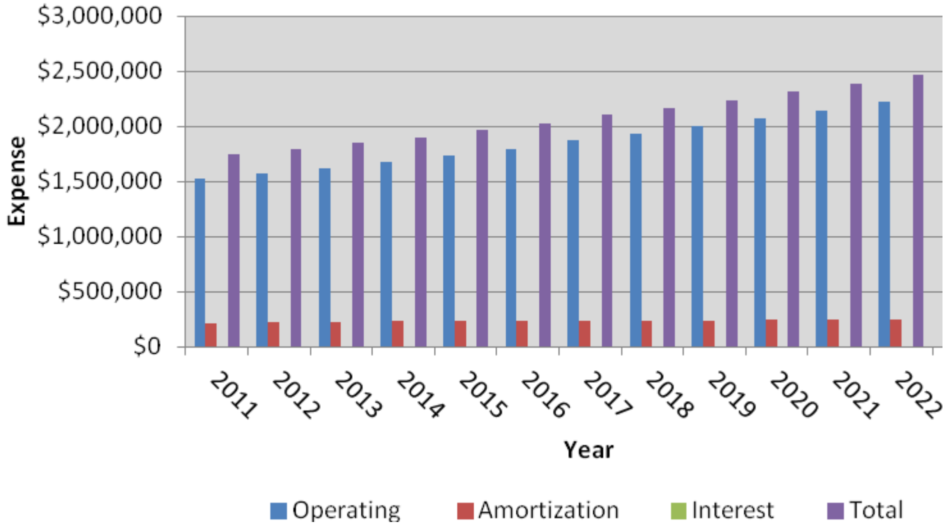


Figure 4.3 shows that the total annual expenses increase to about $2,469,262 by 2022. This is due to the increasing operating costs due to inflation, and the generally increasing amortization expenses due to the acquisitions of new assets.

5. Capital Expenditure

5.1 Data Sources and Assumptions

The PSAB tables provided by the Town included estimates of each asset's expected useful life and replacement cost. Inflation was assumed to be 3% to forecast the replacement costs of the assets.

At the time the Financial Plan was prepared, it was assumed that there are no significant inventories of supplies and no pre-paid expenses.

5.2 Future Capital Needs

The future capital needs of the Town of Hanover Drinking Water System are shown in Figure 5.1.

Figure 5.1 Future Capital Expenditure

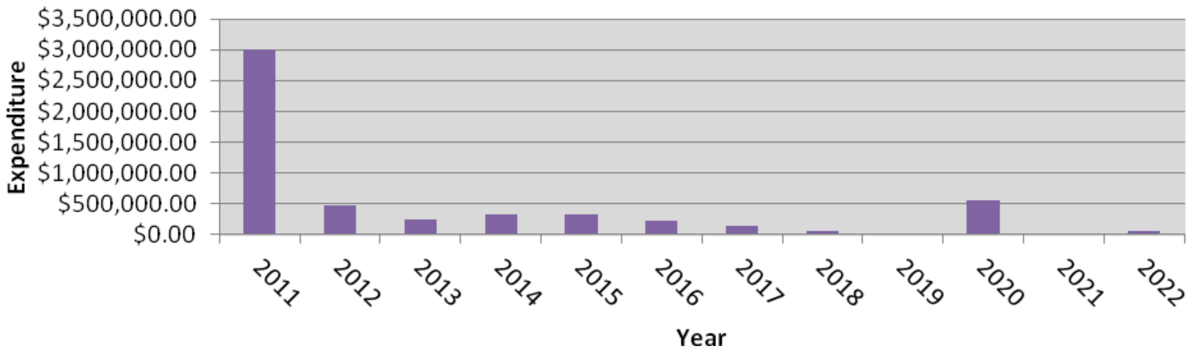


Table 5-1 provides general details on the main assets anticipated to be acquired or replaced in the capital expenditure plan shown in Figure 5.1. The estimated amounts shown in Table 5-1 are in current dollars adjusted for inflation for the proposed year.

Table 5-1 Planned Capital Expenditure

Year	Project #	Asset	Amount
2013	**Capital Expenditure Costs**		**$236,000**
	PW11-03	13th Avenue – 9th to 13th Street	$170,000
	PW11-07	13th Street – 13th to 16th Avenue	$66,000
2014	**Capital Expenditure Costs**		**$328,862**
	35	2005 Dodge Ram Pick-Up	$35,000
	PW10-12	Paint Interior of 7th Avenue Water Tower	$65,000
	PW15-02	8th Avenue Reconstruction – 12th to 14th Street	$173,000
	668	Deep Well #2 Rehabilitation	$55,511
2015	**Capital Expenditure Costs**		**$317,000**
	PW16-01	9th St Reconstruction 7th to 10th Ave	$183,000
	PW16-02	18th Avenue Construction – 6th to 2nd Street	$134,000
2016	**Capital Expenditure Costs**		**$224,000**
	PW17-01	8th St from 14th Ave to 17th Ave/14th Ave from 7th	$224,000

Table 5-1 Planned Capital Expenditure

Year		Project #	Asset	Amount
2017	**Capital Expenditure Costs**			**$134,000**
		PW18-01	11th Street from 15th to 21st Ave Reconstruction	$134,000
2018	**Capital Expenditure Costs**			**$68,617**
		940	10th Ave – 14th St Northerly	$34,521
		1112	12th St from 7th Ave to 10th Ave	$34,096
2020	**Capital Expenditure Costs**			**$554,415**
		1949	Pumphouse Equip-Deep Well #2	$554,415
2022	**Capital Expenditure Costs**			**$67,196**
		560	Waterworks Van	$67,196

6. Revenues

6.1 Data Sources and Assumptions

Information on revenues was obtained from the Town's 2011 budget, including the 2011-2022 budget details as well as actual details for a period from 2009-2010. These details are provided in Appendix A.

6.2 Operating Revenues

The operating revenue information for the entire reporting period was provided by the Town.

The operating revenues from 2009-2010, and the budgeted operating revenues for 2011-2012 are shown in Table 6-1.

Table 6-1 2009 – 2012 Revenues

Item	Amount
Actual 2009	$3,239,864.39
Actual 2010	$1,909,711.91
Budget 2011	$3,925,961.00
Budget 2012	$2,302,500.00

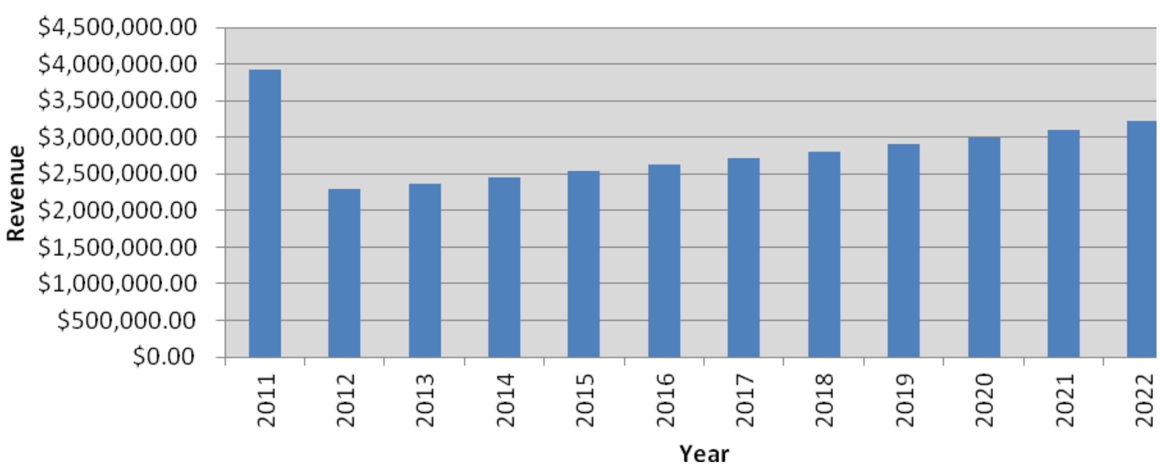
As previously mentioned in Section 4.2, the municipality provides additional funding under "operating revenues", as an allowance for excesses, if any. However, these funds are generally not used and are cancelled by adding the same value to "operating expenses" under accounts "Transfers to Capital Fund" and "Transfers to Reserve Fund".

6.3 Projected Revenues Based on 3% Revenue Increase

Based on the revenue information provided by the Town, there will be an increase of 3% in revenues every year for the projection horizon, to show some growth and to keep up with inflation. The projected revenues based on the 3% growth will be assessed in Section 7 to determine if the percent increase in revenues need to be increased.

The projected revenues for the Town of Hanover Drinking Water System are shown in Figure 6.1.

Figure 6.1 Projected Revenues



At an assumed rate of 3%, the revenues are projected to increase to about $3,215,500 by 2022.

7. Evaluation of 3% Increase in Revenue

7.1 Introduction

The 3% increase in revenue needs to be evaluated to determine if they are sufficient to cover the operating expenses and capital expenditures. In this section, the following will be determined to evaluate whether revenues from existing rates are sufficient:

→ Operating Cash Flow: This is an important identity that determines whether the revenues from the existing rates are sufficient to cover operating costs, from a cash perspective. This is explained further in Section 7.2.

→ Capital Expenditure Balance: This identity determines the amount of cash available for the planned capital expenditures. This is further described in Section 7.3.

→ Annual Surplus/Deficit: This identity measures whether the revenues generated were sufficient to cover the expenses incurred and in turn, whether net financial assets have been maintained or depleted. Section 7.4 provides further details on this identity.

7.2 Operating Cash Flow

The operating cash flow shows that current period operations can generate either a surplus or deficit from a cash perspective, depending on the balance between revenues and cash expenses. The operating cash flow equation is as follows:

Operating Cash Flow = Revenues – Operating expenses – Debt Service

The revenues in the equation above are the projected revenues based on existing rates, as described in Section 6.3 and shown in Figure 6.1. The operating expenses are the expenses described in Section 4.2 and shown in Figure 4.1. It is important to note that the amortization expenses are not included in the equation above, since the operating cash flow offers a cash perspective and the amortization expenses are non-cash expenses.

The operating cash flow for 2011 can be calculated as follows:

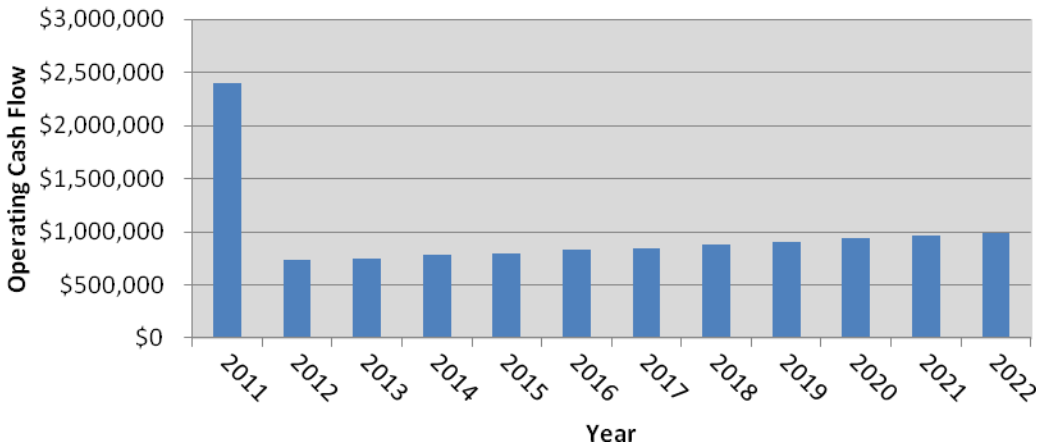
Revenues = $3,925,961 (also shown in Figure 6.1)

Operating Expenses = $1,525,761 (also shown in Figure 4.1)

Operating Cash Flow = $3,925,961 - $1,525,761 = $2,400,200

The operating cash flow, based on the 3% increase in revenues, for the projection horizon is shown in Figure 7.1.

Figure 7.1 Operating Cash Flow



It can be seen from Figure 7.1 that the operating cash flow remains positive for the projection horizon.

7.3 Capital Expenditure Balance

Another important calculation is the amount of cash available for capital expenditures. This amount is called the cash expenditure balance. The cash expenditure balance is the sum of operating cash flow, new debt minus debt payments, and net contributions from reserve funds.

Figure 7.2 shows a comparison of the amount of cash available for capital expenditure (capital expenditure balance) and the amount of cash required for the planned capital expenditure. As mentioned previously, the amount of cash available (capital expenditure balance) is the sum of the operating cash flow, new debt (minus debt payment), and the reserve balance. The planned capital expenditure is based on the future capital needs, previously discussed in Section 5.2 and presented in Table 5-1 and Figure 5.1.

In 2011, the capital expenditure balance can be calculated as follows:

Operating Cash Flow = $2,400,200 (also shown in Figure 7.1)

New Debt = $0

Previous Debt Payment = $0

Reserve Fund Balance = $384,179

Capital Fund Balance = $897,293

Capital Expenditure Balance = $456,200 + $0 + $0 + $384,179 + $897,293 = $3,681,672

The planned capital expenditure is provided in Table 5-1.

Figure 7.2 Capital Expenditure Balance

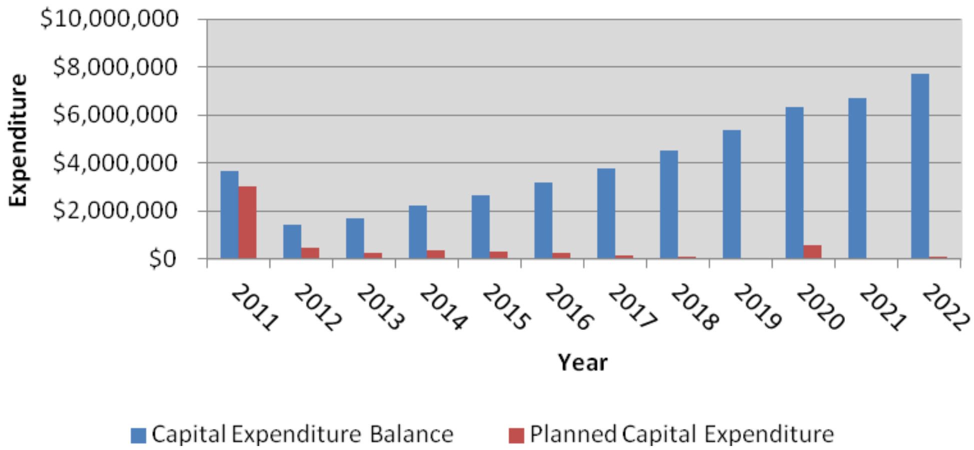


Figure 7.2 shows that the Town of Hanover will have sufficient cash available for the planned capital expenditure for the projection horizon. Furthermore, the proposed revenue will increase the cash balance at the end of the projection period in 2022 to more than $7,500,000.

7.4 Annual Surplus/Deficit

The annual surplus/deficit measures whether the revenues generated were sufficient to cover the expenses incurred and in turn, whether net financial assets have been maintained or depleted. An annual surplus is required to ensure that there is sufficient funding available for non-expense costs such as tangible capital asset acquisitions, reserve funds, and debt principal payments.

The annual surplus is equal to the revenues minus total expenses. It is important to note that the annual surplus is different from the operating cash flow, which did not take into account the amortization expenses. The annual surplus takes into account total expenses, which include amortization expenses. The annual surplus for 2011 is calculated as follows:

Revenues = $3,925,961 (also shown in Figure 6.1)

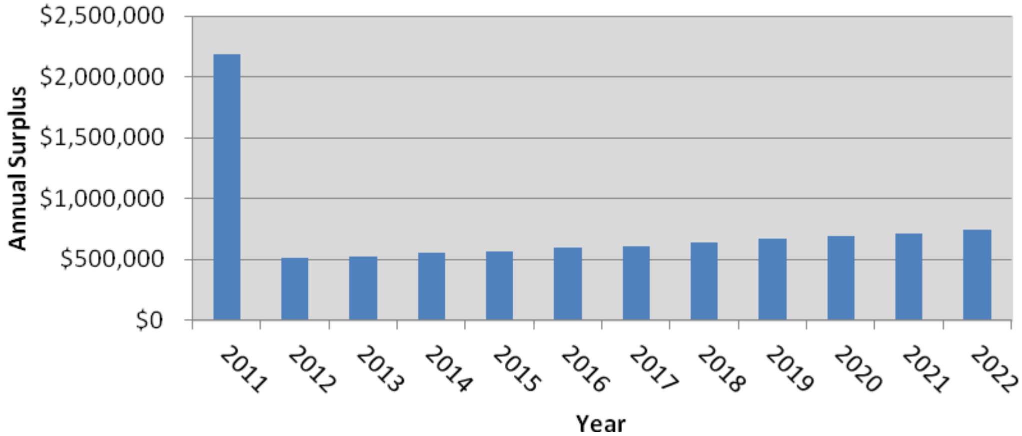
Total Expenses = $1,740,553 (also shown in Figure 4.3)

Annual Surplus = $3,925,961 - $1,740,553 = $2,185,408

Because the annual surplus takes into account the amortization expenses, it is lower than the operating cash flow. For example, the 2011 annual surplus of $2,185,408 is lower than the operating cash flow of $2,400,200, from Section 7.2.

Figure 7.3 shows the annual surplus/deficit for the projection horizon.

Figure 7.3 Annual Surplus/Deficit



It can be seen from Figure 7.3 that there is an annual surplus throughout the projection period. The operating cash flow from Figure 7.1 is likewise positive throughout the projection period. However, the operating cash flow is higher because the annual surplus/deficit takes into account the amortization expenses, and the operating cash flow does not.

7.5 Discussion

The information presented in Section 7 highlights the following:

- Operating Cash Flow: As observed in Figure 7.1, the operating cash flow remains positive for the projection horizon.
- Capital Expenditure Balance: As shown in Figure 7.2, Hanover will have sufficient cash available for the planned capital expenditure, and the proposed revenues will increase the reserve fund balance at the end of 2022 to $7,624,790.
- Annual Surplus/Deficit: As shown in Figure 7.3, the revenues cover the operating expenses plus amortization, and are thus above acceptable levels for the entire projection horizon. An annual surplus is anticipated throughout the projection period.
- Therefore, the proposed operating revenue rate of 3% for the projection horizon is sufficient to provide for total expenses and planned capital expenditures.

8. Financial Plan

8.1 Introduction

The Financial Plan, as required by Regulation, consists of the following statements:

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

These statements are based on the proposed operating revenue rates described in Section 7. It considers the following:

- An increase in operating revenues at a rate of 3% per year beginning 2011 for the entire projection period.

The following subsections present the statements mentioned above.

8.2 Statement of Operations

The Statement of Operations summarizes the revenues and expenses generated by the water system for a given period. The annual surplus/deficit measures whether the revenues generated were sufficient to cover the expenses incurred and in turn, whether net financial assets have been maintained or depleted. Annual surplus is required to ensure funding is available to non-expense costs such as tangible capital asset acquisitions, reserve fund transfers, and debt principal payments.

The Statement of Operations for the first 6 years is provided in Table 8-1. The Statement of Operations for the entire projection horizon i.e. up to 2022 is included in Appendix C.

Table 8-1 Statement of Operations

Line	Item	2011	2012	2013	2014	2015	2016
1	Revenue	$3,925,961	$2,302,500	$2,368,200	$2,449,600	$2,533,900	$2,621,200
2	Expenses						
a	Operating	$1,525,761	$ 1,569,000	$ 1,619,100	$1,670,400	$1,738,900	$1,793,600
b	Amortization	$214,792	$221,757	$225,096	$228,250	$231,474	$233,272
c	Interest	$0	$ 0	$ 0	$0	$0	$0
d	Total Expenses	$1,740,553	$1,790,757	$1,844,196	$1,898,650	$1,970,374	$2,026,872
3	Annual surplus (deficit)	$2,185,408	$511,743	$524,004	$550,950	$563,526	$594,328
4	Accumulated surplus, beginning of period	$10,349,246	$13,649,664	$14,216,907	$14,540,031	$14,965,162	$15,386,428
5	Accumulated surplus, end of period	$12,534,654	$14,161,407	$14,740,911	$15,090,981	$15,528,688	$15,980,755

Line 1: Revenues includes revenues from user fees and user capital cost recovery fees.

Line 2: Includes a) operating, b) amortization, and c) interest expenses; the sum of which is shown on Line 2d.

Line 3: Annual Surplus (Deficit) = Revenues (Line 1) – Total Expenses (Line 2d)

Line 4: Accumulated surplus, beginning of period = Accumulated surplus, end of the previous period; For the first year i.e. 2011 it was calculated as the accumulated surplus at the end of the 2010 period, which is the 2010 Fixed Assets ($9,965,067) + 2010 Reserve Balance ($384,179)

Line 5: Accumulated surplus, end of period = Accumulated surplus, beginning of period (Line 4) + Annual Surplus/Deficit (Line 3)

Line 3 in Table 8-1 shows an annual surplus beginning 2011. It is the same case for the entire projection horizon. The accumulated surplus at the end of the 2016 period is $15,980,755; it increases to about $17,935,832 at the end of the projection horizon i.e. 2022.

8.3 Statement of Cash Flow

The Statement of Cash Flow summarizes how the water system is expected to generate and use cash resources during the planning period. The transactions that provide/use cash are classified as operating, capital, investing, and financing activities.

The Statement of Cash Flow for the first 6 years is provided in Table 8-2. The Statement of Cash Flow for the entire projection horizon i.e. up to 2022 is included in Appendix C.

Table 8-2 Statement of Cash Flow

Line	Item	2011	2012	2013	2014	2015	2016
	Operating Transactions Cash received from:						
1	Revenues	$3,925,961	$2,302,500	$2,368,200	$2,449,600	$2,533,900	$2,621,200
	Cash paid for:						
2	Operating Costs	($1,525,761)	($1,569,000)	($1,619,100)	($1,670,400)	($1,738,900)	($1,793,600)
3	Finance Charges	$0	$0	$0	$0	$0	$0
4	Total Costs	($1,525,761)	($1,569,000)	($1,619,100)	($1,670,400)	($1,738,900)	($1,793,600)
	Cash provided from:						
5	Operating Transactions	$2,400,200	$733,500	$749,100	$779,200	$795,000	$827,600
	Capital Transactions						
6	Acquisition of tangible capital assets	($3,011,448)	($479,000)	($240,720)	($335,081)	($323,340)	($228,480)
7	Cash applied to capital transactions	($3,011,448)	($479,000)	($240,720)	($335,081)	($323,340)	($228,480)
	Finance Transactions						
8	Proceeds from debt issues	$0	$0	$0	$0	$0	$0
9	Debt repayment	$0	$0	$0	$0	$0	$0
10	Cash applied to financing transactions	$0	$0	$0	$0	$0	$0
11	Increase/ (decrease) in cash and cash equivalents	($611,248)	$254,500	$508,380	$444,119	$471,660	$599,120
12	Cash and cash equivalents, beginning of period	$1,281,472	$670,224	$924,724	$1,433,104	$1,877,222	$2,348,882
13	Cash and cash equivalents, end of period	$670,224	$924,724	$1,433,104	$1,877,222	$2,348,882	$2,948,002
14	Cash as percentage of net fixed assets	5.3%	7.1%	11.0%	14.3%	17.7%	22.3%

Line 1: Revenues increase at a rate of 3%

Line 2: Operating expenses increase at a rate of 3% per year

Line 3: Interest Expenses on Debts

Line 4: Total costs = Line 2 + Line 3

Line 5: Operating transactions is the operating cash flow i.e. Line 1 + Line 4

Line 6: The value of the assets acquired

Line 7: Cash used for the capital expenditure

Line 8: Debts incurred

Line 9: Debt repayments

Line 10: Cash applied to financing transactions = Line 8 + Line 9

Line 11: Increase (decrease) in cash = Line 5 + Line 7 + Line 10

Line 12: Cash beginning of period is the reserve fund balance

Line 13: Cash end of period = Line 11 + Line 12

Line 14: Cash as % net fixed assets = Line 13 / fixed assets for that year

Line 13 in Table 8-2 shows a reserve fund balance of $2,948,002 at the end of 2016. This value increases to $7,624,790 at the end of the projection horizon i.e. 2022, and is about 60.4% of net fixed assets.

8.4 Statement of Financial Position

The Statement of Financial Position provides information that describes the assets, liabilities, net financial assets, and tangible capital assets of the Town's water system.

The Statement of Financial Position for the first 6 years is provided in Table 8-3. The Statement of Financial Position for the entire projection horizon i.e. up to 2022 is included in Appendix C.

Table 8-3 Statement of Financial Position

Line	Item	2011	2012	2013	2014	2015	2016
	Financial Assets						
1	Cash	$670,224	$924,724	$1,433,104	$1,877,222	$2,348,882	$2,948,002
	Liabilities						
2	Debt	$0	$0	$0	$0	$0	$0
3	Net Financial Assets (Debt)	$670,224	$924,724	$1,433,104	$1,877,222	$2,348,882	$2,948,002
	Non-Financial Assets						
4	Tangible Capital Assets	$12,761,724	$13,018,967	$13,034,591	$13,141,422	$13,233,288	$13,228,495

Line 1: Cash is the reserve fund balance at the end of the year, similar to Line 13 of the Statement of Cash Flow

Line 2: The remaining debt is the total loan minus any loan repayments

Line 3: Net financial assets (debt) = Line 1 - Line 2

Line 4: Tangible capital assets are non-financial assets calculated as follows: Previous period fixed assets – amortization costs + assets acquisition. For example for 2011: Tangible capital assets = 2010 fixed assets (minus amortization expenses) ($9,965,067) – 2011 amortization costs ($214,792) + assets acquisition ($3,011,448) = $12,761,724.
The net financial assets (debt) as indicated on Line 3 in Table 8-3 show that there is no net debt incurred throughout the projection horizon. This means that the system has the resources to finance future operations.

9. Conclusions

The financial impacts of the Town of Hanover Drinking Water System have been considered in this Financial Plan. The main conclusions of the Financial Plan are as follows:

1) Evaluation of the 3% Increase in Revenue

i. The revenues generated are sufficient for meeting operating expenses for the projection horizon.

ii. With the use of the reserve funds, there is sufficient cash available for the planned capital expenditures for the projection horizon.

iii. There is an annual surplus for the projection horizon, which is sufficient to fully cover the operating expenses plus amortization expenses.

iv. Therefore, the proposed operating revenue rate of 3% for the projection horizon is sufficient to provide for total expenses and planned capital expenditures.

2) Statement of Operations

i. There is an annual surplus for the entirety of the projection period.

v. The accumulated surplus at the end of the 2016 period is $15,980,755; it increases to about $17,935,832 at the end of the projection horizon, i.e., 2022. The accumulated surplus is the sum of cash balance and the amortized value of the water system assets.

3) Statement of Cash Flow

i. There is a positive reserve fund balance throughout the projection horizon.

vi. The reserve fund balance at the end of 2016 is $2,948,002. This value increases to more than $7,624,790 at the end of the projection horizon i.e. 2022, and is about 60.4% of net fixed assets.

4) Statement of Financial Position

i. The net financial assets value is positive throughout the projection horizon.

10. Council Resolution

A council resolution was passed during a council meeting held on June 25th, 2012. A copy of the council resolution is included in Appendix D.

11. Next Steps

The following next steps are required in accordance with the requirements of the Financial Plan Regulation:

1. Notice of the availability of the Financial Plan be advertised
2. The Financial Plan be made available, on request and without charge, to the members of the public that are served by the water system
3. The Financial Plan be made available on the Town of Hanover's website without charge
4. A copy of the Financial Plan, along with the council resolution be submitted to the Ministry of Municipal Affairs and Housing
5. The Financial Plan will be updated and approved prior to applying for a licence renewal (i.e. every five years); a copy of the Council resolution will have to be submitted to the Ministry of the Environment with the licence renewal application.