City of Evanston, Illinois

2100 Ridge Avenue • Evanston, Illinois 60201

Water and Sewer Cost of Service Rate and Fee Study Report

April 2009

Report Prepared By:

Malcolm Pirnie, Inc.

1515 E. Woodfield Road, Suite 360
Schaumburg, IL 60173
847-517-8114

6355001

MALCOLM PIRNIE

Contents

List of Tables

List of Figures

Appendices

1. Introduction

1.1. Background

The City of Evanston ("City") borders the City of Chicago and is twelve miles north of downtown Chicago. The City operates and maintains a water and sewer system that serves the city and additionally provides water service to customers in the Village of Skokie and the communities within the Northwest Water Commission. The City is responsible for providing water and sewer service to over 350,000 customers in the service area.

The communal water system was formed in Evanston in 1874. The current site of the municipally owned and operated potable water treatment plant is located on the shores of Lake Michigan. Lake Michigan serves as the fresh surface water source for the City. The treatment facility has the capacity to supply up to 108 million gallons per day ("MGD") of drinking water. Potable water is supplied on a retail basis within the City and sold at wholesale rates to the Village of Skokie and the Northwest Water Commission which is comprised of Arlington Heights, Buffalo Grove, Palatine, and Wheeling. The water service area makes up approximately 14,400 accounts with the largest users being Northwestern University, Evanston Hospital and St. Francis Hospital. The top ten water uses comprise approximately 22 percent of the metered water consumption.

The sewer system consists of a collection and conveyance system, only. Additionally the City's sewer division only services the City itself and has no additional outside customers. Sanitary and storm sewage is collected and sent to the Metropolitan Water Reclamation District ("MWRD") of the Greater Chicago area for treatment. The conveyance and collection system consists of approximately 142 miles of combined sewer main and 26 miles of relief sewers.

1.2. Objectives

This water and sewer cost of service rate and fee study was completed to:

- Assist the City in generating sufficient revenues to maintain compliance with regulations
- Improve system condition and performance
- Ensure equitable recovery of water and sewer system costs

- Assess rate affordability and competitiveness, and
- Establish defensible water and sewer rates.

The primary goal of this study was to develop a seven year financial and rate plan, and recommend rates, fees, and charges to recover the cost of providing service and to meet the City's rate-setting objectives.

1.3. Existing Water and Sewer Rates

Currently, the City recovers operation and maintenance ("O&M") and capital costs associated with the water and sewer system through uniform rates, with a minimum water charge that includes the first 500 cubic feet of water consumption. A summary of the existing water and sewer rates are provided in Table 1-1 below.

Table 1-1
Current Water and Sewer Rates

Water Rates:		**Sewer Rates:**
Bi-Monthly Minimum Charge[1]		
5/8" & 3/4"	$5.40	$3.94 per 100 cubic feet of water consumed
1"	$10.80	
1-1/2"	$20.20	
2"	$31.80	
3"	$56.00	
4"	$89.70	
6"	$158.20	
8"	$267.80	

[1]Includes the first 500 cubic feet of water consumed

Volumetric Charge

$1.52 per 100 cubic feet above the minimum

1.4. Rate Study Process

The rate-setting process generally consists of three steps: determining rate revenue requirements, assigning cost responsibility to customer classes, and establishing rates to meet the rate revenue requirements and recover water and sewer system costs in an equitable manner. Financial pro formas and rate revenue requirements were developed using an interactive financial modeling process. Based upon the rate revenue

requirements, Malcolm Pirnie updated the cost of service model that was completed by Virchow, Krause & Company, LLP. as part of the prior rate study that was completed in 2006. The update was completed to reassess the cost of providing service to customers based on updated water demands and revenue requirement information.

Documentation of the analysis and assumptions that were employed to complete the rate study and develop the rate model is provided in this report. In addition to this introduction section, this report contains the following sections:

- **Section 2 – Financial Management Plan** – This section describes the recommended financial management plan for the City over the seven year period from fiscal year FY09 through FY15.
- **Section 3 – Cost of Service Evaluation** – This section describes the cost of service evaluation that was completed to ensure that the costs associated with water utility operations and management are allocated equitably among the City's customer classes and rate components to support the development of equitable, cost-based rates.
- **Section 4 – Rate Recommendations** – This section provides a summary of the rate adjustments that are recommended to satisfy operation, maintenance and capital program funding needs.

1.5. Reliance on Data Provided by the City

During the course of this project, the City provided Malcolm Pirnie with a variety of technical information, including cost and revenue data. Malcolm Pirnie reviewed the data for reasonableness and general representation of cost and related activities, but did not independently assess or test the accuracy of such data, historic or projected. We relied on this data in the formulation of our findings and subsequent recommendations contained in this report. As is often the case, there will be differences between actual and projected data, and these differences may be material. However, we take no responsibility for the accuracy of data or projections provided by or prepared on behalf of the City by others, nor does Malcolm Pirnie have any responsibility for updating this report for events occurring after the date of this report.

1.6. Acknowledgments

The successful completion of this study depended upon the efforts of the City of Evanston management and staff. In particular, the Malcolm Pirnie project team would like to thank Mr. Dave Stoneback, Water and Sewer Superintendent, Mr. Kevin Lookis, Assistant Superintendent, Mr. Martin Lyons, Finance Director, and Ms. Raye Janousek, Senior Accountant for their assistance throughout this study.

2. Financial Management Plan

2.1. Introduction

This section summarizes the proposed financial management plan for the Water and Sewer Funds and projected rate revenue requirements for the seven year period beginning in fiscal year FY10. The development of the financial management plan consisted of the evaluation and completion of the following elements:

- Review of existing fiscal policies;
- Review of the City's Water and Sewer Capital Improvement Plans;
- Review of historical Water Sewer Fund revenue and expenses;
- Projection of operation and maintenance expenses; and
- Development of financial plan alternatives and recommendations.

2.2. Fiscal Policy Review

Malcolm Pirnie reviewed the City's existing fiscal policies and financial targets to develop a financial management plan that is in compliance with these policies, and to ensure that the plan supports a sound financial position for the Water and Sewer Funds. The City has comprehensive and well documented fiscal policies and financial targets. These are summarized below and were incorporated into the financial management plan associated with this rate study.

2.2.1. Governance Policies:

The Water Fund. The Water Fund is an enterprise fund established to account for the provision of water services to the residents of the City and the sale of water to the Village of Skokie and the Northwest Water Commission. All activities necessary to provide such services are accounted for in this fund, including, but not limited to, administrative, operation, maintenance, financing and related debt service, billing and collection.

As an enterprise fund, the Water Fund is expected to be self sufficient. Rates should be maintained at sufficient levels to meet the costs of water programs, fund depreciation, and build reserves for future capital needs. Other existing Water Fund policies are as follows:

- Rate increases to the Northwest Water Commission and the Village of Skokie shall conform to the contractual agreements
- Water Rates for City of Evanston customers shall be reviewed on an annual basis.
- The return on investment shall be reviewed on an annual basis. The return on investment is a component of the rate structure with wholesale customers that is collected by the Water Fund and transferred to the General Fund annually. Other transfers for reimbursement of administrative expenses should reflect true program costs.[1]

The Sewer Fund. The Sewer Fund is an enterprise fund established to account for the provision of sewer repair and improvement services to the residents of the City. All activities necessary to provide such services are accounted for in this fund, including administration, operations, financing, billing and collection.

As an enterprise fund, the Sewer Fund is expected to be self-sufficient. As a result, rates should be scheduled to meet the costs of the sewer programs. Transfers to other funds for administrative expenses should be maintained to reflect true program costs.

2.2.2. Fund Reserve Requirements

Several fund reserve requirements apply to the Water Fund in accordance with the covenants of the Series 1999 Water Revenue Bonds.[2]

- A Bond and Interest Account shall be maintained. This account is to be credited each month with not less than one fifth of the amount of the next maturing interest on all outstanding bonds and an amount equal to not less than one tenth of the amount of principal due on the following January 1st. The credits shall continue until the full amounts of such interest and principal are on hand for each payment.
- A Bond Reserve Account shall be maintained. This account is to be credited $12,150 per month throughout the life of all bonds outstanding. This account is to be used to pay maturing interest or principal whenever sufficient funds are not available for that purpose in the Bond and Interest Account. Whenever the balance in this account exceeds the maximum principal and interest requirements on all outstanding bonds and parity bonds of the system for any future fiscal year, any surplus above such amount may be transferred to any other account or may be used for calling and redeeming bonds in the discretion of City Council.
- A Depreciation, Improvement and Extension Account shall be maintained. This account is to be credited monthly installments of $5,100 or such greater amount as designated from time to time by City Council. Money in this account shall first be used to provide an adequate allowance for depreciation, to be used for extraordinary

[1] 2008-2009 Proposed Budget, City of Evanston, p. 35-39.
[2] Preliminary Official Statement, City of Evanston $3,500,000 Water Revenue Bonds, Series 1999.

maintenance, repair of necessary replacements, or if so needed, for improvements and extensions of the system, and shall be used for paying maturing principal or interest of any bonds of the system when no other funds are available for that purpose. Whenever this account aggregates the sum of $400,000, any sums in excess may be transferred to any other system account at the discretion of the City Council.

2.2.3. Liquidity, Financial Strength, and Reserve Policy Recommendations

In accordance with the rate covenants of the Series 1999 Water Revenue Bonds, the City covenants that water rates will be adequate to produce net revenues each year in an amount not less than 125% of the principal and interest requirements for the year. In addition, if parity bonds are issued, the net revenues of the system for the most recent fiscal year shall be equal to not less than 130% of the maximum future annual debt service. The net revenues are the gross revenues of the system less the actual cost of operation and maintenance, and before the provision for depreciation or other required accounts.

The City's current policy requires that a sufficient Water Fund reserve be maintained to satisfy both bond requirements and Illinois EPA loan requirements. A minimum of 5% reserve is required per bond agreements. A portion of this fund reserve shall be used to fund depreciation and capital improvement needs. At the financial planning workshop held on June 19, 2008, the City expressed a desire to work toward establishing a reserve target of maintaining at least $4 million, comprised of the following components:

- A working capital target equal to 25% of operating expenses or approximately $2 million, which is higher than the requirement described above.
- A rate stabilization reserve of $1 million to be used to manage the annual fluctuation in revenues from year-to-year due to seasonal factors. This amount was established based on historical revenue fluctuations.
- A capital reserve equal to $1.0 million to be used as a contingency for major emergency project capital expenditures.

The City's current policy also requires that a sufficient Sewer Fund reserve be maintained to satisfy both bond requirements and Illinois EPA loan requirements. A minimum of 5% reserve is required per bond agreements. A portion of this fund reserve shall be used to fund depreciation and capital improvement needs.[3] At the financial planning workshop held on June 19, 2008, the City expressed a desire to work toward establishing a reserve target of maintaining at least $3 million, comprised of the following components:

- A working capital target equal to 25% of operating expenses or approximately $0.5 million, which is higher than the requirement described above.

[3] 2008-2009 Proposed Budget, City of Evanston, p. 40.

- A rate stabilization reserve of $1.5 million to be used to manage the annual fluctuation in revenues from year-to-year due to seasonal factors. This amount was established based on historical revenue fluctuations.
- A capital reserve equal to $1.0 million to be used as a contingency for major emergency project capital expenditures.

2.2.4. Capital Financing Policy

For purposes of this rate study, in general, we have assumed that to the extent excess cash reserves are available to fund capital projects, these projects will be funded with cash reserves, and any remaining capital projects will be funded with either Illinois EPA loans, if applicable, or revenue bonds. However, due to the current level of water and sewer rates and the large size of the water capital improvement program over the next five years, most of the water capital improvement program will be debt financed. However, most of the sewer capital improvement program will be cash funded on a pay-as-you-go basis.

Over the long-term, it is recommended that annually recurring programs, such as the annual water main replacement program, be funded with user charges or cash (i.e. on a pay-as-you-go basis), and that capital projects with long useful lives or those that occur relatively infrequently be debt financed. Debt financing allows the recoupment of capital costs over a period that more closely approximates the useful life of the asset, and allows for the reasonable assignment of costs across generations resulting in improved intergenerational equity.

Also, the City has recently completed a Water Capacity Fee Study report, which was prepared by TischlerBise in January 2008 and has adopted water capacity fees to offset the cost of system expansion. Revenues collected from the water capacity fees should be dedicated to paying for growth-related capital projects or associated debt service.

2.3. Water and Sewer Capital Improvement Program

The City's water and sewer capital improvement program ("CIP") was reviewed, which consisted of planned design, construction, maintenance and repair of facilities and infrastructure projects, associated costs, and schedules for implementation. Initiation of some of these projects has already begun, and will continue over the next several years.

During the rate study process, several meetings were held to understand and review the City's CIP. Based on this review, adjustments were made to the cost and sequencing of projects to best represent the potential costs of each project and the timing of project funding needs. A summary of the projects and annual costs associated with the water and sewer CIP is provided Table 2-1 and Table 2-2.

Table 2-1
Capital Improvement Program Costs - Water System

Line	Description	Fiscal Year 08-09	09-10	10-11	11-12	12-13	13-14	14-15
1	Security Equipment	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000
2	Water Billing Software	340,000	70,000	-	-	-	-	-
3	SCADA System Phase I and II Study	140,000	-	-	-	-	-	-
4	SCADA System Technology implementation	100,000	1,500,000	-	-	-	-	250,000
5	Zebra Mussel Control System Phase I and II	-	-	-	150,000	-	-	-
6	Zebra Mussel Control System Repair	-	-	-	-	1,200,000	-	-
7	54 " Intake Anchor Ice Control System	-	-	-	-	500,000	-	-
8	Laboratory HVAC Replacement	-	-	-	-	-	-	90,000
9	Filter Rehab (#19-24)	-	750,000	1,300,000	200,000	-	-	-
10	Emergency Interconnection	-	400,000	900,000	900,000	-	-	-
11	Emergency Interconnection Design	145,000	-	-	-	-	-	-
12	Service Building and Filtration Building Expansion	1,800,000	-	-	-	-	-	-
13	Tuckpointing Pumping Station	-	250,000	200,000	-	-	-	275,000
14	McCormick Mag Meter East	25,000	-	-	-	-	-	-
15	McCormick Mag Meter West	-	-	-	-	85,000	-	-
16	Hydraulic Study _Distribution Pressures	50,000	-	-	-	-	-	-
17	Roof Projects	-	-	-	-	150,000	150,000	150,000
18	Standpipe Painting	-	-	350,000	350,000	-	-	-
19	Plant Evaluation	-	-	-	-	-	150,000	-
20	Standpipe Mixing Equipment	-	-	-	-	-	175,000	-
21	Eff;uent Filter Monitoring System	-	75,000	-	-	-	-	-
22	South Tank Paving	-	-	-	-	-	100,000	-
23	Flash Mix Study	-	-	-	-	-	350,000	2,500,000
24	Asbestos Removal	-	50,000	50,000	50,000	50,000	50,000	-
25	Asset Management System (Plant)	-	-	-	-	-	-	-
26	Lincoln Street Dune Restoration	-	-	-	-	-	-	75,000
27	AMR Radio Transmitter Replacement Program	-	-	-	-	-	625,000	625,000
28	Renewable Energy Study	-	-	-	-	-	-	-
29	Renewable Energy Pilot	-	-	-	-	-	-	-
30	Renewable Energy Installation	-	-	-	-	-	-	-
31	Non-destructive testing Pre Cast Concrete	-	-	-	500,000	-	-	-
32	Concrete Structure Rehab	-	-	-	-	-	1,200,000	1,300,000
33	Master Meter Replacement	-	-	-	-	235,000	235,000	235,000
34	SCADA System Upgrade	-	-	-	-	-	-	-
35	Alum Tank Replacement	-	-	-	-	-	-	-
36	Future Project Allocation	-	-	-	-	-	-	-
37	UV Treatment of Finished Water	-	-	-	-	-	-	-
38	Water Main Replacement Program	-	-	-	-	-	-	-
39	Engineering Services for WM Design and Const	300,000	300,000	300,000	300,000	350,000	355,000	400,000
40	Annual Water Main Work	2,800,000	2,800,000	2,900,000	3,000,000	3,100,000	3,200,000	3,300,000
41	Large Diameter Water Main Replacement	-	-	-	-	-	-	1,000,000
42	**Annual Total**	**$ 5,750,000**	**$ 6,245,000**	**$ 6,050,000**	**$5,500,000**	**$ 5,720,000**	**$6,640,000**	**$ 10,250,000**

Table 2-2
Capital Improvement Program Costs - Sewer System

Line	Description	Fiscal Year 08-09	09-10	10-11	11-12	12-13	13-14	14-15
1	Emergency Sewer Work	$75,000	$75,000	$75,000	$75,000	$75,000	$75,000	$75,000
2	Sewer Lining	250,000	250,000	250,000	250,000	250,000	250,000	250,000
3	Street Improvement Projects	550,000	550,000	550,000	550,000	550,000	550,000	550,000
4	Ridge Avenue Storm Sewer Project	2,200,000	-	-	-	-	-	-
5	Relief Sewer Project Extension on Street Resurfacing Project	-	-	-	-	-	-	500,000
6	Rehabilitation of Large Diameter Sewers	-	-	-	-	-	-	-
7	S82B - Contract 2 construction (IEPA)	827,280	-	-	-	-	-	-
8	S82B - Contract 2 construction (ineligible)	91,920	-	-	-	-	-	-
9	S82B - Contract 2 construction eng (IEPA)	110,587	-	-	-	-	-	-
10	S82B - Contract 2 construction eng (ineligible)	12,287	-	-	-	-	-	-
11	Phase 10C Design (ineligible)	-	-	-	-	-	-	-
12	Phase 10C Construction (ineligible)	-	-	-	-	-	-	-
13	Phase 10C Construction (IEPA)	-	-	-	-	-	-	-
14	Phase 10C Construction engineering (ineligible)	-	-	-	-	-	-	-
15	Phase 10C Construction Eng. (IEPA)	-	-	-	-	-	-	-
16	**TOTAL FOR SEWER SYSTEM**	**$ 4,117,074**	**$ 875,000**	**$ 875,000**	**$ 875,000**	**$ 875,000**	**$ 875,000**	**$ 1,375,000**

2.4. Revenue and Expense Projections – Water Fund

The City's Water Fund revenues and expenditures from fiscal year 2003 through 2007 were reviewed along with information provided by the City related to future capital and O&M programs. These were used to forecast revenues and expenditures from fiscal year 2009 through 2015 (the forecast period), and to determine the need for future rate adjustments.

2.5. Revenues

Historical and projected water revenues include revenues from the sale of retail and wholesale water services, phosphate sales, water capacity fees, and other miscellaneous revenues. These revenues are used to recover the costs of operating and maintaining the water utility and providing service to existing and new customers.

Projected revenues are based upon historical information, discussions of revenue trends with City management, and projections of customer growth rates. Customer growth rates were forecasted based upon a review of:

- Historical billed flow
- Amount of historical revenue collected from the City's retail, residential, commercial, industrial and wholesale customers including the Village of Skokie and the Northwest Water Commission, and

- Discussions with the City regarding the expected customer growth rates in the future.

It is important to note that the return on investment portion of the water sales to the Village of Skokie and the Northwest Water Commission is transferred to the General Fund annually and is not available to pay for capital or O&M costs of the water system.

2.5.1. Projected Water Sales

Water sales revenues were projected based on trends and projections of water consumption and customer accounts. The City has experienced a downward trend in both historical water sales and system water consumption in recent years. Figure 2-1 and Table 2-3 show a downward trend in water consumption for single family, multi-family, and commercial customer consumption between 2003 and 2007, corresponding to a total system average annual decline in consumption of 2.9 percent. In addition, total system water consumption between 2003 and 2007 varied by as much as 11.5 percent from year to year.

This information was reviewed and discussed at the Financial Planning Workshop June 19, 2008 and, for conservativeness, the City decided to forecast water revenues based on the minimum annual water consumption over the past five years, while incorporating anticipated growth in customer accounts. The projected growth in customer accounts was estimated based upon historical trends and discussion with the City's utility staff. A summary of the projected annual customer growth rates for retail and wholesale customers is provided in Table 2-4 below.

Figure 2-1: Annual Water Consumption by User Class

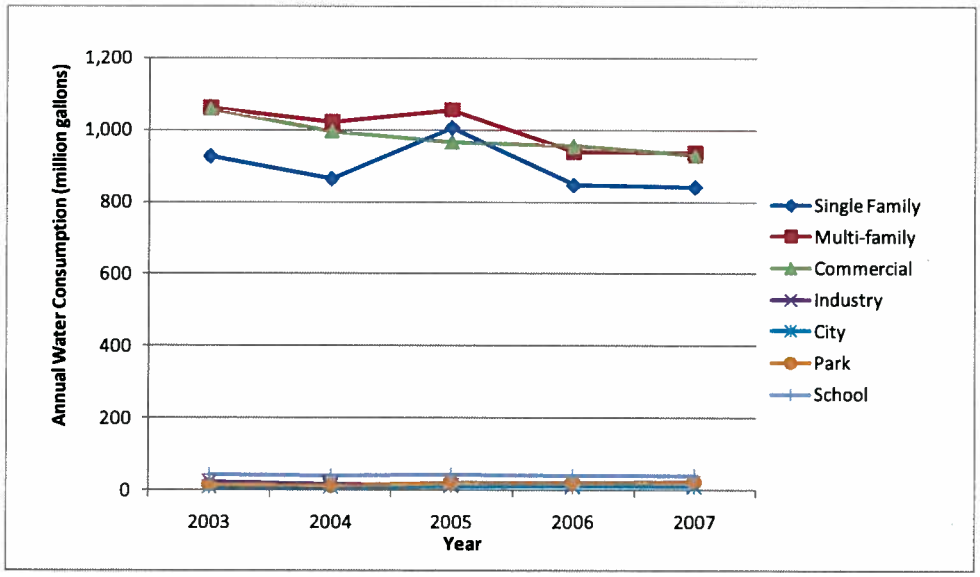


Table 2-3
Annual Water Consumption by User Class

Class	Annual Water Consumption (Million Gallons) 2003	2004	2005	2006	2007	Average % Change
Single Family	906	839	973	839	839	-1.9%
Multi-Family	1,040	1,007	1,040	940	906	-3.4%
Commercial	1,040	973	940	940	906	-3.4%
Industrial	25	19	15	13	12	-16.8%
City	9	10	12	10	11	3.9%
Park	16	14	21	21	23	10.0%
School	44	40	44	40	40	-2.5%
Total	3,081	2,901	3,045	2,802	2,737	-2.9%

Table 2-4
Projected Growth in Customer Demands

Customer	Projected Annual Growth Rate
City Retail Customers	0.3%
Village of Skokie	2.0%
Northwest Water Commission	2.0%

Projected water revenues, including revenues anticipated to be generated from rate adjustments, are summarized in Tables 2-7 through 2-9 at the end of this section.

2.5.2. Water Capacity Fee Revenues

The projection of water capacity fee revenues was estimated based on the water capacity fee schedules provided by the City multiplied by the anticipated number of new annual equivalent residential accounts. The number of equivalent residential accounts was estimated based on the growth rate for City retail customers shown in Table 2-4. The projection of water capacity fee revenues is shown in Tables 2-7 through 2-9 at the end of this section. These projections are more conservative than the projections contained in the Water Capacity Fee Study report prepared by TischlerBise in January 2008 due to the observed and anticipated slow down in development within the City service area.

2.5.3. Other Miscellaneous Revenues

Other miscellaneous revenues, including property sales and rentals, merchandise sales, and penalties were projected to remain at approximately the 2008 revenue levels. Interest income was calculated based upon the average annual fund balance and an interest earning rate of 4 percent per annum, and phosphate sales were projected to increase 6 percent per year to correspond with the anticipated rate of increase in chemical costs.

2.6. Expenditures

Water system expenditures include operating expenses (personnel, professional, internal services, materials and supplies, travel and expense, vehicle fuel/repair, contract services, utilities, insurance, rentals, advertising and printing, equipment, and other expenses), debt service, and capital outlay. A detailed projection of operating expenses was developed based upon discussions with the City regarding system operational changes, historical cost trends, and anticipated future water flows. Based upon an analysis of this information, the following operating expense projections were made, as shown in Table 2-5 below:

Table 2-5
Operating Expense Projection Assumptions

Expense Category	Annual % Increase	Basis / Rationale
Personal	4.0	Historical trends.
Fringe Benefits	6.0	Historical trends.
Materials and Supplies	3.0	Projected cost inflation.
Utilities	3.0	Projected based upon historical power consumption trends, utility costs, and anticipated customer growth.
Chemicals	6.0	Historical trends and anticipated future cost increases.
All other	3.0	Projected cost inflation.

A detailed projection of non-operating expenditures was developed based upon a review of the City's existing debt obligations, discussions with the City regarding anticipated capital outlay requirements, and historical cost trends. Based upon an analysis of this information, the following non-operating expense projections were made:

- The City' existing debt repayment obligations over the forecast period consist of repayment of water revenue bond obligations. In addition, it is anticipated that the City will issue new debt to finance the anticipated capital improvement program over

the forecast period. It was anticipated that this debt would be issued with an interest rate of 6.0 percent and amortization period of 30 years.

- Capital outlay is projected to increase at an inflationary rate over the forecast period. Capital Outlay includes personnel computer and general water plant equipment.

2.7. Financial Plan Alternatives – Water Fund

Several financial plan alternatives were considered to support the funding of the City's water capital improvement plan and its operation and maintenance expenses to achieve the City's financial policy targets over the forecast period. The alternatives were developed utilizing interactive financial planning models developed for the Water and Sewer Funds. These alternatives consider the overall rate revenue increase requirements to meet these objectives, and do not specifically consider the individual rate component that will be adjusted to generate the necessary revenue under each alternative. Financial plan alternatives are summarized below. Specific rate component recommendations are provided in Section 4.

Alternative A consists of implementing rate increases to correspond with projected annual revenue requirements on a "just-in-time" basis. Alternative B consists of smoothing the rate increases over the forecast period. Alternative C consists of implementing increases only in fiscal years 2011 and 2013. A summary table illustrating the resulting rate revenue increase requirements under the three alterative financial plans is provided in Table 2-6 below. Figures 2-2 through 2-4 present the financial model "dashboard" results, and Tables 2-7 through 2-9 provide the cash flow projections under each alternative.

Table 2-6
Annual Water Rate Revenue Increase Alternatives

	Fiscal year					
Description	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Alternative A – Just-in-Time	0.0%	11.1%	10.3%	5.5%	6.6%	10.0%
Alternative B - Smoothed	0.0%	9.3%	9.3%	9.3%	9.1%	6.6%
Alternative C – Front Loaded	0.0%	19.0%	0.0%	21.0%	0.0%	0.0%

Each of these alternatives reflects the overall rate revenue requirements necessary to meet the City's objectives over the forecast period. Furthermore, these alternatives assume that the majority of the water capital improvement projects in 2011 through 2015 will be debt financed, including the water main replacement projects.

Figure 2-2: Water Fund Financial Model Dashboard – Alternative A (Just-In-Time)

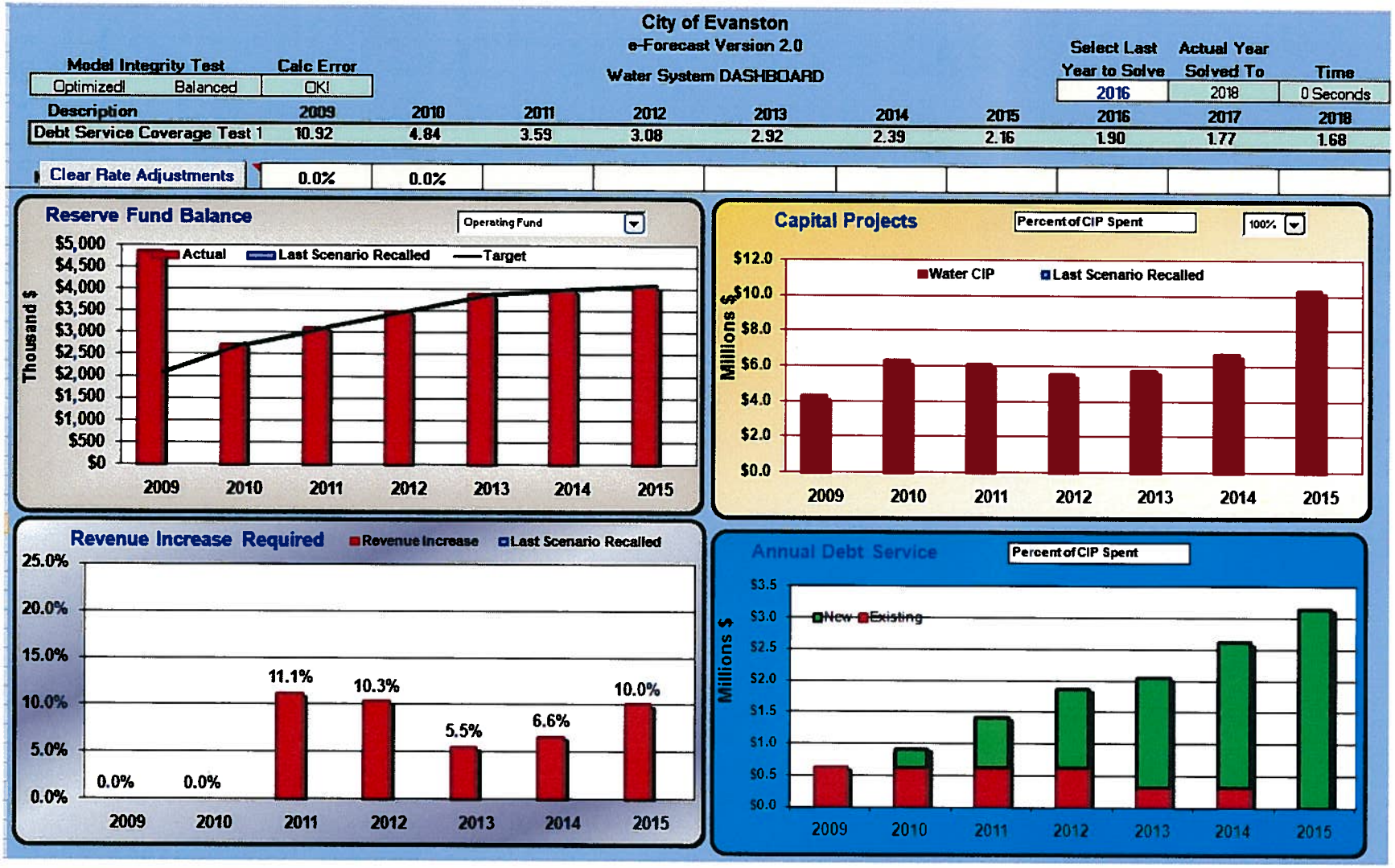


Figure 2-3: Water Fund Financial Model Dashboard – Alternative B (Smoothed)

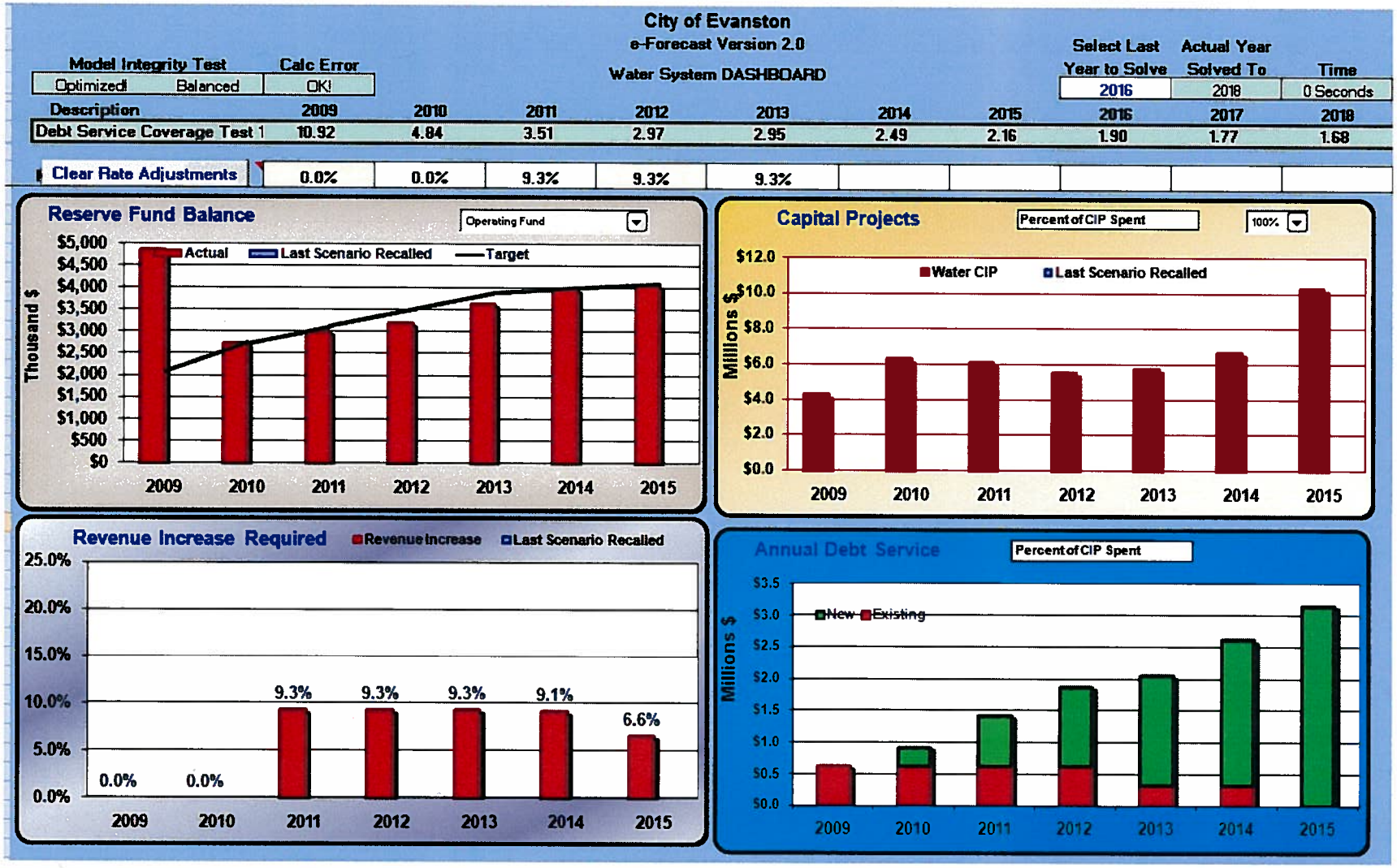


Figure 2-4: Water Fund Financial Model Dashboard – Alternative C (Front Loaded)

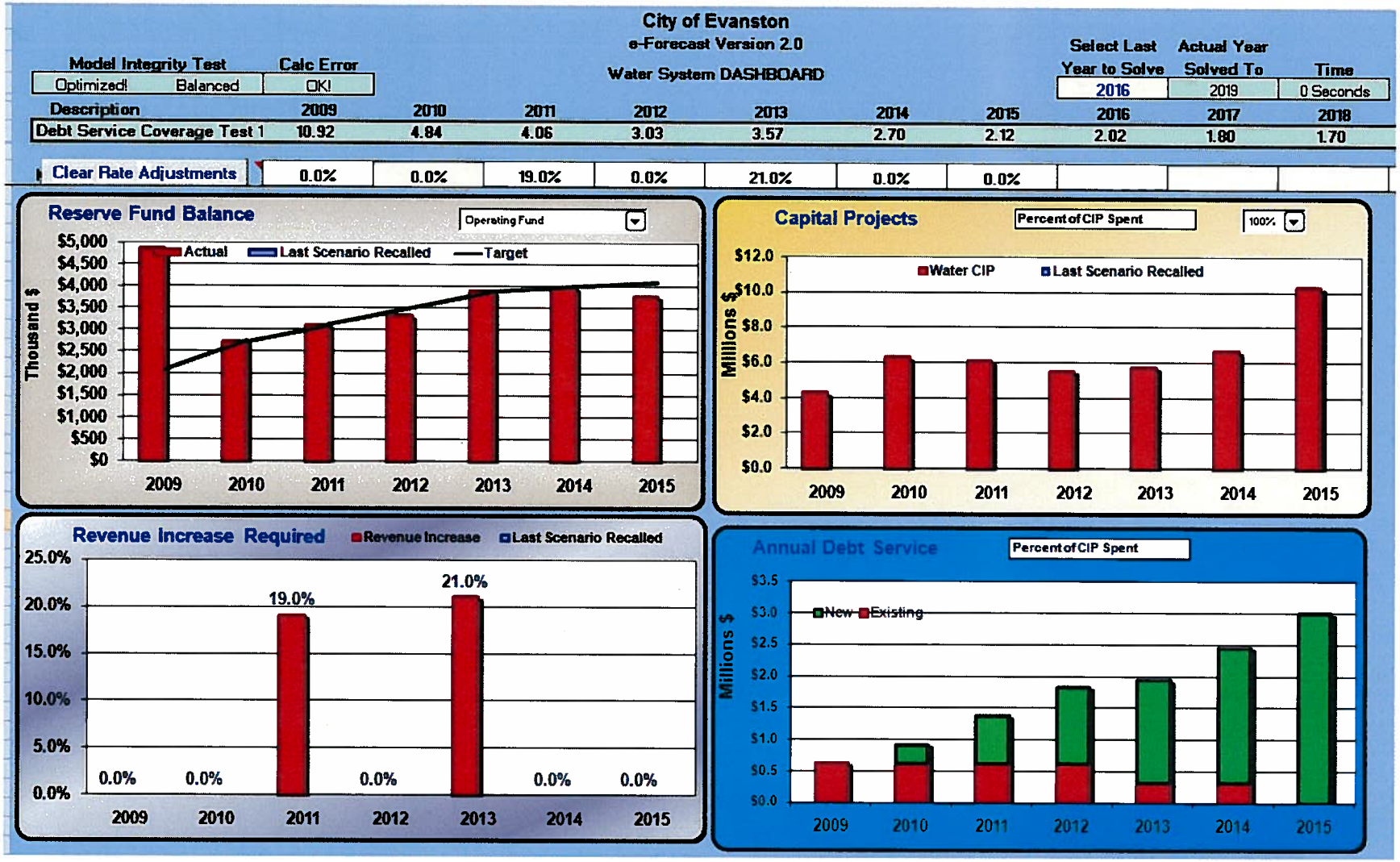


Table 2-7
Water Fund Cash Flow Forecast - Alternative A (Just-in-Time)

Line No.	Description	1 2009	2 2010	3 2011	4 2012	5 2013	6 2014	7 2015
	Revenues							
1	Water Sales Revenue	6,123,252	5,675,000	6,310,468	6,965,568	7,351,529	7,840,783	8,628,958
2	Wholesale Revenues	-	-	-	-	-	-	-
3	Skokie	3,151,537	2,803,000	2,883,714	2,968,125	3,055,295	3,145,322	3,238,310
4	NWWC	3,691,778	3,727,000	3,825,683	3,928,885	4,035,460	4,145,529	4,259,219
5	Miscellaneous Revenue	619,973	491,176	493,100	495,153	497,342	499,677	502,166
6	Transfer In From DIE Account	-	-	-	-	-	-	-
7	Interest Income	261,898	133,023	102,378	115,806	129,376	137,826	141,161
8	**Total Revenues**	**13,848,438**	**12,829,199**	**13,615,344**	**14,473,537**	**15,069,002**	**15,769,137**	**16,769,814**
	Revenue Requirements							
	Operating Expenditures							
9	Water General Support	646,122	755,700	958,291	996,106	1,035,486	1,076,499	1,119,217
10	Pumping	2,095,533	2,494,100	2,496,948	2,588,034	2,682,652	2,780,949	2,883,077
11	Filtration	1,958,979	2,387,800	2,407,808	2,520,662	2,639,058	2,763,280	2,893,627
12	Distribution	1,228,618	1,513,800	1,651,860	1,717,221	1,785,317	1,856,269	1,930,204
13	Water Meter Maintenance	318,994	349,600	370,407	385,316	400,860	417,069	433,972
14	Other Operations	825,830	1,036,600	977,872	999,435	1,021,491	1,044,052	1,067,131
15	**Subtotal**	7,074,076	8,537,599	8,863,186	9,206,775	9,564,864	9,938,117	10,327,227
16	Capital Outlay	115,900	120,826	124,571	128,433	132,414	136,519	140,751
16	Transfer to the GF - Insurance	85,000	85,000	86,700	88,434	90,203	92,007	93,847
17	Transfers to the GF - ROI	2,531,300	2,531,300	2,581,926	2,633,565	2,686,236	2,739,961	2,794,760
18	Transfers to the GF - Op Cash	162,300	162,300	165,546	168,857	172,234	175,679	179,192
	Debt Service							
19	Existing Debt Service	620,913	616,556	621,269	624,343	316,031	318,343	-
20	New-Revenue Bonds	-	271,084	703,369	1,089,359	1,569,623	2,127,324	2,988,885
21	New-General Obligation Bonds	-	-	-	-	-	-	-
22	New-SRF Loans	-	26,886	87,380	147,875	147,875	147,875	147,875
23	**Total Debt Service**	620,913	914,526	1,412,018	1,861,577	2,033,528	2,593,541	3,136,759
24	Capital Projects Funded with Cash	4,214,858	2,610,151	-	-	-	-	-
25	**Total Revenue Requirements**	**14,804,347**	**14,961,701**	**13,233,947**	**14,087,640**	**14,679,480**	**15,675,824**	**16,672,537**
26	**Revenues Over (Under) Expenses**	**(955,909)**	**(2,132,503)**	**381,397**	**385,897**	**389,522**	**93,313**	**97,278**
27	Beginning Balance	5,822,811	4,866,902	2,734,400	3,115,796	3,501,694	3,891,216	3,984,529
28	Revenues Over (Under) Expenses	(955,909)	(2,132,503)	381,397	385,897	389,522	93,313	97,278
29	Ending Balance	4,866,902	2,734,400	3,115,796	3,501,694	3,891,216	3,984,529	4,081,807

Table 2-8
Water Fund Cash Flow Forecast - Alternative B (Smoothed)

Line No.	Description	1 2009	2 2010	3 2011	4 2012	5 2013	6 2014	7 2015
	Revenues							
1	Water Sales Revenue	6,123,252	5,675,000	6,203,657	6,781,562	7,413,302	8,092,797	8,628,958
2	Wholesale Revenues	-	-	-	-	-	-	-
3	Skokie	3,151,537	2,803,000	2,883,714	2,968,125	3,055,295	3,145,322	3,238,310
4	NWWC	3,691,778	3,727,000	3,825,683	3,928,885	4,035,460	4,145,529	4,259,219
5	Miscellaneous Revenue	619,973	491,176	493,100	495,153	497,342	499,677	502,166
6	Transfer In From DIE Account	-	-	-	-	-	-	-
7	Interest Income	261,898	133,023	100,476	108,656	119,794	133,491	141,161
8	**Total Revenues**	**13,848,438**	**12,829,199**	**13,506,631**	**14,282,381**	**15,121,193**	**16,016,816**	**16,769,814**
	Revenue Requirements							
	Operating Expenditures							
9	Water General Support	646,122	755,700	958,291	996,106	1,035,486	1,076,499	1,119,217
10	Pumping	2,095,533	2,494,100	2,496,948	2,588,034	2,682,652	2,780,949	2,883,077
11	Filtration	1,958,979	2,387,800	2,407,808	2,520,662	2,639,058	2,763,280	2,893,627
12	Distribution	1,228,618	1,513,800	1,651,860	1,717,221	1,785,317	1,856,269	1,930,204
13	Water Meter Maintenance	318,994	349,600	370,407	385,316	400,860	417,069	433,972
14	Other Operations	825,830	1,036,600	977,872	999,435	1,021,491	1,044,052	1,067,131
15	**Subtotal**	7,074,076	8,537,599	8,863,186	9,206,775	9,564,864	9,938,117	10,327,227
16	Capital Outlay	115,900	120,826	124,571	128,433	132,414	136,519	140,751
16	Transfer to the GF - Insurance	85,000	85,000	86,700	88,434	90,203	92,007	93,847
17	Transfers to the GF - ROI	2,531,300	2,531,300	2,581,926	2,633,565	2,686,236	2,739,961	2,794,760
18	Transfers to the GF - Op Cash	162,300	162,300	165,546	168,857	172,234	175,679	179,192
	Debt Service							
19	Existing Debt Service	620,913	616,556	621,269	624,343	316,031	318,343	-
20	New-Revenue Bonds	-	271,084	703,369	1,089,359	1,569,623	2,127,324	2,988,885
21	New-General Obligation Bonds	-	-	-	-	-	-	-
22	New-SRF Loans	-	26,886	87,380	147,875	147,875	147,875	147,875
23	**Total Debt Service**	620,913	914,526	1,412,018	1,861,577	2,033,528	2,593,541	3,136,759
24	Capital Projects Funded with Cash	4,214,858	2,610,151	-	-	-	-	-
25	**Total Revenue Requirements**	**14,804,347**	**14,961,701**	**13,233,947**	**14,087,640**	**14,679,480**	**15,675,824**	**16,672,537**
26	**Revenues Over (Under) Expenses**	**(955,909)**	**(2,132,503)**	**272,683**	**194,741**	**441,713**	**340,992**	**97,278**
27	Beginning Balance	5,822,811	4,866,902	2,734,400	3,007,083	3,201,824	3,643,537	3,984,529
28	Revenues Over (Under) Expenses	(955,909)	(2,132,503)	272,683	194,741	441,713	340,992	97,278
29	Ending Balance	4,866,902	2,734,400	3,007,083	3,201,824	3,643,537	3,984,529	4,081,807

Table 2-9
Water Fund Cash Flow Forecast - Alternative C (Front Loaded)

Line No.	Description	1 2009	2 2010	3 2011	4 2012	5 2013	6 2014	7 2015
	Revenues							
1	Water Sales Revenue	6,123,252	5,675,000	6,757,302	6,761,356	8,186,150	8,191,062	8,195,976
2	Wholesale Revenues	-	-	-	-	-	-	-
3	Skokie	3,151,537	2,803,000	2,883,714	2,968,125	3,055,295	3,145,322	3,238,310
4	NWWC	3,691,778	3,727,000	3,825,683	3,928,885	4,035,460	4,145,529	4,259,219
5	Miscellaneous Revenue	619,973	491,176	493,100	495,153	497,342	499,677	502,166
6	Transfer In From DIE Account	-	-	-	-	-	-	-
7	Interest Income	261,898	133,023	102,378	112,900	126,470	137,826	136,084
8	**Total Revenues**	**13,848,438**	**12,829,199**	**14,062,177**	**14,266,420**	**15,900,717**	**16,119,415**	**16,331,756**
	Revenue Requirements							
	Operating Expenditures							
9	Water General Support	646,122	755,700	958,291	996,106	1,035,486	1,076,499	1,119,217
10	Pumping	2,095,533	2,494,100	2,496,948	2,588,034	2,682,652	2,780,949	2,883,077
11	Filtration	1,958,979	2,387,800	2,407,808	2,520,662	2,639,058	2,763,280	2,893,627
12	Distribution	1,228,618	1,513,800	1,651,860	1,717,221	1,785,317	1,856,269	1,930,204
13	Water Meter Maintenance	318,994	349,600	370,407	385,316	400,860	417,069	433,972
14	Other Operations	825,830	1,036,600	977,872	999,435	1,021,491	1,044,052	1,067,131
15	**Subtotal**	7,074,076	8,537,599	8,863,186	9,206,775	9,564,864	9,938,117	10,327,227
16	Capital Outlay	115,900	120,826	124,571	128,433	132,414	136,519	140,751
16	Transfer to the GF - Insurance	85,000	85,000	86,700	88,434	90,203	92,007	93,847
17	Transfers to the GF - ROI	2,531,300	2,531,300	2,581,926	2,633,565	2,686,236	2,739,961	2,794,760
18	Transfers to the GF - Op Cash	162,300	162,300	165,546	168,857	172,234	175,679	179,192
	Debt Service							
19	Existing Debt Service	620,913	616,556	621,269	624,343	316,031	318,343	-
20	New-Revenue Bonds	-	271,084	662,301	1,048,292	1,463,601	1,979,364	2,840,926
21	New-General Obligation Bonds	-	-	-	-	-	-	-
22	New-SRF Loans	-	26,886	87,380	147,875	147,875	147,875	147,875
23	**Total Debt Service**	620,913	914,526	1,370,951	1,820,510	1,927,506	2,445,582	2,988,800
24	Capital Projects Funded with Cash	4,214,858	2,610,151	487,901	-	771,686	498,237	-
25	**Total Revenue Requirements**	**14,804,347**	**14,961,701**	**13,680,781**	**14,046,573**	**15,345,144**	**16,026,102**	**16,524,578**
26	**Revenues Over (Under) Expenses**	**(955,909)**	**(2,132,503)**	**381,397**	**219,847**	**555,573**	**93,313**	**(192,822)**
27	Beginning Balance	5,822,811	4,866,902	2,734,400	3,115,796	3,335,643	3,891,216	3,984,529
28	Revenues Over (Under) Expenses	(955,909)	(2,132,503)	381,397	219,847	555,573	93,313	(192,822)
29	Ending Balance	4,866,902	2,734,400	3,115,796	3,335,643	3,891,216	3,984,529	3,791,707

If the annual water main projects were to be funded entirely on a pay-as-you-go basis, rather than debt financing these projects, the necessary annual water rate increases that would be needed in each year of the forecast period under Alternatives A through C are presented in Table 2-10 below.

Table 2-10
Annual Water Rate Revenue Increase Alternatives Assuming Water Main Projects Funded Entirely on a Pay-As-You-Go Basis

	Fiscal year					
Description	2010	2011	2012	2013	2014	2015
Alternative A – Just-in-Time	3.1%	52.9%	5.6%	2.3%	3.2%	6.0%
Alternative B - Smoothed	24.8%	24.7%	4.3%	4.3%	4.3%	4.3%
Alternative C – Front Loaded	0.0%	64.0%	0.0%	12.0%	0.0%	0.0%

2.8. Revenue and Expense Projections – Sewer Fund

The City's Sewer Fund revenues and expenditures from fiscal year 2003 through 2007 were reviewed along with information provided by the City related to future capital and O&M programs to forecast revenues and expenditures from fiscal year 2009 through 2015, and to determine the need for future rate adjustments.

2.9. Revenues

Historical sewer revenues include revenues from sewer service charges and other miscellaneous revenues. These revenues are used to recover the costs of operating and maintaining the sewer utility and providing service to existing and new customers.

Projected revenues were based upon historical information, discussions of revenue trends with City management, and projections of customer growth rates. Customer growth rates were forecasted based upon a review of historical billed flow; amount of historical revenue collected from City's retail, residential, commercial, and industrial customers; and discussions with the City regarding the expected customer growth rates in the future. Projected sewer revenues are provided in Tables 2-12 through 2-14 at the end of this section.

Other miscellaneous sewer revenues, including penalties, were projected to remain at the 2008 revenue levels. Interest income was calculated based upon the average annual fund balance and an interest earning rate of 4 percent per annum.

2.10. Expenditures

Sewer system expenditures include: operating expenses (personnel, professional, internal services, materials and supplies, travel and expense, vehicle fuel/repair, contract services, utilities, insurance, rentals, advertising and printing, equipment, and other expenses), debt service, and capital outlay. A detailed projection of operating expenditures was developed based upon discussions with the City regarding system operational changes, historical cost trends, and anticipated future sewer flows. Based upon an analysis of this information, the following operating expense projections were made, as shown in Table 2-11.

Table 2-11
Operating Expense Projection Assumptions

Expense Category	Annual % Increase	Basis / Rationale
Personal	4.0	Historical trends.
Fringe Benefits	6.0	Historical trends.
Materials and Supplies	3.0	Projected cost inflation.
Utilities	3.0	Projected based upon historical power consumption trends, utility costs, and anticipated customer growth.
Chemicals	6.0	Historical trends and anticipated future cost increases.
All other	3.0	Projected cost inflation.

A detailed projection of non-operating expenditures was developed based upon a review of the City's existing debt obligations, discussions with the City regarding anticipated capital outlay requirements, and historical cost trends. Based upon an analysis of this information, the following non-operating expense projections were made:

- The City's existing debt repayment obligations over the forecast period will consist of repayment of sewer IEPA loans and General Obligation bonds. It is anticipated that the City will finalize an additional loan with IEPA in fiscal year 2009. However, no additional debt financing of capital projects is anticipated over the forecast period.
- Capital outlay is projected to increase at an inflationary rate over the forecast period. Capital Outlay includes furniture and fixtures.

2.11. Financial Plan Alternatives – Sewer Fund

Several financial plan alternatives were considered to support the funding of the City's sewer capital improvement plan and its operation and maintenance expenses to achieve the City's financial policy targets over the forecast period. These alternatives consider the overall rate revenue increase requirements to meet these objectives, and do not

specifically consider the individual rate component that will be adjusted to generate the necessary revenue under each alternative. Financial plan alternatives are summarized below. Specific rate component recommendations are provided in Section 4.

Alternative A consists of implementing rate increases to correspond with projected annual revenue requirements on a "just-in-time" basis. Alternative B consists of smoothing the rate increases over the forecast period. Alternative C consists of implementing a sewer rate increase in fiscal year 2011. Since repayment of some of the IEPA loans will be completed in fiscal year 2014, each alternative provides for sewer rate reductions in fiscal years 2014 and 2015. A summary table illustrating the resulting rate revenue increase requirements under the three alterative financial plans is provided in Table 2-12 below. Figures 2-5 through 2-7 present the financial model "dashboard" results, and Tables 2-13 through 2-16 provide the cash flow projections under each alternative.

Table 2-12
Annual Sewer Rate Revenue Increase Alternatives

	Fiscal year					
Description	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Alternative A – Just-in-Time	3.5%	22.0%	2.0%	0.0%	-8.0%	-12.0%
Alternative B - Smoothed	10.0%	10.0%	5.8%	0.9%	-8.0%	-12.0%
Alternative C – Front Loaded	0.0%	29.5%	0.0%	0.0%	-8.0%	-12.0%

Each of these alternatives reflects the overall rate revenue requirements necessary to meet City's objectives over the forecast period.

Figure 2-5: Sewer Fund Financial Model Dashboard – Alternative A (Just-In-Time)

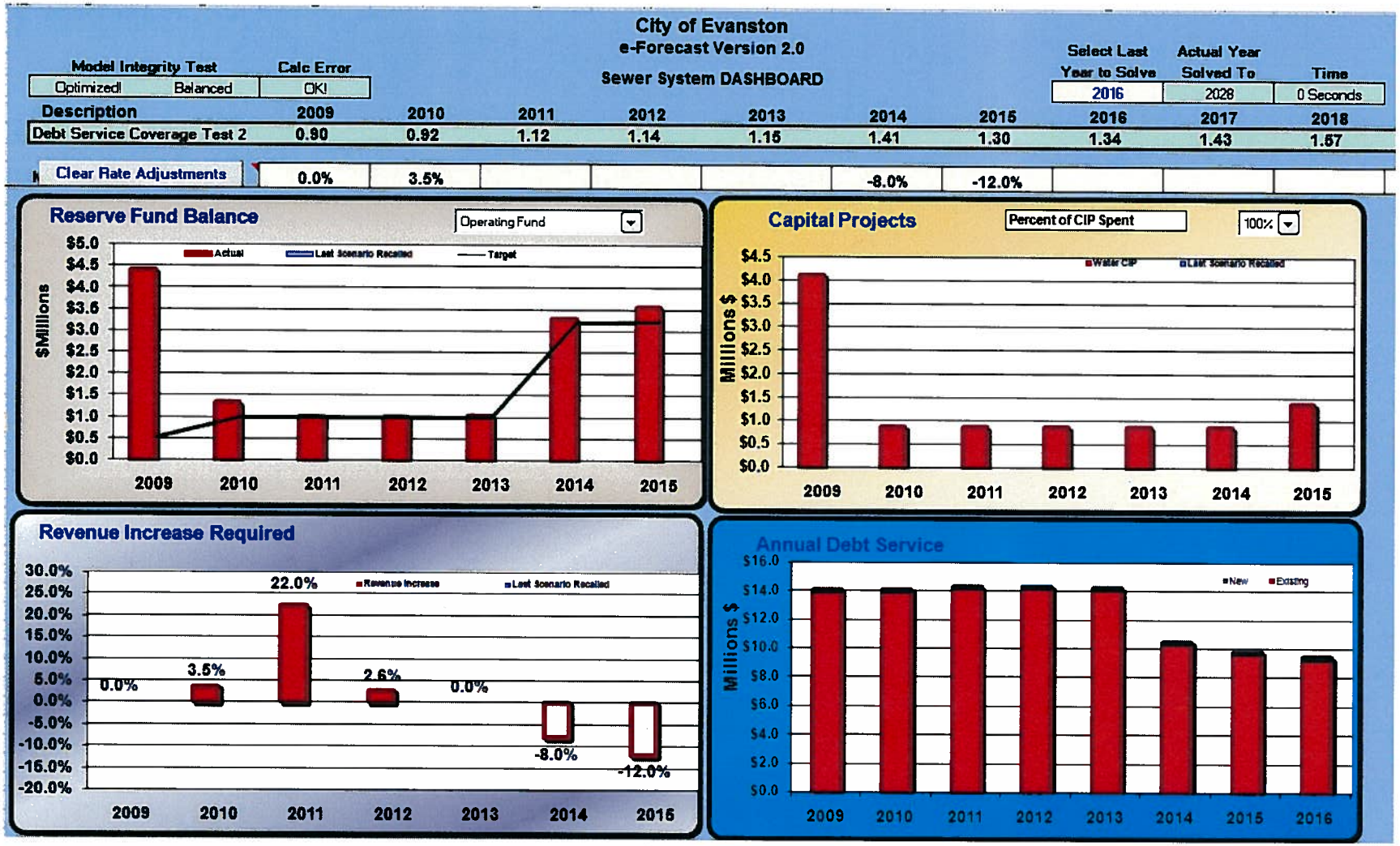


Figure 2-6: Sewer Fund Financial Model Dashboard – Alternative B (Smoothed)

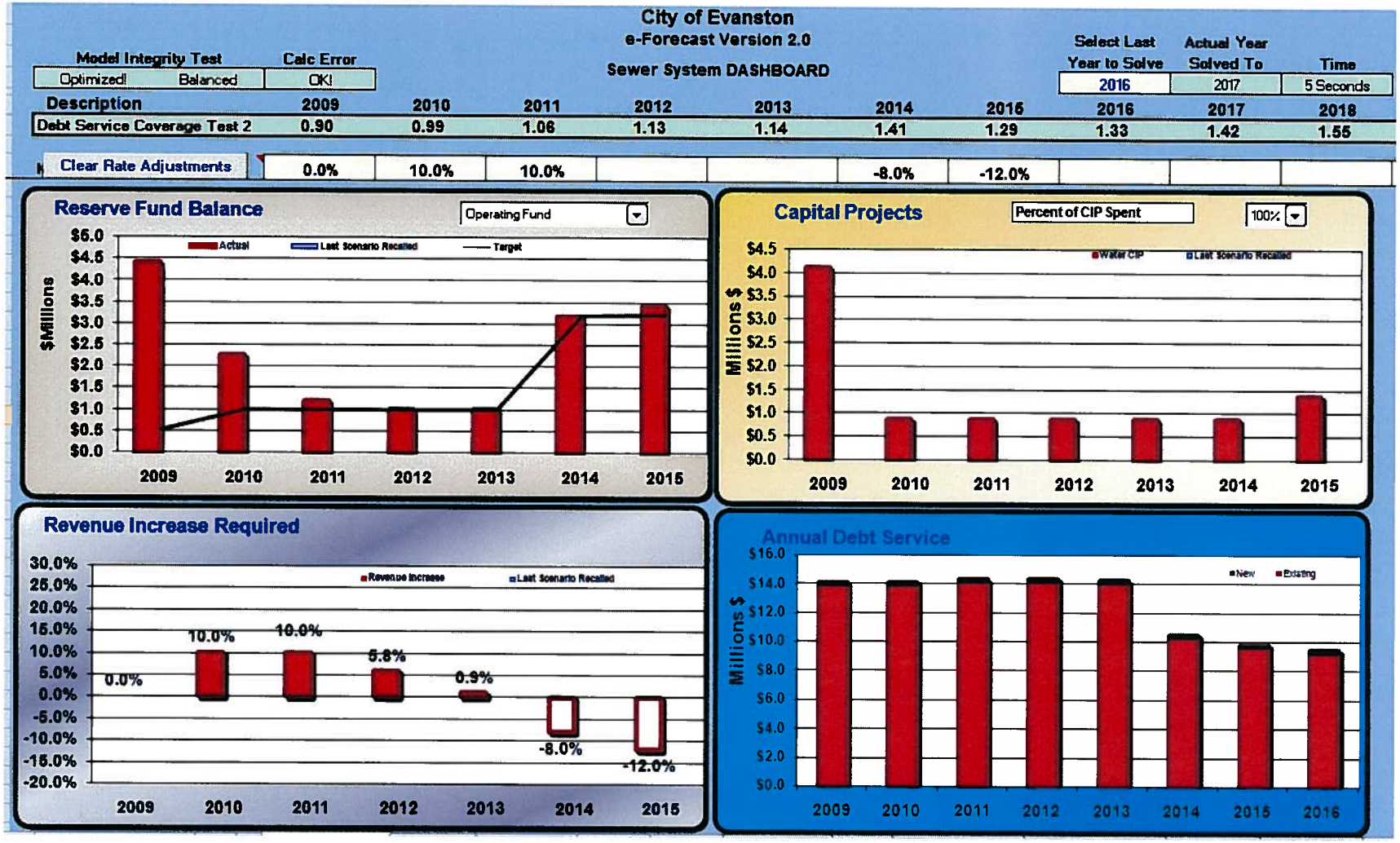


Figure 2-7: Sewer Fund Financial Model Dashboard – Alternative C (Front Loaded)

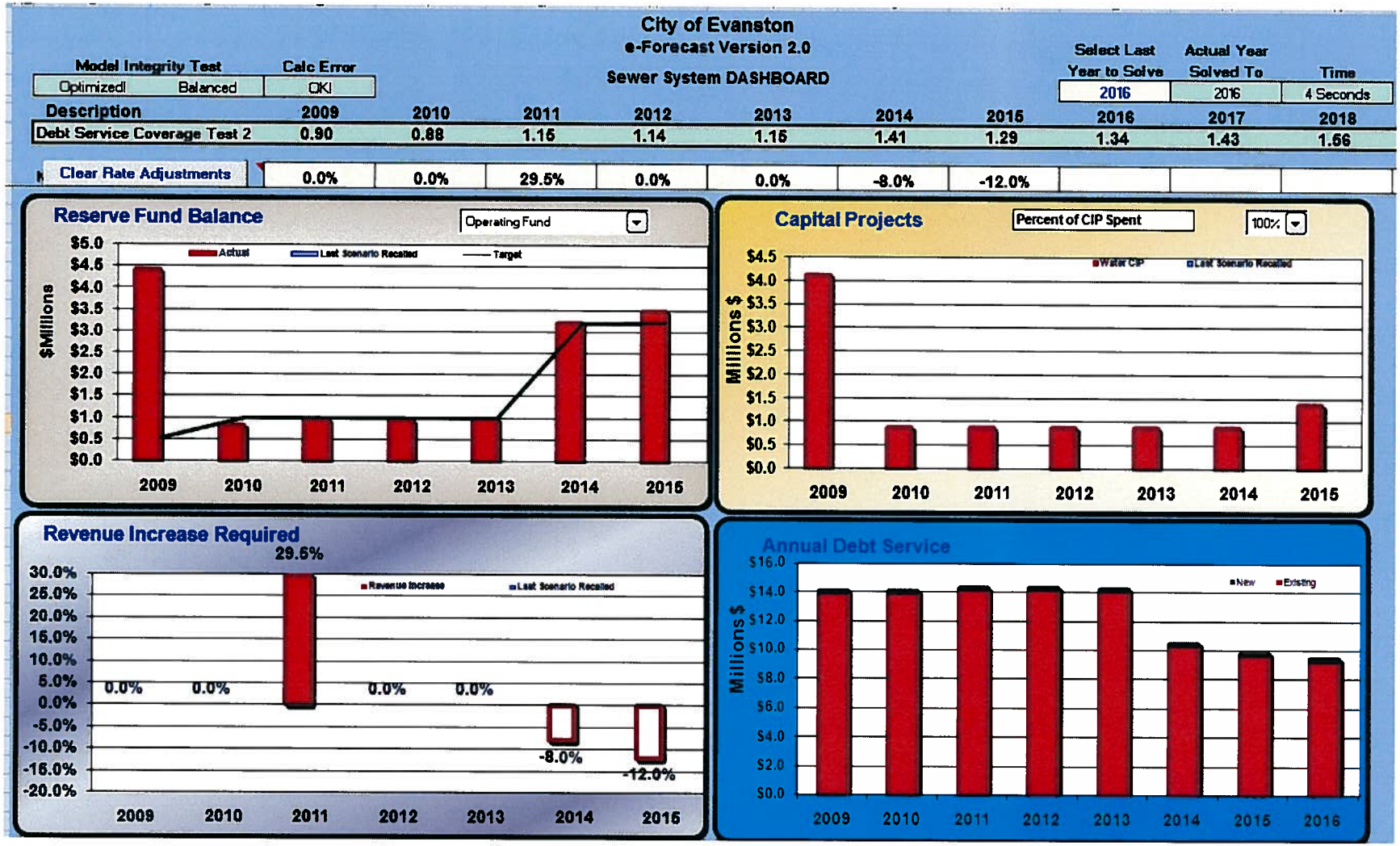


Table 2-13
Sewer Fund Cash Flow Forecast - Alternative A (Just-in-Time)

Line No.	Description	1 2009	2 2010	3 2011	4 2012	5 2013	6 2014	7 2015
	Revenues							
1	Sewer Sales Revenue	14,231,468	14,773,758	18,076,150	18,601,474	18,657,278	17,216,190	15,195,698
2	Miscellaneous Revenue	205,367	205,285	205,203	205,121	205,039	204,957	204,875
3	Interest Income	182,280	86,127	34,977	30,000	30,739	65,083	103,022
4	**Total Revenues**	**14,619,114**	**15,065,169**	**18,316,330**	**18,836,594**	**18,893,056**	**17,486,230**	**15,503,595**
	Revenue Requirements							
7	**Operating Expenditures**							
8	Sewer Maintenance	1,772,124	1,889,600	2,117,999	2,202,012	2,289,546	2,380,759	2,475,816
9	Sewer and Other Operations	320,851	315,600	367,280	375,347	383,597	392,036	400,667
11	**Subtotal**	2,092,975	2,205,200	2,485,279	2,577,358	2,673,143	2,772,795	2,876,483
12	Capital Outlay	967,300	1,008,410	1,039,671	1,071,901	1,105,130	1,139,389	1,174,710
13	Transfers Out	-	-	-	-	-	-	-
14	Minor Capital Expense	-	-	-	-	-	-	-
	Debt Service							
15	Existing Debt Service	13,952,325	13,991,125	14,184,624	14,248,760	14,126,920	10,395,162	9,724,859
16	New-Revenue Bonds	-	-	-	-	-	-	-
17	New-General Obligation Bonds	-	-	-	-	-	-	-
18	New-SRF Loans	63,575	63,575	63,575	63,575	63,575	63,575	63,575
	Total Debt Service	14,015,900	14,054,700	14,248,199	14,312,335	14,190,495	10,458,737	9,788,434
19	Capital Projects Funded with Cash	875,000	875,000	875,000	875,000	875,000	875,000	1,375,000
20	**Total Revenue Requirements**	**17,951,175**	**18,143,310**	**18,648,149**	**18,836,594**	**18,843,768**	**15,245,921**	**15,214,627**
21	**Revenues Over (Under) Expenses**	**(3,332,061)**	**(3,078,141)**	**(331,819)**	**-**	**49,288**	**2,240,309**	**288,968**
22	Beginning Balance	7,742,021	4,409,960	1,331,819	1,000,000	1,000,000	1,049,288	3,289,597
23	Revenues Over (Under) Expenses	(3,332,061)	(3,078,141)	(331,819)	-	49,288	2,240,309	288,968
24	Ending Balance	4,409,960	1,331,819	1,000,000	1,000,000	1,049,288	3,289,597	3,578,564

Table 2-14
Sewer Fund Cash Flow Forecast - Alternative B (Smoothed)

Line No.	Description	1 2009	2 2010	3 2011	4 2012	5 2013	6 2014	7 2015
	Revenues							
1	Sewer Sales Revenue	14,231,468	15,701,578	17,323,551	18,391,796	18,608,729	17,171,391	15,156,157
2	Miscellaneous Revenue	205,367	205,285	205,203	205,121	205,039	204,957	204,875
3	Interest Income	182,280	100,256	52,205	33,099	30,000	62,900	99,488
4	**Total Revenues**	**14,619,114**	**16,007,119**	**17,580,959**	**18,630,015**	**18,843,768**	**17,439,248**	**15,460,519**
	Revenue Requirements							
7	**Operating Expenditures**							
8	Sewer Maintenance	1,772,124	1,889,600	2,117,999	2,202,012	2,289,546	2,380,759	2,475,816
9	Sewer and Other Operations	320,851	315,600	367,280	375,347	383,597	392,036	400,667
11	**Subtotal**	2,092,975	2,205,200	2,485,279	2,577,358	2,673,143	2,772,795	2,876,483
12	Capital Outlay	967,300	1,008,410	1,039,671	1,071,901	1,105,130	1,139,389	1,174,710
13	Transfers Out	-	-	-	-	-	-	-
14	Minor Capital Expense	-	-	-	-	-	-	-
	Debt Service							
15	Existing Debt Service	13,952,325	13,991,125	14,184,624	14,248,760	14,126,920	10,395,162	9,724,859
16	New-Revenue Bonds	-	-	-	-	-	-	-
17	New-General Obligation Bonds	-	-	-	-	-	-	-
18	New-SRF Loans	63,575	63,575	63,575	63,575	63,575	63,575	63,575
	Total Debt Service	14,015,900	14,054,700	14,248,199	14,312,335	14,190,495	10,458,737	9,788,434
19	Capital Projects Funded with Cash	875,000	875,000	875,000	875,000	875,000	875,000	1,375,000
20	**Total Revenue Requirements**	**17,951,175**	**18,143,310**	**18,648,149**	**18,836,594**	**18,843,768**	**15,245,921**	**15,214,627**
21	**Revenues Over (Under) Expenses**	**(3,332,061)**	**(2,136,191)**	**(1,067,190)**	**(206,579)**	**0**	**2,193,326**	**245,892**
22	Beginning Balance	7,742,021	4,409,960	2,273,769	1,206,579	1,000,000	1,000,000	3,193,326
23	Revenues Over (Under) Expenses	(3,332,061)	(2,136,191)	(1,067,190)	(206,579)	0	2,193,326	245,892
24	Ending Balance	4,409,960	2,273,769	1,206,579	1,000,000	1,000,000	3,193,326	3,439,219

Table 2-15
Sewer Fund Cash Flow Forecast - Alternative C (Front Loaded)

Line No.	Description	1 2009	2 2010	3 2011	4 2012	5 2013	6 2014	7 2015
	Revenues							
1	Sewer Sales Revenue	14,231,468	14,274,162	18,540,495	18,596,117	18,651,905	17,211,232	15,191,322
2	Miscellaneous Revenue	205,367	205,285	205,203	205,121	205,039	204,957	204,875
3	Interest Income	182,280	78,519	26,601	28,358	28,884	63,014	100,748
4	**Total Revenues**	**14,619,114**	**14,557,966**	**18,772,298**	**18,829,595**	**18,885,827**	**17,479,202**	**15,496,944**
	Revenue Requirements							
7	**Operating Expenditures**							
8	Sewer Maintenance	1,772,124	1,889,600	2,117,999	2,202,012	2,289,546	2,380,759	2,475,816
9	Sewer and Other Operations	320,851	315,600	367,280	375,347	383,597	392,036	400,667
11	**Subtotal**	2,092,975	2,205,200	2,485,279	2,577,358	2,673,143	2,772,795	2,876,483
12	Capital Outlay	967,300	1,008,410	1,039,671	1,071,901	1,105,130	1,139,389	1,174,710
13	Transfers Out	-	-	-	-	-	-	-
14	Minor Capital Expense	-	-	-	-	-	-	-
	Debt Service							
15	Existing Debt Service	13,952,325	13,991,125	14,184,624	14,248,760	14,126,920	10,395,162	9,724,859
16	New-Revenue Bonds	-	-	-	-	-	-	-
17	New-General Obligation Bonds	-	-	-	-	-	-	-
18	New-SRF Loans	63,575	63,575	63,575	63,575	63,575	63,575	63,575
	Total Debt Service	14,015,900	14,054,700	14,248,199	14,312,335	14,190,495	10,458,737	9,788,434
19	Capital Projects Funded with Cash	875,000	875,000	875,000	875,000	875,000	875,000	1,375,000
20	**Total Revenue Requirements**	**17,951,175**	**18,143,310**	**18,648,149**	**18,836,594**	**18,843,768**	**15,245,921**	**15,214,627**
21	**Revenues Over (Under) Expenses**	**(3,332,061)**	**(3,585,345)**	**124,149**	**(6,999)**	**42,059**	**2,233,281**	**282,317**
22	Beginning Balance	7,742,021	4,409,960	824,615	948,765	941,765	983,825	3,217,106
23	Revenues Over (Under) Expenses	(3,332,061)	(3,585,345)	124,149	(6,999)	42,059	2,233,281	282,317
24	Ending Balance	4,409,960	824,615	948,765	941,765	983,825	3,217,106	3,499,423

3. Cost of Service Evaluation

3.1. Introduction

This section describes the cost of service evaluation that was completed to ensure that the costs associated with water and sewer utility operations and management are allocated equitably across customer classes and to support the development of cost-based rates. The water and sewer cost of service evaluation was completed utilizing the City's existing cost of service model. The City was provided with a Microsoft Excel-based cost of service model at the completion of the 2006 Water and Sewer Rate Studies, which was prepared by Virchow, Krause & Company, LLP. Malcolm Pirnie used this model to prepare an updated cost of service evaluation by inputting updated water demand and revenue requirement information. While we reviewed this model for reasonableness, we did not independently verify all estimates and assumptions contained in the model.

3.2. Water Cost of Service Update

Developing cost-of-service rates for the water utility consisted of three major steps: (1) determination of rate revenue requirements, (2) allocation of rate revenue requirements to customers and (3) development of rates to fully recover the rate revenue requirements. The cost of service study was completed using the base-extra capacity methodology to allocate system costs to the various customer classifications. This is an industry accepted cost allocation methodology. The water cost of service evaluation is summarized below.

3.2.1. Rate Revenue Requirements

The first step in the cost of service process involves the determination of rate revenue requirements. The water financial plan in Section 2 identifies the rate revenue requirements necessary to meet the City's financial and rate objectives. The projections of rate revenue requirements in fiscal year FY10 were used to calculate the cost-of-service-based rates.

3.2.2. Categorization of Water Costs to Functional Components

The next step in the cost of service process involves the allocation of costs to functional categories. Cost allocation is the process of apportioning costs into various cost categories for subsequent distribution to customer classes based upon their service characteristics. This section describes the process that was completed to apportion water system costs into functional categories.

Water costs were categorized into seven different functional cost components. These categories are shown below:

- Base or Average Day Costs
- Maximum Day Extra Capacity Costs
- Maximum Hour Extra Capacity Costs
- Customer Costs (Including meters, services and customer billing)
- Public Fire Protection

The revenues anticipated to be generated from providing wholesale water service to the Northwest Water Commission and the Village of Skokie were subtracted from the overall rate revenue requirement for the purposes of allocating the remaining costs to retail customers.

The categorization of costs into average demand, maximum day demand, maximum hour demand, customer costs, and public fire protection categories were based on the categorizations contained in the City's existing cost of service model. These categorizations were considered to be generally reasonable.

3.2.3. Water Capital Cost Allocation

The City's existing cost of service model allocates annual capital costs utilizing capital cost allocation factors that were developed based on the value of the City's fixed assets. Water system assets were categorized into various functional categories including source of supply, pumping plant, transmission and distribution, and general plant. Fixed asset information was obtained from the City's 2004-2005 fixed asset records. A summary of the allocation of the annualized capital costs to functional cost components is provided in Appendix B.

Based on the capital costs categories described above, overall percentages of capital facilities in each functional category were developed. These allocation percentages were used in each year of the forecast period to allocate the capital component of the revenue requirement to functional cost components. The calculated capital cost allocation factors are summarized in Table 3-1 below.

Table 3-1
Summary of Capital Cost Allocation Factors

	Extra-Capacity		Customer Costs			
Base Cost	Max Day	Max Hour	Billing	Equiv Meter	Equiv Service	Fire Protection
53.5%	21.9%	14.5%	0.0%	5.0%	4.3%	0.7%

3.2.4. Water Operation and Maintenance Cost Allocation

Water system O&M costs were categorized into the seven functional cost components as described above to recognize the costs incurred to handle water flow, water demand peaking, billing, equivalent meter service and fire protection. The percent allocation of these costs to each of the allocation factors was kept consistent with the City's existing cost of service model. Detailed projected cost information for fiscal year FY10 was used to develop the allocation factors. A summary of the O&M cost allocations is provided in Table 3-2.

Table 3-2
Summary of O&M Cost Allocation Factors

	Extra-Capacity		Customer Costs			
Base Cost	Max Day	Max Hour	Billing	Equiv Meter	Equiv Service	Fire Protection
63.3%	18.7%	7.4%	7.9%	2.2%	0.2%	0.4%

3.2.5. Allocation of Water System Costs to Customer Classes

The categorized water system costs were then allocated to each customer class based upon the service characteristics of each class. Units of service are the number of units for each customer classification that correspond to the functional categories discussed above. The units include the volume of water used by each customer class, the maximum-day and maximum-hour demands for each class, the number of equivalent meters and services, and the number of customer bills for each class. This information was obtained from the City's billing records and water system-related reports. The total projected units of service by customer class is summarized in Table 3-3, and detailed in Appendix B.

3.2.6. Water Unit Cost of Service

The unit cost of service was calculated for each of the functional categories described above. The unit costs were determined by dividing the cost allocated to each functional category by the total number of units of service anticipated in fiscal year FY10. The unit costs were used to determine cost-based rates for each of the Department's customer classifications. Table 3-3 summarizes the calculation of the unit cost of service. Additional detail is provided in Appendix B.

Table 3-3
Units and Unit Cost of Service for the Water System

	Total Cost (A)	Extra Capacity Demand: Maximum Day	Extra Capacity Demand: Maximum Hour	Base (Volume)	Customer Costs: Equivalent Meters	Customer Costs: Equivalent Services	Customer Costs: Customer Billing (D)	Fire Protection
Unit cost of svc ($/unit)		$ 0.43850	$ 3.05169	$ 0.009	$ 17.67750	$ 10.84458	$ 0.09066	
Residential:								
Units of service (B)		857,725	64,979	113,830,000	11,499	10,935	64,696	
Allocated cost of service	$ 1,914,200	376,100	198,300	1,012,000	203,300	118,600	5,900	
Multi-Family:								
Units of service (B)		946,550	71,708	125,620,000	5,781	3,362	15,277	
Allocated cost of service	1,890,800	415,100	218,800	1,116,800	102,200	36,500	1,400	
Commercial:								
Units of service (B)		730,590	45,299	126,990,000	3,773	1,571	5,674	
Allocated cost of service	1,671,600	320,400	138,200	1,128,800	66,700	17,000	500	
Industrial:								
Units of service (B)		7,590	412	1,670,000	121	57	210	
Allocated cost of service	22,200	3,300	1,300	14,900	2,100	600	0	
School:								
Units of service (B)		34,860	2,161	6,060,000	277	83	174	
Allocated cost of service	81,600	15,300	6,600	53,900	4,900	900	0	
Fire Protection: (C)								
Units of service (B)		16,043	8,021	3,741,700				
Allocated cost of service	94,600	7,000	24,500	33,400	-	-	-	29,700
Total:								
Units of service		2,593,358	192,582	377,911,700	21,451	16,008	86,031	0
Allocated cost of service	$ 5,675,000	$ 1,137,200	$ 587,700	$ 3,359,800	$ 379,200	$ 173,600	$ 7,800	$ 29,700

3.2.7. Allocation of Costs to Customer Classifications

The total cost of service was calculated for each customer class to estimate the proportion of costs attributable to each customer class and to determine cost-of-service based rates. The total cost of service for each customer class is summarized in Table 3-3.

3.2.8. Water Cost of Service Results

The results of the water cost of service analysis indicate that a uniform rate charged to each of the City's customer classes is generally appropriate. However, some customer classes, such as universities and schools may have higher seasonal peaking than other customer classes within the City, resulting in higher costs to serve these customers. In addition, the cost of service results indicate that the proportion of revenue generated from the volumetric and minimum charge component of the rate structure is generally reasonable based on the allocation of costs, and no significant rate restructuring is necessary at this time. A comparison of the current and calculated and cost-of-service

rates for each rate component is summarized on Table 3-4. Additional detail is provided in Appendix B.

Table 3-4
Cost of Service versus Current Rates for the Water System

Rate Component	Calculated Rates	Current Rates
Volume Charge	$ 1.54 /00 CF	$ 1.52 /00 CF
Meter Size		
5/8	$ 4.80 /Bi-Monthly	$ 5.40 /Bi-Monthly
3/4	4.80 /Bi-Monthly	5.40 /Bi-Monthly
1	9.80 /Bi-Monthly	10.80 /Bi-Monthly
1 1/2	18.40 /Bi-Monthly	20.20 /Bi-Monthly
2	29.10 /Bi-Monthly	31.80 /Bi-Monthly
3	51.50 /Bi-Monthly	56.00 /Bi-Monthly
4	82.80 /Bi-Monthly	89.70 /Bi-Monthly
6	147.40 /Bi-Monthly	158.20 /Bi-Monthly
8	248.40 /Bi-Monthly	267.80 /Bi-Monthly

3.3. Sewer Cost of Service

As described in Section 1, the City's existing retail sewer rate structure consists of a uniform rate by customer class. Based on a review of the City's customer classes and sewer cost categories, sewer costs were considered "common to all" customers. Therefore, a detailed allocation of costs to customer classes was not necessary for the sewer system. Instead, sewer rate revenue requirements were estimated over the forecast period as described in Section 2. Sewer rate recommendations are provided in Section 4.

3.4. Water and Sewer Rate Comparisons

A water and sewer rate survey was completed to compare the City's water and sewer rates to other nearby communities. A summary of the survey results are provided in Figures 3-1 through 3-3. The results indicate that the combined water and sewer bill for the City's "typical" residential customer who uses 10,600 cubic feet of water per year is in the mid- to high-range compared with the cost of other surveyed water and sewer communities. However, it is important to note that the comparison does not consider potential differences of each water and sewer system, such as the concentration of customer base, condition of the water and sewer system assets, level of capital reinvestment, or the amount of costs recovered through ancillary fees. These differences make comparing utility rates among communities difficult.

Figure 3-1: Residential Water Cost Comparison

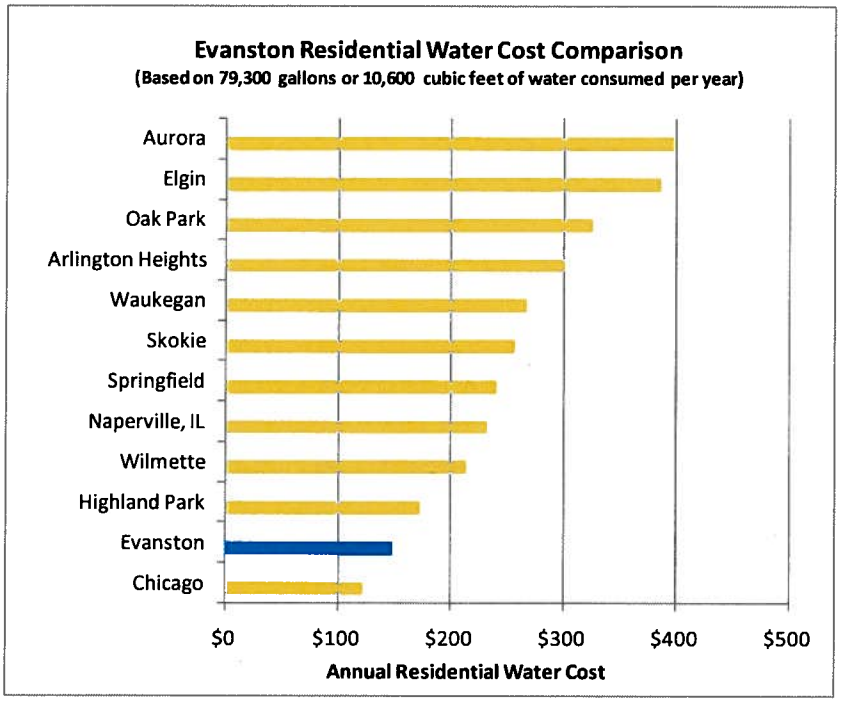


Figure 3-2: Residential Sewer Cost Comparison

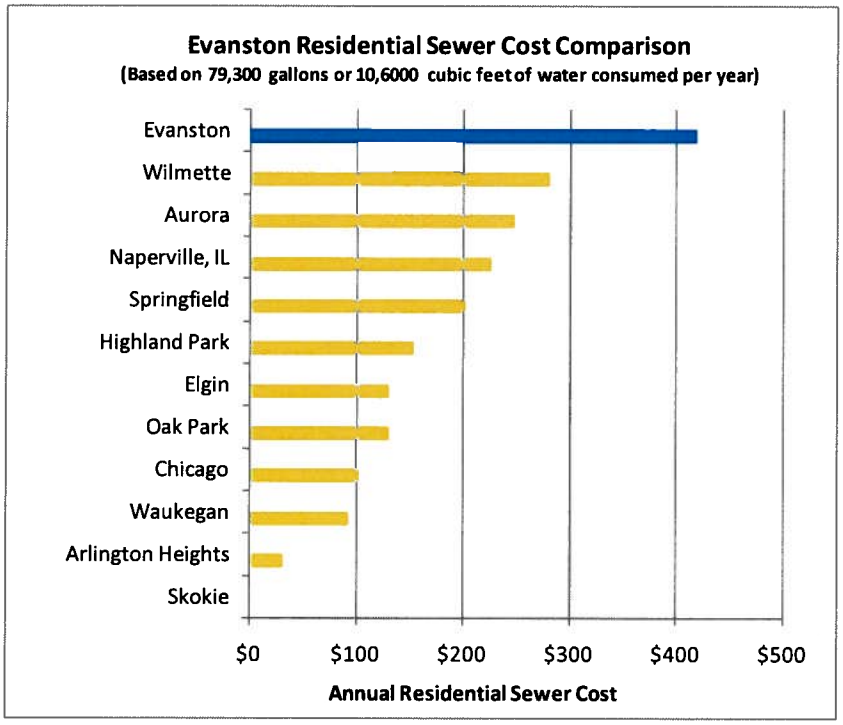
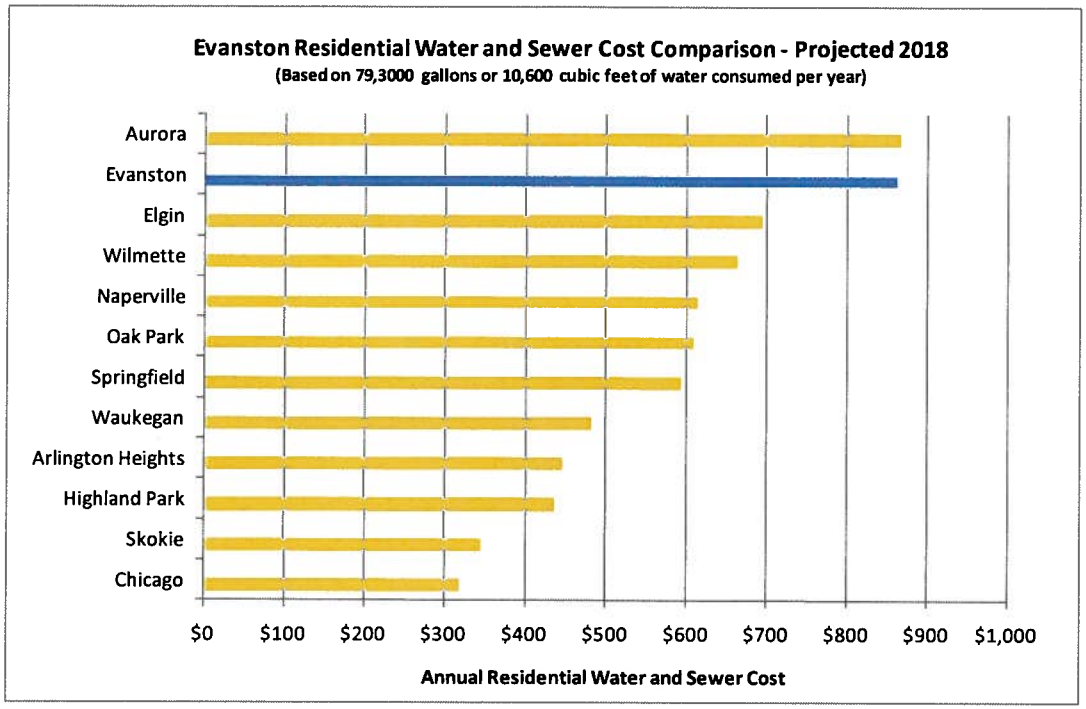


Figure 3-3: Combined Residential Water and Sewer Cost Comparison



4. Rate Recommendations

As discussed in Section 1, the City's existing water rate structure consists of a uniform metered rate with a minimum charge, and the sewer rate structure consists of a uniform rate. This is a common rate structure that charges each customer the same amount for each unit of water consumed. Assuming that the City decides to stay with its existing rate structure, if the City proceeds with Alternative A (Just-in-Time Rate Increases), then it is recommended that the water and sewer rates be established at the levels show in Table 4-1. If the City proceeds with Alternative B (Smoothed Rate Increases), then it is recommended that the water and sewer rates be established at the levels shown in Tables 4-3. If the City decides to proceed with Alternative C (Front Loaded Rate Increases), then it is recommended that the water and sewer rate be established at the levels shown in Table 4-5. In addition, the projected combined annual water and sewer bills for a typical residential customer under Alternatives A through C are provided in Tables 4-2, 4-4 and 4-6.

The City has expressed an interest in considering a tiered rate structure. Under this approach, the unit rate of water would vary with increasing consumption amounts or between customer classes. This type of structure may be established by customer class to reflect the customer classes' demand characteristics, or to encourage water conservation. If the City desires to examine the possibility of implementing a tiered rate, then Malcolm Pirnie recommends that a detailed analysis of bi-monthly billing data be completed in order to further assess customer class seasonal demand characteristics (e.g. seasonal peaking). This will allow the design of tiered rates to reasonably reflect the cost of providing service and meet the City's rate setting objectives. While this level of effort was beyond the scope of this study, analysis of tiered rate structures could be completed in the future at the City's direction.

Table 4-1
Water and Sewer Rate Schedule - Alternative A Just-in-Time

Rate Component	Existing FY09	Proposed FY10	FY11	FY12	FY13	FY14	FY15
Water Rates:							
Volumetric Charge ($ / ccf)	$1.52	$1.52	$1.69	$1.86	$1.97	$2.09	$2.30
Minimum Charge[1]							
5/8"	$5.40	$5.40	$6.00	$6.62	$6.98	$7.44	$8.19
3/4"	$5.40	$5.40	$6.00	$6.62	$6.98	$7.44	$8.19
1"	$10.80	$10.80	$12.00	$13.23	$13.96	$14.88	$16.37
1-1/2"	$20.20	$20.20	$22.44	$24.75	$26.12	$27.84	$30.62
2"	$31.80	$31.80	$35.33	$38.97	$41.11	$43.83	$48.21
3"	$56.00	$56.00	$62.22	$68.62	$72.40	$77.18	$84.89
4"	$89.70	$89.70	$99.66	$109.92	$115.97	$123.62	$135.98
6"	$158.20	$158.20	$175.76	$193.86	$204.53	$218.02	$239.83
8"	$267.80	$267.80	$297.53	$328.17	$346.22	$369.07	$405.98
Sewer Rates:							
Volumetric Charge ($ / ccf)	$3.94	$4.08	$4.98	$5.07	$5.07	$4.67	$4.11

[1]Includes the first 500 cubic feet of water consumed in each bi-monthly billing period.

Table 4-2
Combined Residential Bill Impact - Alternative A Just-in-Time

Year	Annual Water Cost	Annual Sewer Cost	Total	$ Increase	% Increase
FY09	$ 147.31	$ 417.64	$ 564.95	$ -	0.0%
FY10	147.31	432.26	579.57	14.62	2.6%
FY11	163.71	527.30	691.01	111.44	19.2%
FY12	180.60	541.00	721.60	30.59	4.4%
FY13	190.49	541.00	731.49	9.89	1.4%
FY14	203.04	497.72	700.76	(30.72)	-4.2%
FY15	223.32	437.99	661.31	(39.45)	-5.6%

Based on a residential customer that uses 106 ccf (79,300 gallons) of water per year.

Table 4-3
Water and Sewer Rate Schedule - Alternative B Smoothed

Rate Component	Existing FY09	Proposed FY10	FY11	FY12	FY13	FY14	FY15
Water Rates:							
Volumetric Charge ($ / ccf)	$1.52	$1.52	$1.66	$1.82	$1.98	$2.17	$2.31
Minimum Charge[1]							
5/8"	$5.40	$5.40	$5.90	$6.45	$7.05	$7.69	$8.20
3/4"	$5.40	$5.40	$5.90	$6.45	$7.05	$7.69	$8.20
1"	$10.80	$10.80	$11.80	$12.90	$14.10	$15.39	$16.40
1-1/2"	$20.20	$20.20	$22.08	$24.13	$26.38	$28.78	$30.68
2"	$31.80	$31.80	$34.76	$37.99	$41.52	$45.30	$48.29
3"	$56.00	$56.00	$61.21	$66.90	$73.12	$79.78	$85.04
4"	$89.70	$89.70	$98.04	$107.16	$117.13	$127.78	$136.22
6"	$158.20	$158.20	$172.91	$188.99	$206.57	$225.37	$240.24
8"	$267.80	$267.80	$292.71	$319.93	$349.68	$381.50	$406.68
Sewer Rates:							
Volumetric Charge ($ / ccf)	$3.94	$4.33	$4.77	$5.04	$5.09	$4.68	$4.12

[1]Includes the first 500 cubic feet of water consumed in each bi-monthly billing period.

Table 4-4.
Combined Residential Bill Impact - Alternative B Smoothed

Year	Annual Water Cost	Annual Sewer Cost	Total	$ Increase	% Increase
FY09	$ 147.31	$ 417.64	$ 564.95	$ -	0.0%
FY10	147.31	459.40	606.72	41.76	7.4%
FY11	160.94	505.34	666.28	59.57	9.8%
FY12	175.83	534.90	710.73	44.44	6.7%
FY13	192.09	539.59	731.68	20.95	2.9%
FY14	209.57	496.42	705.99	(25.69)	-3.5%
FY15	223.32	436.85	660.17	(45.82)	-6.5%

Based on a residential customer that uses 106 ccf (79,300 gallons) of water per year.

Table 4-5
Water and Sewer Rate Schedule - Alternative C Front Loaded

Rate Component	Existing FY09	Proposed FY10	FY11	FY12	FY13	FY14	FY15
Water Rates:							
Volumetric Charge ($ / ccf)	$1.52	$1.52	$1.81	$1.81	$2.19	$2.19	$2.19
Minimum Charge[1]							
5/8"	$5.40	$5.40	$6.43	$6.43	$7.78	$7.78	$7.78
3/4"	$5.40	$5.40	$6.43	$6.43	$7.78	$7.78	$7.78
1"	$10.80	$10.80	$12.85	$12.85	$15.55	$15.55	$15.55
1-1/2"	$20.20	$20.20	$24.04	$24.04	$29.09	$29.09	$29.09
2"	$31.80	$31.80	$37.84	$37.84	$45.79	$45.79	$45.79
3"	$56.00	$56.00	$66.64	$66.64	$80.63	$80.63	$80.63
4"	$89.70	$89.70	$106.74	$106.74	$129.16	$129.16	$129.16
6"	$158.20	$158.20	$188.26	$188.26	$227.79	$227.79	$227.79
8"	$267.80	$267.80	$318.68	$318.68	$385.61	$385.61	$385.61
Sewer Rates:							
Volumetric Charge ($ / ccf)	$3.94	$3.94	$5.10	$5.10	$5.10	$4.69	$4.13

[1]Includes the first 500 cubic feet of water consumed in each bi-monthly billing period.

Table 4-6.
Combined Residential Bill Impact - Alternative C Front Loaded

Year	Annual Water Cost	Annual Sewer Cost	Total	$ Increase	% Increase
FY09	$ 147.31	$ 417.64	$ 564.95	$ -	0.0%
FY10	147.31	417.64	564.95	-	0.0%
FY11	175.30	540.84	716.15	151.19	26.8%
FY12	175.30	540.84	716.15	-	0.0%
FY13	212.11	540.84	752.96	36.81	5.1%
FY14	212.11	497.58	709.69	(43.27)	-5.7%
FY15	212.11	437.87	649.98	(59.71)	-8.4%
FY16	247.91	437.87	685.78	35.80	5.5%

Based on a residential customer that uses 106 ccf (79,300 gallons) of water per year.

Appendix A – Financial Modeling Results

Malcolm Pirnie provided the City with a CD containing copies of the financial models used to develop the financial plans for the Water and Sewer Funds. These financial models contain additional detail pertaining to information and assumptions used in developing the financial plans. These models are proprietary and confidential and are not to be resold or otherwise used for secondary commercial gain.

Appendix B - Cost of Service Model Results

Schedule 1
City of Evanston
Water System Revenue Requirement
Proforma - Operating Fund

Line No.	Description	1 2009	2 2010	3 2011	4 2012	5 2013	6 2014	7 2015	8 2016	9 2017	10 2018
	Revenues										
1	Water Sales Revenue	6,123,252	5,675,000	6,757,302	6,761,356	8,186,150	8,191,062	8,195,976	9,751,733	10,487,150	11,257,803
2	Wholesale Revenues	-	-	-	-	-	-	-	-	-	-
3	Skokie	3,151,537	2,803,000	2,883,714	2,968,125	3,055,295	3,145,322	3,238,310	3,334,368	3,433,607	3,536,143
4	NWWC	3,691,778	3,727,000	3,825,683	3,928,885	4,035,460	4,145,529	4,259,219	4,376,661	4,497,992	4,623,354
5	Miscellaneous Revenue	619,973	491,176	493,100	495,153	497,342	499,677	502,166	504,819	507,646	510,658
6	Transfer In From DIE Account	-	-	-	-	-	-	-	-	-	-
7	Interest Income	261,898	133,023	102,378	112,900	126,470	137,826	136,084	137,811	143,014	141,545
8	**Total Revenues**	**13,848,438**	**12,829,199**	**14,062,177**	**14,266,420**	**15,900,717**	**16,119,415**	**16,331,756**	**18,105,393**	**19,069,409**	**20,069,503**
	Revenue Requirements										
	Operating Expenditures										
9	Water General Support	646,122	755,700	958,291	996,106	1,035,486	1,076,499	1,119,217	1,163,714	1,210,069	1,258,364
10	Pumping	2,095,533	2,494,100	2,496,948	2,588,034	2,682,652	2,780,949	2,883,077	2,989,198	3,099,479	3,214,096
11	Filtration	1,958,979	2,387,800	2,407,808	2,520,662	2,639,058	2,763,280	2,893,627	3,030,416	3,173,980	3,324,669
12	Distribution	1,228,618	1,513,800	1,651,860	1,717,221	1,785,317	1,856,269	1,930,204	2,007,257	2,087,566	2,171,279
13	Water Meter Maintenance	318,994	349,600	370,407	385,316	400,860	417,069	433,972	451,600	469,987	489,168
14	Other Operations	825,830	1,036,600	977,872	999,435	1,021,491	1,044,052	1,067,131	1,090,739	1,114,889	1,139,595
15	**Subtotal**	7,074,076	8,537,599	8,863,186	9,206,775	9,564,864	9,938,117	10,327,227	10,732,923	11,155,970	11,597,170
16	Capital Outlay	115,900	120,826	124,571	128,433	132,414	136,519	140,751	145,115	149,613	154,251
17	Transfer to the GF - Insurance	85,000	85,000	86,700	88,434	90,203	92,007	93,847	95,724	97,638	99,591
18	Transfers to the GF - ROI	2,531,300	2,531,300	2,581,926	2,633,565	2,686,236	2,739,961	2,794,760	2,850,655	2,907,668	2,965,821
19	Transfers to the GF - Op Cash	162,300	162,300	165,546	168,857	172,234	175,679	179,192	182,776	186,432	190,160
	Debt Service										
20	Existing Debt Service	620,913	616,556	621,269	624,343	316,031	318,343	-	-	-	-
21	New-Revenue Bonds	-	271,084	662,301	1,048,292	1,463,601	1,979,364	2,840,926	3,658,802	4,418,451	5,004,334
22	New-General Obligation Bonds	-	-	-	-	-	-	-	-	-	-
23	New-SRF Loans	-	26,886	87,380	147,875	147,875	147,875	147,875	147,875	147,875	147,875
24	**Total Debt Service**	620,913	914,526	1,370,951	1,820,510	1,927,506	2,445,582	2,988,800	3,806,676	4,566,326	5,152,208
25	Capital Projects Funded with Cash	4,214,858	2,610,151	487,901	-	771,686	498,237	-	-	0	-
26	**Total Revenue Requirements**	**14,804,347**	**14,961,701**	**13,680,781**	**14,046,573**	**15,345,144**	**16,026,102**	**16,524,578**	**17,813,869**	**19,063,647**	**20,159,203**
27	**Revenues Over (Under) Expenses**	**(955,909)**	**(2,132,503)**	**381,397**	**219,847**	**555,573**	**93,313**	**(192,822)**	**291,524**	**5,762**	**(89,700)**

CITY OF EVANSTON WATER UTILITY
Sales Forecast
Actual 07/08 - Forecasted 13/14

Schedule 3c

		Actual 2004-2005	Actual 2005-2006	Actual 2006-2007	Actual 2007-2008	Forecasted 2008-2009	Forecasted 2009-2010	Forecasted 2010-2011	Forecasted 2011-2012	Forecasted 2012-2013	Forecasted 2013-2014
Residential											
Total Consumption (00 ccf)		1,148,402	1,339,168	1,133,243	1,125,593	1,134,200	1,138,300	1,142,300	1,146,400	1,150,500	1,154,600
Less: Consumption Included in Min. Chg	(E)	(378,349)	(379,991)	(381,419)	(382,490)	(383,561)	(384,941)	(386,322)	(387,702)	(389,082)	(390,463)
Net consumption		770,053	959,177	751,824	743,103	750,639	753,359	755,978	758,698	761,418	764,137
Number of Meters		10,598	10,644	10,684	10,714	10,744	10,783	10,821	10,860	10,899	10,937
Ave cons/Cust/Month (00 ccf)	(A)	9.03	10.48	8.84	8.75	8.80	8.80	8.80	8.80	8.80	8.80
Percentage Change in Consumption			16.61%	-15.38%	-0.68%	0.76%	0.36%	0.35%	0.36%	0.36%	0.36%
Annual Increase (Decrease) in Meters	(D)		46	40	30	30	39	39	39	39	39
Commercial											
Total Consumption (00 ccf)		1,318,236	1,274,447	1,275,840	1,240,591	1,264,500	1,269,900	1,275,300	1,280,600	1,286,000	1,291,400
Less: First 700 cf included in min. charge	(E)	(33,380)	(33,522)	(33,701)	(33,558)	(33,618)	(33,760)	(33,903)	(34,046)	(34,189)	(34,332)
Net consumption		1,284,857	1,240,925	1,242,139	1,207,033	1,230,883	1,236,140	1,241,397	1,246,554	1,251,811	1,257,069
Number of Meters		935	939	944	940	942	946	950	954	958	962
Ave cons/Cust/Month (00 ccf)	(A)	117.49	113.10	112.63	109.98	111.90	111.90	111.90	111.90	111.90	111.90
Percentage Change in Consumption			-3.32%	0.11%	-2.76%	1.93%	0.43%	0.43%	0.42%	0.42%	0.42%
Annual Increase (Decrease) in Meters	(A)		4	5	(4)	2	4	4	4	4	4
Industrial											
Total Consumption (00 ccf)		22,010	20,190	16,840	16,579	16,700	16,700	16,700	16,700	16,700	16,700
Less: First 700 cf included in min. charge	(E)	(1,392)	(1,321)	(1,250)	(1,250)	(1,250)	(1,250)	(1,250)	(1,250)	(1,250)	(1,250)
Net consumption		20,618	18,869	15,591	15,330	15,451	15,451	15,451	15,451	15,451	15,451
Number of Meters		39	37	35	35	35	35	35	35	35	35
Ave cons/Cust/Month (00 ccf)	(C)	47.03	45.47	40.10	39.47	39.78	39.78	39.78	39.78	39.78	39.78
Percentage Change in Consumption			-8.27%	-16.59%	-1.55%	0.73%	0.00%	0.00%	0.00%	0.00%	0.00%
Annual Increase (Decrease) in Meters	(B)		(2)	(2)	0	0	0	0	0	0	0
School											
Total Consumption (00 ccf)		53,375	61,133	53,918	53,324	60,600	60,600	60,600	60,600	60,600	60,600
Less: First 700 cf included in min. charge	(E)	(964)	(928)	(928)	(1,035)	(1,035)	(1,035)	(1,035)	(1,035)	(1,035)	(1,035)
Net consumption		52,411	60,205	52,990	52,289	59,565	59,565	59,565	59,565	59,565	59,565
Number of Meters		27	26	26	29	29	29	29	29	29	29
Ave cons/Cust/Month (00 ccf)	(A)	164.74	195.94	172.81	153.23	173.99	173.99	173.99	173.99	173.99	173.99
Percentage Change in Consumption			14.53%	-11.80%	-1.10%	13.64%	0.00%	0.00%	0.00%	0.00%	0.00%
Annual Increase (Decrease) in Meters	(A)		(1)	0	3	0	0	0	0	0	0
City											
Total Consumption (00 ccf)		13,743	15,318	14,710	14,765	15,100	15,100	15,100	15,100	15,100	15,100
Less: First 700 cf included in min. charge	(E)	(964)	(964)	(1,071)	(1,035)	(1,035)	(1,035)	(1,035)	(1,035)	(1,035)	(1,035)
Net consumption		12,779	14,354	13,639	13,730	14,065	14,065	14,065	14,065	14,065	14,065
Number of Meters		27	27	30	29	29	29	29	29	29	29
Ave cons/Cust/Month (00 ccf)	(A)	42.42	47.28	40.86	42.43	43.52	43.52	43.52	43.52	43.52	43.52
Percentage Change in Consumption			11.46%	-3.97%	0.37%	2.27%	0.00%	0.00%	0.00%	0.00%	0.00%
Annual Increase (Decrease) in Meters	(A)		0	3	(1)	0	0	0	0	0	0

(A) - Average consumption per customer per month for forecasted fiscal years and average increase/decrease in meters per Schedule 3d.
(B) - Assumes no change to industrial customers.
(C) - Forecasted consumption consistent with actual 2004-2005 usage.
(D) - Per management estimates.
(E) - Consumption included in minimum charge calculated by multiplying the number of meters billed by 700 cubic feet by six billing periods multiplied by 85% to represent portion of customers using less than 700 cubic feet per bi-monthly period. This amount based on trend analysis of actual customer data showing between 10%-15% of all customers billed use less than 700 cubic feet per billing period.
NOTE - Refer to Executive Summary section of report for further sales forecast assumptions.

CITY OF EVANSTON WATER UTILITY
Sales Forecast
Actual 07/08 - Forecasted 13/14

Schedule 3c

		Actual 2004-2005	Actual 2005-2006	Actual 2006-2007	Actual 2007-2008	Forecasted 2008-2009	Forecasted 2009-2010	Forecasted 2010-2011	Forecasted 2011-2012	Forecasted 2012-2013	Forecasted 2013-2014
Park											
Total Consumption (00 ccf)		18,978	30,136	28,812	32,189	30,400	30,400	30,400	30,400	30,400	30,400
Less: First 700 cf included in min. charge	(E)	(2,285)	(2,285)	(2,285)	(2,285)	(2,285)	(2,285)	(2,285)	(2,285)	(2,285)	(2,285)
Net consumption		16,693	27,851	26,527	29,904	28,115	28,115	28,115	28,115	28,115	28,115
Number of Meters		64	64	64	64	64	64	64	64	64	64
Ave cons/Cust/Month (00 ccf)	(A)	24.71	39.24	37.52	41.91	39.56	39.56	39.56	39.56	39.56	39.56
Percentage Change in Consumption			58.79%	-4.39%	11.72%	-5.56%	0.00%	0.00%	0.00%	0.00%	0.00%
Annual Increase (Decrease) in Meters	(A)		0	0	0	0	0	0	0	0	0
Multi-Family - General											
Total Consumption (00 ccf)		1,358,485	1,399,176	1,256,388	1,250,349	1,248,700	1,256,200	1,263,700	1,271,200	1,278,700	1,286,100
Less: First 700 cf included in min. charge	(E)	(94,391)	(91,392)	(90,999)	(90,321)	(90,321)	(90,863)	(91,405)	(91,947)	(92,489)	(93,031)
Net consumption		1,264,094	1,307,784	1,165,389	1,160,028	1,158,379	1,165,337	1,172,295	1,179,253	1,186,211	1,193,069
Number of Meters		2,644	2,560	2,549	2,530	2,530	2,545	2,560	2,576	2,591	2,606
Ave cons/Cust/Month (00 ccf)	(A)	42.82	45.55	41.07	41.18	41.13	41.13	41.13	41.13	41.13	41.13
Percentage Change in Consumption			3.00%	-10.21%	-0.48%	-0.13%	0.60%	0.60%	0.59%	0.59%	0.58%
Annual Increase (Decrease) in Meters	(A)		(84)	(11)	(19)	0	15	15	15	15	15
Multi-Family - Condominiums (C)											
Total Consumption (00 ccf)			0	0	0	0	0	0	0	0	0
Less: First 700 cf included in min. charge	(E)		0	0	0	0	0	0	0	0	0
Net consumption			0	0	0	0	0	0	0	0	0
Number of Units	(F)		0	0	0	0	0	0	0	0	0
Number of Meters	(F)		0	0	0	0	0	0	0	0	0
Ave cons/Unit/Month (00 ccf)	(D)		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Annual Increase (Decrease) in Units			200	200	200	200	200	200	200	200	200
Annual Increase (Decrease) in Meters			0	0	0	0	0	0	0	0	0
TOTAL											
Total Consumption (00 ccf)		3,933,229	4,139,568	3,779,751	3,733,390	3,770,200	3,787,200	3,804,100	3,821,000	3,838,000	3,854,900
Less: First 700 cf included in min. charge	(E)	(511,724)	(510,403)	(511,652)	(511,974)	(513,104)	(515,169)	(517,234)	(519,300)	(521,365)	(523,430)
Net consumption		3,421,505	3,629,165	3,268,099	3,221,416	3,257,096	3,272,031	3,286,866	3,301,700	3,316,635	3,331,470
Number of Meters		14,334	14,297	14,332	14,341	14,373	14,431	14,488	14,546	14,604	14,662
Ave cons/Cust/Month (00 ccf)		448.23	501.06	457.83	440.97	462.69	462.69	462.69	462.69	462.69	462.69
Percentage Change in Consumption			5.25%	-8.69%	-1.23%	0.99%	0.45%	0.45%	0.44%	0.44%	0.44%
Consumption Billed (00 ccf)	(B)	3,392,033	3,586,960	3,227,932	3,177,782	3,214,916	3,229,851	3,244,686	3,259,521	3,274,455	3,289,290
Calculated Average Growth Rate (Based on Consumption)						0.99%	0.45%	0.45%	0.44%	0.44%	0.44%

(A) - Average consumption per customer per month for forecasted fiscal years and average increase/decrease in meters per Schedule 3d (pages 23-24).
(B) - Excludes city and park customer classes.
(C) - Only growth forecasted for condominiums.
(D) - Average consumption per condominium unit is expected to be lower than average residential consumption.
(E) - Consumption included in minimum charge calculated by multiplying the number of meters billed by 700 cubic feet by six billing periods multiplied by 85% to represent portion of customers using less than 700 cubic feet per bi-monthly period. This amount based on trend analysis of actual customer data showing between 10%-15% of all customers billed use less than 700 cubic feet per billing period.
(F) - For only the condominium multi-family class the number of units rather than meters will be used as one high rise only has one meter regardless of number of units; for purposes of study, 200 customers will equate to three meters - one 2", one 3" and one 4".
NOTE - Refer to Executive Summary section of report for further sales forecast assumptions.

CITY OF EVANSTON WATER UTILITY
Usage Trends
Actual 99/00 - 04/05

Schedule 3d

	Actual 1999-2000	Actual 2000-2001	Actual 2001-2002	Actual 2002-2003	Actual 2003-2004	Actual 2004-2005	Actual 2005-2006	Actual 2006-2007	Actual 2007-2008	3-Year Average
Residential										
Total Consumption (00 ccf)	1,393,811	1,315,787	1,215,082	1,271,233	1,233,234	1,148,402	1,339,168	1,133,243	1,125,593	
Number of Meters	10,455	10,510	10,514	10,531	10,555	10,598	10,644	10,684	10,714	
Ave cons/Cust/Month (00 ccf)	11.11	10.43	9.63	10.06	9.74	9.03	10.48	8.84	8.75	9.36
Percentage Change in Consumption		-5.60%	-7.65%	4.62%	-2.99%	-6.88%	16.61%	-15.38%	-0.68%	
Annual Increase (Decrease) in Meters		55	4	17	24	43	46	40	30	39
Commercial										
Total Consumption (00 ccf)	1,306,272	1,252,818	1,337,280	1,395,576	1,415,895	1,318,236	1,274,447	1,275,840	1,240,591	
Number of Meters	952	933	931	927	936	935	939	944	940	
Ave cons/Cust/Month (00 ccf)	114.34	111.90	119.70	125.46	126.06	117.49	113.10	112.63	109.98	111.90
Percentage Change in Consumption		-4.09%	6.74%	4.36%	1.46%	-6.90%	-3.32%	0.11%	-2.76%	
Annual Increase (Decrease) in Meters		(19)	(2)	(4)	9	(1)	4	5	(4)	2
Industrial										
Total Consumption (00 ccf)	42,440	42,748	41,895	37,076	36,015	22,010	20,190	16,840	16,579	
Number of Meters	43	43	43	42	40	39	37	35	35	
Ave cons/Cust/Month (00 ccf)	82.25	82.84	81.19	73.56	75.03	47.03	45.47	40.10	39.47	41.68
Percentage Change in Consumption		0.73%	-2.00%	-11.50%	-2.86%	-38.89%	-8.27%	-16.59%	-1.55%	
Annual Increase (Decrease) in Meters		0	0	(1)	(2)	(1)	(2)	(2)	0	(1)
School										
Total Consumption (00 ccf)	64,860	73,884	75,175	66,868	59,100	53,375	61,133	53,918	53,324	
Number of Meters	26	26	26	27	27	27	26	26	29	
Ave cons/Cust/Month (00 ccf)	207.88	236.81	240.95	206.38	182.41	164.74	195.94	172.81	153.23	173.99
Percentage Change in Consumption		13.91%	1.75%	-11.05%	-11.62%	-9.69%	14.53%	-11.80%	-1.10%	
Annual Increase (Decrease) in Meters		0	0	1	0	0	(1)	0	3	1

Please Refer to Accountants' Report, Summary of Significant Accounting Policies, and Significant Assumptions.

CITY OF EVANSTON WATER UTILITY
Usage Trends
Actual 99/00 - 04/05

Schedule 3d

	Actual 1999-2000	Actual 2000-2001	Actual 2001-2002	Actual 2002-2003	Actual 2003-2004	Actual 2004-2005	Actual 2005-2006	Actual 2006-2007	Actual 2007-2008	3-Year Average
City										
Total Consumption (00 ccf)	13,033	13,102	14,815	16,373	12,457	13,743	15,318	14,710	14,765	
Number of Meters	27	27	28	29	27	27	27	30	29	
Ave cons/Cust/Month (00 ccf)	40.23	40.44	44.09	47.05	38.45	42.42	47.28	40.86	42.43	43.52
Percentage Change in Consumption		0.53%	13.07%	10.52%	-23.92%	10.32%	11.46%	-3.97%	0.37%	
Annual Increase (Decrease) in Meters		0	1	1	(2)	0	0	3	(1)	1
Park										
Total Consumption (00 ccf)	19,672	14,035	23,359	28,766	19,351	18,978	30,136	28,812	32,189	
Number of Meters	63	63	63	64	64	64	64	64	64	
Ave cons/Cust/Month (00 ccf)	26.02	18.56	30.90	37.46	25.20	24.71	39.24	37.52	41.91	39.56
Percentage Change in Consumption		-28.65%	66.43%	23.15%	-32.73%	-1.93%	58.79%	-4.39%	11.72%	
Annual Increase (Decrease) in Meters		0	0	1	0	0	0	0	0	-
Multi-Family (A)										
Total Consumption (00 ccf)	1,571,858	1,526,350	1,496,189	1,462,969	1,406,483	1,358,485	1,399,176	1,256,388	1,250,349	
Number of Meters	2,747	2,722	2,722	2,698	2,665	2,644	2,560	2,549	2,530	
Ave cons/Cust/Month (00 ccf)	47.68	46.73	45.81	45.19	43.98	42.82	45.55	41.07	41.18	42.60
Percentage Change in Consumption		-2.90%	-1.98%	-2.22%	-3.86%	-3.41%	3.00%	-10.21%	-0.48%	
Annual Increase (Decrease) in Meters		(25)	0	(24)	(33)	(21)	(84)	(11)	(19)	(38)
TOTAL										
Total Consumption (00 ccf)	4,411,946	4,238,724	4,203,795	4,278,861	4,182,535	3,933,229	4,139,568	3,779,751	3,733,390	
Number of Meters	14,313	14,324	14,327	14,318	14,314	14,334	14,297	14,332	14,341	
Ave cons/Cust/Month (00 ccf)	25.69	24.66	24.45	24.90	24.35	22.87	24.13	21.98	21.69	22.60
Percentage Change in Consumption		-3.93%	-0.82%	1.79%	-2.25%	-5.96%	5.25%	-8.69%	-1.23%	
Annual Increase (Decrease) in Meters		11	3	(9)	(4)	20	(37)	35	9	2

(A) - Does not separate condominium from general multi-family.

CITY OF EVANSTON WATER UTILITY
Sales Analysis
Actual 2007-2008

Schedule 3h

	Authorized Rates		Commercial		Industrial		School		City	
			Units	Revenue	Units	Revenue	Units	Revenue	Units	Revenue
Volume Charge	$ 1.52 /00 CF	(A)	1,207,033	$ 1,834,700	15,330	$ 23,300	52,289	$ 79,500	13,730	$ 20,900
Meter Size			Meters / Billings / Revenues		Meters / Billings / Revenues		Meters / Billings / Revenues		Meters / Billings / Revenues	
5/8	$ 5.40 /Bi-Monthly		436 / 2,616 / 14,126		11 / 66 / 356		2 / 12 / 65		8 / 48 / 259	
3/4	5.40 /Bi-Monthly		20 / 120 / 648		1 / 6 / 32		- / - / -		- / - / -	
1	10.80 /Bi-Monthly		196 / 1,176 / 12,701		11 / 66 / 713		3 / 18 / 194		5 / 30 / 324	
1 1/2	20.20 /Bi-Monthly		86 / 516 / 10,423		5 / 30 / 606		4 / 24 / 485		5 / 30 / 606	
2	31.80 /Bi-Monthly		157 / 942 / 29,956		7 / 42 / 1,336		14 / 84 / 2,671		11 / 66 / 2,099	
3	56.00 /Bi-Monthly		23 / 138 / 7,728		- / - / -		4 / 24 / 1,344		- / - / -	
4	89.70 /Bi-Monthly		16 / 96 / 8,611		- / - / -		1 / 6 / 538		- / - / -	
6	158.20 /Bi-Monthly		3 / 18 / 2,848		- / - / -		1 / 6 / 949		- / - / -	
8	267.80 /Bi-Monthly		3 / 18 / 4,820		- / - / -		- / - / -		- / - / -	
Subtotal			940 / 5,640 / 91,861		35 / 210 / 3,043		29 / 174 / 6,247		29 / 174 / 3,288	
Minimum Charge	$ - /Bi-Monthly		940 / 5,640 / -		35 / 210 / -		29 / 174 / -		29 / 174 / -	
Sub-Total Forecasted Revenues				$ 1,926,561		$ 26,343		$ 85,747		$ 24,188

	Authorized Rates		Park		Multi-Family		Residential		**Total**	
			Units	Revenue	Units	Revenue	Units	Revenue	**Units**	**Revenue**
Volume Charge	$ 1.52 /00 CF	(A)	29,904	$ 45,500	1,160,028	$ 1,763,200	743,103	$ 1,129,500	**3,221,416**	**$ 4,896,600**
Meter Size			Meters / Billings / Revenues		Meters / Billings / Revenues		Meters / Billings / Revenues		**Meters / Billings / Revenues**	
5/8	$ 5.40 /Bi-Monthly		61 / 366 / 1,976		1,527 / 9,162 / 49,475		9,973 / 59,838 / 323,125		**12,018 / 72,108 / 389,383**	
3/4	5.40 /Bi-Monthly		- / - / -		193 / 1,158 / 6,253		350 / 2,100 / 11,340		**564 / 3,384 / 18,274**	
1	10.80 /Bi-Monthly		1 / 6 / 65		433 / 2,598 / 28,058		356 / 2,136 / 23,069		**1,005 / 6,030 / 65,124**	
1 1/2	20.20 /Bi-Monthly		- / - / -		103 / 618 / 12,484		31 / 186 / 3,757		**234 / 1,404 / 28,361**	
2	31.80 /Bi-Monthly		- / - / -		247 / 1,482 / 47,128		4 / 24 / 763		**440 / 2,640 / 83,952**	
3	56.00 /Bi-Monthly		- / - / -		18 / 108 / 6,048		- / - / -		**45 / 270 / 15,120**	
4	89.70 /Bi-Monthly		- / - / -		4 / 24 / 2,153		- / - / -		**21 / 126 / 11,302**	
6	158.20 /Bi-Monthly		- / - / -		- / - / -		- / - / -		**4 / 24 / 3,797**	
8	267.80 /Bi-Monthly		- / - / -		- / - / -		- / - / -		**3 / 18 / 4,820**	
Subtotal			62 / 372 / 2,041		2,525 / 15,150 / 151,598		10,714 / 64,284 / 362,054		**14,334 / 86,004 / 620,133**	
Minimum Charge	$ - /Bi-Monthly		62 / 372 / -		2,525 / 15,150 / -		10,714 / 64,284 / -		**14,334 / 86,004 / -**	
Sub-Total Forecasted Revenues				$ 47,541		$ 1,914,798		$ 1,491,554		**$ 5,516,733**
Less Unbilled City and Parks:										**(71,729)**
Total Forecasted Revenues										**$ 5,445,004**

(A) - Kept volume rate consistent at $1.47 per 100 cubic feet (in excess of 700 cubic feet already included in bi-monthly minimum charge) to determine adequate rate increase for spring 2006.

Check Data not avai

Please Refer to Accountants' Report, Summary of Significant Accounting Policies, and Significant Assumptions.

CITY OF EVANSTON WATER UTILITY
Sales Analysis
Forecasted 2009-2010

Schedule 3j

	Authorized Rates		Commercial			Industrial			School			City		
			Units	Revenue		Units	Revenue		Units	Revenue		Units	Revenue
Volume Charge	$ 1.52 /00 CF	(A)	1,236,140	$ 1,878,900		15,451	$ 23,500		59,565	$ 90,500		14,065	$ 21,400
Meter Size			Meters	Billings	Revenues	Meters	Billings	Revenues	Meters	Billings	Revenues	Meters	Billings	Revenues
5/8	$ 5.40 /Bi-Monthly		442	2,650	14,310	11	66	356	2	12	65	8	48	259
3/4	5.40 /Bi-Monthly		20	120	648	1	6	32	-	-	-	-	-	-
1	10.80 /Bi-Monthly		196	1,176	12,701	11	66	713	3	18	194	5	30	324
1 1/2	20.20 /Bi-Monthly		86	516	10,423	5	30	606	4	24	485	5	30	606
2	31.80 /Bi-Monthly		157	942	29,956	7	42	1,336	14	84	2,671	11	66	2,099
3	56.00 /Bi-Monthly		23	138	7,728	-	-	-	4	24	1,344	-	-	-
4	89.70 /Bi-Monthly		16	96	8,611	-	-	-	1	6	538	-	-	-
6	158.20 /Bi-Monthly		3	18	2,848	-	-		1	6	949	-	-	-
8	267.80 /Bi-Monthly		3	18	4,820	-	-	-	-	-	-	-	-	-
Subtotal			946	5,674	92,045	35	210	3,043	29	174	6,247	29	174	3,288
Minimum Charge	$ - /Bi-Monthly		946	5,674	-	35	210	-	29	174	-	29	174	-
Sub-Total Forecasted Revenues					$ 1,970,945			$ 26,543			$ 96,747			$ 24,688

	Authorized Rates		Park			Multi-Family			Residential			**Total**	
			Units	Revenue		Units	Revenue		Units	Revenue		**Units**	**Revenue**
Volume Charge	$ 1.52 /00 CF	(A)	28,115	$ 42,700		1,165,337	$ 1,771,300		753,359	$ 1,145,100		**3,272,031**	**$ 4,973,400**
Meter Size			Meters	Billings	Revenues	Meters	Billings	Revenues	Meters	Billings	Revenues	**Meters**	**Billings**	**Revenues**
5/8	$ 5.40 /Bi-Monthly		61	366	1,976	1,532	9,193	49,643	10,002	60,010	324,054	**12,058**	**72,345**	**390,663**
3/4	5.40 /Bi-Monthly		-	-	-	199	1,194	6,448	370	2,220	11,988	**590**	**3,540**	**19,116**
1	10.80 /Bi-Monthly		1	6	65	437	2,622	28,318	376	2,256	24,365	**1,029**	**6,174**	**66,679**
1 1/2	20.20 /Bi-Monthly		-	-	-	103	618	12,484	31	186	3,757	**234**	**1,404**	**28,361**
2	31.80 /Bi-Monthly		-	-	-	249	1,494	47,509	4	24	763	**442**	**2,652**	**84,334**
3	56.00 /Bi-Monthly		-	-	-	20	120	6,720	-	-	-	**47**	**282**	**15,792**
4	89.70 /Bi-Monthly		-	-	-	6	36	3,229	-	-	-	**23**	**138**	**12,379**
6	158.20 /Bi-Monthly		-	-	-	-	-	-	-	-	-	**4**	**24**	**3,797**
8	267.80 /Bi-Monthly		-	-	-	-	-	-	-	-	-	**3**	**18**	**4,820**
Subtotal			62	372	2,041	2,546	15,277	154,350	10,783	64,696	364,927	**14,430**	**86,577**	**625,941**
Minimum Charge	$ - /Bi-Monthly		62	372	-	2,546	15,277	-	10,783	64,696	-	**14,430**	**86,577**	**-**
Sub-Total Forecasted Revenues					$ 44,741			$ 1,925,650			$ 1,510,027			**$ 5,599,341**
Less Unbilled City and Parks:														**(69,429)**
Total Forecasted Revenues														**$ 5,529,912**

(A) - Kept volume rate consistent at $1.47 per 100 cubic feet (in excess of 700 cubic feet already included in bi-monthly minimum charge) to determine adequate rate increase for spring 2006.

Check 5,675,000

Please Refer to Accountants' Report, Summary of Significant Accounting Policies, and Significant Assumptions.

CITY OF EVANSTON WATER UTILITY
Summary Of Cost Allocation to Customer Groups
Test Year 2009-2010
COST OF SERVICE - VERSION 2

Schedule 6a

	Total Cost (A)	Percent Allocation Res	Multi	Comm	Ind	School	Fire	Residential	Multi-Family	Commercial	Industrial	School	Fire Protection
Maximum Day (B)	$ 1,137,240	0.3307	0.3650	0.2817	0.0029	0.0134	0.0062	$ 376,100	$ 415,100	$ 320,400	$ 3,300	$ 15,300	$ 7,000
Maximum Hour (B)	587,680	0.3374	0.3724	0.2352	0.0021	0.0112	0.0417	198,300	218,800	138,200	1,300	6,600	24,500
Base (Volume) (B)	3,359,932	0.3012	0.3324	0.3360	0.0044	0.0160	0.0099	1,012,000	1,116,800	1,128,800	14,900	53,900	33,400
Customer Costs: (C)													
Meters	379,090	0.5361	0.2695	0.1759	0.0056	0.0129		203,300	102,200	66,700	2,100	4,900	-
Services	173,692	0.6831	0.2100	0.0981	0.0036	0.0052		118,600	36,500	17,000	600	900	-
Customer Billing	7,758	0.7520	0.1776	0.0660	0.0024	0.0020		5,900	1,400	500	-	-	-
Fire Protection (D)	29,700						1.0000	-	-	-	-	-	29,700
Net Revenue Required	5,675,092							1,914,200	1,890,800	1,671,600	22,200	81,600	94,600
Revenue At Present Rates	5,675,000												
Difference	(92)												
% Difference	0.00%												

(A) - Total cost summarized on Schedule 6c (page 58).
(B) - Allocation % from Schedule 7a (page 63).
(C) - Allocation % from Schedule 7c (page 65).
(D) - 100% allocated to fire protection.

CITY OF EVANSTON SEWER UTILITY *Schedule 6b*
System Demand Ratios
COST OF SERVICE - VERSION 2

Maximum Day System Demand

Evanston (A)			3,112,156,333			
Skokie (A)			3,479,621,667			
Northwest Water Commission (A)			9,206,015,000			
Total Annual Pumpage			15,797,793,000	gallons		
Total Sold (B)			15,673,306,747	gallons		
Total Annual Pumpage			15,797,793,000	gallons		
Average Daily Pumpage			43,281,625	gallons		
Maximum Day Pumpage (A)			70,779,667	gallons		
Fire Flow (C):						
Gal/Min		1,000				
Duration (Hours)		2	120,000	gallons		
Average Day Plus Fire Flow			43,401,625	gallons		Use
Ratio:	Base:		43,281,625	=	61.15%	61.00%
			70,779,667			
	Max Day:		100-Base	=	38.85%	39.00%

Maximum Hour System Demand

Average Hour on Max. Day			2,949,153	gallons		
Maximum Hour Pumpage (A)			3,190,667	gallons		
Average Hour						
Plus One Hour Fire Flow			1,820,544	gallons		
						Use
Ratio:						
	Base:		1,803,401	=	56.52%	57.00%
			3,190,667			
	Max Hour:		100-Base	=	43.48%	43.00%

(A) - Based on three year (2002-2004) average per statistical information provided by management.
(B) - Assumes a 4% water loss based on the average water loss for 2000 through 2004 applied to Evanston only.
(C) - Current city ISO rating is Class 3; 1,000 gallons per minute for a duration of two hours is the minimum available throughout all areas of the city.

CITY OF EVANSTON WATER UTILITY
Summary of Costs of Service
Test Year 2009-2010
COST OF SERVICE - VERSION 2

Schedule 6c

Revenue Requirement	Allocation Basis	Forecasted 2009-2010	Base (Volume)	Demand		Customer Costs			Fire Flow
				Max Day	Max Hour	Meters	Services	Bill & Collecting	
Operating Expenses	Detailed Schedule	$ 8,537,599	$ 5,405,332	$ 1,593,242	$ 628,281	$ 673,195	$ 185,592	$ 20,258	$ 31,695
	Percentages	100.00%	63.31%	18.66%	7.36%	7.89%	2.17%	0.24%	0.37%
Capital Improvements Funded Through Rates	Detailed Plant Schedule Percentages	2,610,151	1,397,300	572,700	378,400	130,900	111,800	-	19,100
		100.00%	53.53%	21.94%	14.50%	5.01%	4.28%	0.00%	0.73%
Capital Outlay	Detailed Plant Schedule Percentages	120,826	64,700	26,500	17,500	6,100	5,200	-	900
		100.00%	53.53%	21.94%	14.50%	5.01%	4.28%	0.00%	0.73%
Debt Service Payments ~~- Including 125% Requirements~~	Detailed Plant Schedule Percentages	914,526	489,600	200,700	132,600	45,900	39,200	-	6,700
		100.00%	53.53%	21.94%	14.50%	5.01%	4.28%	0.00%	0.73%
Transfer to General Fund - Return on Investment	Detailed Plant Schedule Percentages	2,531,300	1,355,100	555,400	366,900	126,900	108,400	0	18,500
		100.00%	53.53%	21.94%	14.50%	5.01%	4.28%	0.00%	0.73%
Subtotal		14,714,401	8,712,032	2,948,542	1,523,681	982,995	450,192	20,258	76,895
Percentages		100.00%	59.21%	20.04%	10.36%	6.68%	3.06%	0.14%	0.52%
Transfer to General Fund - Operating Cash/Other Uses	Above Allocation Percentages	247,300	146,500	49,600	25,600	16,500	7,600	300	1,300
		100.00%	59.21%	20.04%	10.36%	6.68%	3.06%	0.14%	0.52%
Less - Other Revenues	Above Allocation Percentages	(624,199)	(369,600)	(125,100)	(64,600)	(41,700)	(19,100)	(900)	(3,300)
		100.00%	59.21%	20.04%	10.36%	6.68%	3.06%	0.14%	0.52%
Less - Revenues Generated Through Wholesale Customers	Above Allocation Percentages	(6,530,000)	(3,866,400)	(1,308,500)	(676,200)	(436,200)	(199,800)	(9,000)	(34,100)
		100.00%	59.21%	20.04%	10.36%	6.68%	3.06%	0.14%	0.52%
Less - Offset to Revenues	Above Allocation Percentages	(2,132,503)	(1,262,600)	(427,300)	(220,800)	(142,500)	(65,200)	(2,900)	(11,100)
		100.00%	59.21%	20.04%	10.36%	6.68%	3.06%	0.14%	0.52%
Total Revenue Required from Rates		$ 5,675,000	$ 3,359,932	$ 1,137,242	$ 587,681	$ 379,095	$ 173,692	$ 7,758	$ 29,695
Revenue Forecasted from Current Rates - Evanston Only		5,675,000							
Current Revenue Deficiency		$ 0							
% Increase Forecasted - Evanston Customers Only		0.00%							

CITY OF EVANSTON WATER UTILITY
Allocation of Operation and Maintenance Expense
Forecasted 2004
COST OF SERVICE - VERSION 2

Schedule 6d

Acct No		Forecasted 2009-2010	Base	Percent Allocation: Demand Max. Day	Demand Max. Hour	Customer Costs Equiv Meters	Customer Costs Equiv Services	Customer Costs Bill & Coll.	Fire	Base (Volume)	Demand Max. Day	Demand Max. Hour	Customer Costs Equiv Meters	Customer Costs Equiv Services	Customer Costs Bill & Coll.	Fire
	Water Pumping:															
61010	Regular Pay	$ 799,664	0.610	0.390	0.000	0.000	0.000	0.000	0.000	$ 487,795	$ 311,869	$ -	$ -	$ -	$ -	$ -
61060	Seasonal Employees	5,088	0.610	0.390	0.000	0.000	0.000	0.000	0.000	3,104	1,984	-	-	-	-	-
61110	Overtime Pay	23,956	0.610	0.390	0.000	0.000	0.000	0.000	0.000	14,613	9,343	-	-	-	-	-
	Longevity	5,838	0.610	0.390	0.000	0.000	0.000	0.000	0.000	3,561	2,277	-	-	-	-	-
61510	Health Insurance	114,273	0.610	0.390	0.000	0.000	0.000	0.000	0.000	69,706	44,566	-	-	-	-	-
61615	Life Insurance	1,183	0.610	0.390	0.000	0.000	0.000	0.000	0.000	721	461	-	-	-	-	-
61630	Shoe Allowance	1,564	0.610	0.390	0.000	0.000	0.000	0.000	0.000	954	610	-	-	-	-	-
	IMRF	63,318	0.610	0.390	0.000	0.000	0.000	0.000	0.000	38,624	24,694	-	-	-	-	-
	Social Security	52,245	0.610	0.390	0.000	0.000	0.000	0.000	0.000	31,869	20,376	-	-	-	-	-
	Medicare	12,148	0.610	0.390	0.000	0.000	0.000	0.000	0.000	7,410	4,738	-	-	-	-	-
62230	Improvement Maint Service	8,340	0.610	0.390	0.000	0.000	0.000	0.000	0.000	5,087	3,253	-	-	-	-	-
62245	Other Eqmt Maintenance	9,487	0.610	0.390	0.000	0.000	0.000	0.000	0.000	5,787	3,700	-	-	-	-	-
62295	Training & travel		0.610	0.390	0.000	0.000	0.000	0.000	0.000	-	-	-	-	-	-	-
62360	Membership Dues	417	0.610	0.390	0.000	0.000	0.000	0.000	0.000	254	163	-	-	-	-	-
62675	Interdept. Trsf.-Pensions		0.610	0.390	0.000	0.000	0.000	0.000	0.000	-	-	-	-	-	-	-
64005	Electricity	1,208,700	1.000	0.000	0.000	0.000	0.000	0.000	0.000	1,208,700	-	-	-	-	-	-
64015	Natural Gas	37,230	1.000	0.000	0.000	0.000	0.000	0.000	0.000	37,230	-	-	-	-	-	-
64505	Telecommunications - Carrier L	2,448	0.610	0.390	0.000	0.000	0.000	0.000	0.000	1,493	955	-	-	-	-	-
64540	Telecommunications - Wireless	1,224	0.610	0.390	0.000	0.000	0.000	0.000	0.000	747	477	-	-	-	-	-
65020	Clothing	834	0.610	0.390	0.000	0.000	0.000	0.000	0.000	509	325	-	-	-	-	-
65035	Petroleum Products	12,823	0.610	0.390	0.000	0.000	0.000	0.000	0.000	7,822	5,001	-	-	-	-	-
65040	Janitorial Supplies	2,085	0.610	0.390	0.000	0.000	0.000	0.000	0.000	1,272	813	-	-	-	-	-
65050	Bldg Maintenance Material	2,815	0.610	0.390	0.000	0.000	0.000	0.000	0.000	1,717	1,098	-	-	-	-	-
65055	Mater. To Maint. Imp	0	0.610	0.390	0.000	0.000	0.000	0.000	0.000	-	-	-	-	-	-	-
65070	Office/Other Eqt Mtn Matl	47,225	0.610	0.390	0.000	0.000	0.000	0.000	0.000	28,807	18,418	-	-	-	-	-
65085	Minor Equipment & Tools	2,085	0.610	0.390	0.000	0.000	0.000	0.000	0.000	1,272	813	-	-	-	-	-
65090	Safety Equipment	1,043	0.610	0.390	0.000	0.000	0.000	0.000	0.000	636	407	-	-	-	-	-
	Total Water Pumping Expenses	2,416,030								1,959,690	456,341	-	-	-	-	-
	Filtration:															
61010	Regular Pay	$ 981,772	0.610	0.390	0.000	0.000	0.000	0.000	0.000	$ 598,881	$ 382,891	$ -	$ -	$ -	$ -	$ -
61110	Overtime Pay	19,822	0.610	0.390	0.000	0.000	0.000	0.000	0.000	12,091	7,731	-	-	-	-	-
	Longevity	17,201	0.610	0.390	0.000	0.000	0.000	0.000	0.000	10,493	6,708	-	-	-	-	-
61510	Health Insurance	145,448	0.610	0.390	0.000	0.000	0.000	0.000	0.000	88,723	56,725	-	-	-	-	-
61615	Life Insurance	1,505	0.610	0.390	0.000	0.000	0.000	0.000	0.000	918	587	-	-	-	-	-
61630	Shoe Allowance	1,772	0.610	0.390	0.000	0.000	0.000	0.000	0.000	1,081	691	-	-	-	-	-
	IMRF	77,830	0.610	0.390	0.000	0.000	0.000	0.000	0.000	47,476	30,354	-	-	-	-	-
	Social Security	63,748	0.610	0.390	0.000	0.000	0.000	0.000	0.000	38,886	24,862	-	-	-	-	-
	Medicare	14,835	0.610	0.390	0.000	0.000	0.000	0.000	0.000	9,049	5,786	-	-	-	-	-
62245	Other Eqmt Maintenance	15,638	0.610	0.390	0.000	0.000	0.000	0.000	0.000	9,539	6,099	-	-	-	-	-
62295	Training & Travel		0.610	0.390	0.000	0.000	0.000	0.000	0.000	-	-	-	-	-	-	-
62360	Membership Dues	417	0.610	0.390	0.000	0.000	0.000	0.000	0.000	254	163	-	-	-	-	-
62420	MWRD Fees	443,063	0.610	0.390	0.000	0.000	0.000	0.000	0.000	270,268	172,794	-	-	-	-	-
62465	Outside Laboratory Costs (Hlth	21,580	0.610	0.390	0.000	0.000	0.000	0.000	0.000	13,164	8,416	-	-	-	-	-
62675	Interdept. Trsf.-Pensions		0.610	0.390	0.000	0.000	0.000	0.000	0.000	-	-	-	-	-	-	-
64540	Telecommunications - Wireless	2,142	0.610	0.390	0.000	0.000	0.000	0.000	0.000	1,307	835	-	-	-	-	-
65005	Agri/Botancial Supplies	1,043	0.610	0.390	0.000	0.000	0.000	0.000	0.000	636	407	-	-	-	-	-
65015	Chemicals	398,250	1.000	0.000	0.000	0.000	0.000	0.000	0.000	398,250	-	-	-	-	-	-
65020	Clothing	1,043	0.610	0.390	0.000	0.000	0.000	0.000	0.000	636	407	-	-	-	-	-
65030	Phosphate Chemicals	58,410	0.610	0.390	0.000	0.000	0.000	0.000	0.000	35,630	22,780	-	-	-	-	-
65036	Petroleum Products	2,398	0.610	0.390	0.000	0.000	0.000	0.000	0.000	1,463	935	-	-	-	-	-
65040	Janitorial Supplies	1,460	0.610	0.390	0.000	0.000	0.000	0.000	0.000	890	569	-	-	-	-	-
65050	Bldg Maintenance Material	3,440	0.610	0.390	0.000	0.000	0.000	0.000	0.000	2,099	1,342	-	-	-	-	-
65070	Office, Other Eqt Mtn Matl	51,083	0.610	0.390	0.000	0.000	0.000	0.000	0.000	31,160	19,922	-	-	-	-	-
65075	Medical & Lab Supplies	20,850	0.610	0.390	0.000	0.000	0.000	0.000	0.000	12,719	8,132	-	-	-	-	-
65085	Minor Equipment & Tools	1,668	0.610	0.390	0.000	0.000	0.000	0.000	0.000	1,017	651	-	-	-	-	-
65090	Safety Equipment	1,564	0.610	0.390	0.000	0.000	0.000	0.000	0.000	954	610	-	-	-	-	-
	Total Filtration Expenses	2,347,978								1,587,584	760,397	-	-	-	-	-

CITY OF EVANSTON WATER UTILITY
Allocation of Operation and Maintenance Expense
Forecasted 2004
COST OF SERVICE - VERSION 2

Schedule 6d

Acct No		Forecasted 2009-2010	Percent Allocation: Base	Demand: Max. Day	Demand: Max. Hour	Customer Costs: Equiv Meters	Customer Costs: Equiv Services	Customer Costs: Bill & Coll.	Fire	Base (Volume)	Demand: Max. Day	Demand: Max. Hour	Customer Costs: Equiv Meters	Customer Costs: Equiv Services	Customer Costs: Bill & Coll.	Fire
	Distribution:															
61010	Regular Pay	$ 695,360	0.451	0.026	0.309	0.107	0.091	0.000	0.016	$ 313,512	$ 18,337	$ 214,873	$ 74,326	$ 63,473	$ -	$ 10,840
61060	Seasonal Employees	5,512	0.451	0.026	0.309	0.107	0.091	0.000	0.016	2,485	145	1,703	589	503	-	86
61110	Overtime Pay	66,992	0.451	0.026	0.309	0.107	0.091	0.000	0.016	30,204	1,767	20,701	7,161	6,115	-	1,044
	Longevity	10,634	0.451	0.026	0.309	0.107	0.091	0.000	0.016	4,794	280	3,286	1,137	971	-	166
61510	Health Insurance	114,273	0.451	0.026	0.309	0.107	0.091	0.000	0.016	51,521	3,013	35,311	12,214	10,431	-	1,781
61615	Life Insurance	1,183	0.451	0.026	0.309	0.107	0.091	0.000	0.016	533	31	365	126	108	-	18
61630	Shoe Allowance	1,460	0.451	0.026	0.309	0.107	0.091	0.000	0.016	658	38	451	156	133	-	23
	IMRF	59,018	0.451	0.026	0.309	0.107	0.091	0.000	0.016	26,609	1,556	18,237	6,308	5,387	-	920
	Social Security	48,698	0.451	0.026	0.309	0.107	0.091	0.000	0.016	21,956	1,284	15,048	5,205	4,445	-	759
	Medicare	11,395	0.451	0.026	0.309	0.107	0.091	0.000	0.016	5,138	300	3,521	1,218	1,040	-	178
62225	Bldg Maintenance Services	3,649	0.451	0.026	0.309	0.107	0.091	0.000	0.016	1,645	96	1,127	390	333	-	57
62230	Improvement Maint Service	53,168	0.451	0.026	0.309	0.107	0.091	0.000	0.016	23,971	1,402	16,429	5,683	4,853	-	829
62245	Other Eqmt Maintenance	3,128	0.451	0.026	0.309	0.107	0.091	0.000	0.016	1,410	82	966	334	285	-	49
62295	Training & Travel		0.451	0.026	0.309	0.107	0.091	0.000	0.016	-	-	-	-	-	-	-
62305	Rental of Auto-Fleet Ser	241,860	0.451	0.026	0.309	0.107	0.091	0.000	0.016	109,046	6,378	74,737	25,852	22,077	-	3,770
62360	Membership Dues	313	0.451	0.026	0.309	0.107	0.091	0.000	0.016	141	8	97	33	29	-	5
62415	Debris/Removal Contractual Cos	52,125	0.451	0.026	0.309	0.107	0.091	0.000	0.016	23,501	1,375	16,107	5,572	4,758	-	813
62675	Interdept. Trsf.-Pensions		0.451	0.026	0.309	0.107	0.091	0.000	0.016	-	-	-	-	-	-	-
64540	Telecommunications - Wireless	7,854	0.451	0.026	0.309	0.107	0.091	0.000	0.016	3,541	207	2,427	840	717	-	122
65020	Clothing	1,668	0.451	0.026	0.309	0.107	0.091	0.000	0.016	752	44	515	178	152	-	26
65050	Bldg Maintenance Material	1,251	0.451	0.026	0.309	0.107	0.091	0.000	0.016	564	33	387	134	114	-	20
	Materials- Street Division	27,418	0.451	0.026	0.309	0.107	0.091	0.000	0.016	12,362	723	8,472	2,931	2,503	-	427
65055	Mater. To Maint. Imp	187,859	0.451	0.026	0.309	0.107	0.091	0.000	0.016	84,698	4,954	58,050	20,080	17,148	-	2,928
65070	Office, Other Eqt Mtn Matl	7,298	0.451	0.026	0.309	0.107	0.091	0.000	0.016	3,290	192	2,255	780	666	-	114
65085	Minor Equipment & Tools	3,649	0.451	0.026	0.309	0.107	0.091	0.000	0.016	1,645	96	1,127	390	333	-	57
65090	Safety Equipment	1,043	0.451	0.026	0.309	0.107	0.091	0.000	0.016	470	27	322	111	95	-	16
	Total Distribution Expenses	1,606,802								724,446	42,368	496,514	171,748	146,669	-	25,048
	Water Meter Maintenance:															
61010	Regular Pay	$ 176,808	0.000	0.000	0.000	1.000	0.000	0.000	0.000	$ -	$ -	$ -	$ 176,808	$ -	$ -	$ -
61110	Overtime Pay	1,166	0.000	0.000	0.000	1.000	0.000	0.000	0.000	-	-	-	1,166	-	-	-
	Longevity	2,815	0.000	0.000	0.000	1.000	0.000	0.000	0.000	-	-	-	2,815	-	-	-
61510	Health Insurance	31,175	0.000	0.000	0.000	1.000	0.000	0.000	0.000	-	-	-	31,175	-	-	-
61615	Life Insurance	323	0.000	0.000	0.000	1.000	0.000	0.000	0.000	-	-	-	323	-	-	-
61630	Shoe Allowance	104	0.000	0.000	0.000	1.000	0.000	0.000	0.000	-	-	-	104	-	-	-
	IMRF	13,760	0.000	0.000	0.000	1.000	0.000	0.000	0.000	-	-	-	13,760	-	-	-
	Social Security	11,288	0.000	0.000	0.000	1.000	0.000	0.000	0.000	-	-	-	11,288	-	-	-
	Medicare	2,688	0.000	0.000	0.000	1.000	0.000	0.000	0.000	-	-	-	2,688	-	-	-
62210	Printing	938	0.000	0.000	0.000	1.000	0.000	0.000	0.000	-	-	-	938	-	-	-
62245	Other Eqmt Maintenance	10,217	0.000	0.000	0.000	1.000	0.000	0.000	0.000	-	-	-	10,217	-	-	-
62295	Training & Travel		0.000	0.000	0.000	1.000	0.000	0.000	0.000	-	-	-	-	-	-	-
62305	Rental of Auto-Fleet Ser	51,604	0.000	0.000	0.000	1.000	0.000	0.000	0.000	-	-	-	51,604	-	-	-
62315	Postage		0.000	0.000	0.000	1.000	0.000	0.000	0.000	-	-	-	-	-	-	-
62360	Membership Dues	209	0.000	0.000	0.000	1.000	0.000	0.000	0.000	-	-	-	209	-	-	-
62675	Interdept. Trsf.-Pensions		0.000	0.000	0.000	1.000	0.000	0.000	0.000	-	-	-	-	-	-	-
64540	Telecommunications - Wireless	2,958	0.000	0.000	0.000	1.000	0.000	0.000	0.000	-	-	-	2,958	-	-	-
65070	Office/Other Eqt Mtn Matl	54,210	0.000	0.000	0.000	1.000	0.000	0.000	0.000	-	-	-	54,210	-	-	-
	Total Water Meter Maintenance Expenses	360,261								-	-	-	360,263	-	-	-
	Subtotal Pumping, Filtration, Dist & Meter Ex	6,731,070								4,271,720	1,259,106	496,514	532,011	146,669	-	25,048

CITY OF EVANSTON WATER UTILITY
Allocation of Operation and Maintenance Expense
Forecasted 2004
COST OF SERVICE - VERSION 2

Schedule 6d

Acct No		Forecasted 2009-2010	Base	Percent Allocation: Demand Max. Day	Demand Max. Hour	Customer Costs Equiv Meters	Customer Costs Equiv Services	Customer Costs Bill & Coll.	Fire	Base (Volume)	Demand Max. Day	Demand Max. Hour	Customer Costs Equiv Meters	Customer Costs Equiv Services	Customer Costs Bill & Coll.	Fire
	Other Operations:															
62180	Studies	39,094	0.635	0.187	0.074	0.079	0.022	0.000	0.004	24,810	7,313	2,884	3,090	852	-	145
62235	Office Equipment Maint	0	0.635	0.187	0.074	0.079	0.022	0.000	0.004	-	-	-	-	-	-	-
62315	Postage	18,661	0.635	0.187	0.074	0.079	0.022	0.000	0.004	11,843	3,491	1,377	1,475	407	-	69
	Computer License & Support	47,747	0.635	0.187	0.074	0.079	0.022	0.000	0.004	30,301	8,931	3,522	3,774	1,040	-	178
62350	Fiscal Agent Services		0.635	0.187	0.074	0.079	0.022	0.000	0.004	-	-	-	-	-	-	-
62455	Wtr/Swr Bill Print and Mail Co	15,638	0.000	0.000	0.000	0.000	0.000	1.000	0.000	-	-	-	-	-	15,638	-
62460	Wtr/Swr Bill Epayment Contract	2,606	0.000	0.000	0.000	0.000	0.000	1.000	0.000	-	-	-	-	-	2,606	-
62680	Transfer to GF-Data Proc	92,514	0.635	0.187	0.074	0.079	0.022	0.000	0.004	58,712	17,306	6,824	7,312	2,016	-	344
62685	Reimb. GF for Admin Exp	493,680	0.635	0.187	0.074	0.079	0.022	0.000	0.004	313,303	92,347	36,416	39,020	10,757	-	1,837
65080	Merchandise for Resale	52,125	0.635	0.187	0.074	0.079	0.022	0.000	0.004	33,080	9,750	3,845	4,120	1,136	-	194
66132	Transfer to GF-Insurance	143,208	0.635	0.187	0.074	0.079	0.022	0.000	0.004	90,884	26,788	10,564	11,319	3,120	-	533
66138	Tran to GF-Pub. Works Support	18,870	0.635	0.187	0.074	0.079	0.022	0.000	0.004	11,975	3,530	1,392	1,491	411	-	70
66139	Tran to GF- Workers Comp	31,620	0.635	0.187	0.074	0.079	0.022	0.000	0.004	20,067	5,915	2,332	2,499	689	-	118
68205	Contingencies	1,050	0.635	0.187	0.074	0.079	0.022	0.000	0.004	666	196	77	83	23	-	4
	Total Other Operations Expenses	956,812								595,641	175,567	69,233	74,183	20,451	18,244	3,492
	Total	7,687,882								4,867,361	1,434,673	565,747	606,194	167,120	18,244	28,540
	Water General Support:															
61010	Regular pay	$ 441,914	0.633	0.187	0.074	0.079	0.022	0.002	0.004	279,785	82,468	32,520	34,845	9,606	1,049	1,641
61060	Seasonal Employees	9,964	0.633	0.187	0.074	0.079	0.022	0.002	0.004	6,308	1,859	733	786	217	24	37
	Internship Program	13,250	0.633	0.187	0.074	0.079	0.022	0.002	0.004	8,389	2,473	975	1,045	288	31	49
	Job Training Program	66,144	0.633	0.187	0.074	0.079	0.022	0.002	0.004	41,877	12,343	4,868	5,215	1,438	157	246
61110	Overtime Pay		0.633	0.187	0.074	0.079	0.022	0.002	0.004	-	-	-	-	-	-	-
61510	Health Insurance	41,603	0.633	0.187	0.074	0.079	0.022	0.002	0.004	26,339	7,764	3,062	3,280	904	99	154
61615	Life Insurance	538	0.633	0.187	0.074	0.079	0.022	0.002	0.004	340	100	40	42	12	1	2
61625	Auto Allowance	1,877	0.633	0.187	0.074	0.079	0.022	0.002	0.004	1,188	350	138	148	41	4	7
61630	Shoe Allowance	313	0.633	0.187	0.074	0.079	0.022	0.002	0.004	198	58	23	25	7	1	1
	IMRF	33,755	0.633	0.187	0.074	0.079	0.022	0.002	0.004	21,371	6,299	2,484	2,662	734	80	125
	Social Security	28,273	0.633	0.187	0.074	0.079	0.022	0.002	0.004	17,900	5,276	2,081	2,229	615	67	105
	Medicare	6,558	0.633	0.187	0.074	0.079	0.022	0.002	0.004	4,152	1,224	483	517	143	16	24
62210	Printing	8,340	0.633	0.187	0.074	0.079	0.022	0.002	0.004	5,280	1,556	614	658	181	20	31
62215	Photographers/Blueprints	1,251	0.633	0.187	0.074	0.079	0.022	0.002	0.004	792	233	92	99	27	3	5
62225	Bldg Maintenance Services		0.633	0.187	0.074	0.079	0.022	0.002	0.004	-	-	-	-	-	-	-
62235	Office Equipment Maint	1,981	0.633	0.187	0.074	0.079	0.022	0.002	0.004	1,254	370	146	156	43	5	7
62245	Other Eqmt Maintenance	11,468	0.633	0.187	0.074	0.079	0.022	0.002	0.004	7,260	2,140	844	904	249	27	43
62275	Postage Chargebacks	3,128	0.633	0.187	0.074	0.079	0.022	0.002	0.004	1,980	584	230	247	68	7	12
62295	Training & travel	26,063	0.633	0.187	0.074	0.079	0.022	0.002	0.004	16,501	4,864	1,918	2,055	567	62	97
62305	Rental of Auto-Fleet Ser	51,812	0.633	0.187	0.074	0.079	0.022	0.002	0.004	32,803	9,669	3,813	4,085	1,126	123	192
62315	Postage	2,606	0.633	0.187	0.074	0.079	0.022	0.002	0.004	1,650	486	192	206	57	6	10
62320	Telephone Chargebacks		0.633	0.187	0.074	0.079	0.022	0.002	0.004	-	-	-	-	-	-	-
	Internet Solutions Providers	1,564	0.633	0.187	0.074	0.079	0.022	0.002	0.004	990	292	115	123	34	4	6
62360	Membership Dues	5,213	0.633	0.187	0.074	0.079	0.022	0.002	0.004	3,300	973	384	411	113	12	19
62380	Copy Machine Charges	313	0.633	0.187	0.074	0.079	0.022	0.002	0.004	198	58	23	25	7	1	1
	Copy Machine Leases	4,379	0.633	0.187	0.074	0.079	0.022	0.002	0.004	2,772	817	322	345	95	10	16
62420	MWRD Fees	7,610	0.633	0.187	0.074	0.079	0.022	0.002	0.004	4,818	1,420	560	600	165	18	28
62463	Water Maintenance Contracts	1,043	0.633	0.187	0.074	0.079	0.022	0.002	0.004	660	195	77	82	23	2	4
62675	Interdept. Trsf.-Pensions		0.633	0.187	0.074	0.079	0.022	0.002	0.004	-	-	-	-	-	-	-
64015	Natural Gas	112,200	0.633	0.187	0.074	0.079	0.022	0.002	0.004	71,036	20,938	8,257	8,847	2,439	266	417
64505	Telecommunications - Carrier L	6,120	0.633	0.187	0.074	0.079	0.022	0.002	0.004	3,875	1,142	450	483	133	15	23
64540	Telecommunications - Wireless	3,978	0.633	0.187	0.074	0.079	0.022	0.002	0.004	2,519	742	293	314	86	9	15
65010	Books, Publications, Maps	7,610	0.633	0.187	0.074	0.079	0.022	0.002	0.004	4,818	1,420	560	600	165	18	28
65020	Clothing	7,298	0.633	0.187	0.074	0.079	0.022	0.002	0.004	4,620	1,362	537	575	159	17	27
65040	Janitorial Supplies	1,668	0.633	0.187	0.074	0.079	0.022	0.002	0.004	1,056	311	123	132	36	4	6
65050	Bldg Maintenance Material	1,043	0.633	0.187	0.074	0.079	0.022	0.002	0.004	660	195	77	82	23	2	4
65070	Office/Other Eqt Mtn Matl	15,638	0.633	0.187	0.074	0.079	0.022	0.002	0.004	9,900	2,918	1,151	1,233	340	37	58
65090	Safety Equipment	209	0.633	0.187	0.074	0.079	0.022	0.002	0.004	132	39	15	16	5	-	1
65095	Office Supplies	5,213	0.633	0.187	0.074	0.079	0.022	0.002	0.004	3,300	973	384	411	113	12	19
65108	Photo/Drafting Supplies	417	0.633	0.187	0.074	0.079	0.022	0.002	0.004	264	78	31	33	9	1	2
	Total Water General Support Expenses	932,346								590,285	173,989	68,615	73,516	20,268	2,210	3,462
	TOTAL WATER EXPENSES	$ 8,620,228								$ 5,457,646	$1,608,662	$ 634,362	$ 679,710	$ 187,388	$ 20,454	$ 32,002
										63.3%	18.7%	7.4%	7.9%	2.2%	0.2%	0.4%

Please Refer to Accountants' Report,

CITY OF EVANSTON WATER UTILITY
Demand Ratios Used For Allocation Of Cost To Customer Classes
Test Year 2009-2010
COST OF SERVICE - VERSION 2

Schedule 7a

	Total Consumption			Maximum Day Extra Capacity Demand			Maximum Hour Extra Capacity Demand			
				Ratio	Rate		Ratio	Rate	Percent of Total	
	Annual Cubic Feet	Ave Day Cubic Feet	% of Total	Extra Capacity	Cubic Feet Day	% of Total	Extra Capacity	Cubic Feet Hour	Storage	Distri-bution
Customer Class										
Residential (A)	113,830,000	311,900	30.12%	2.75 (B)	857,725	33.07%	5.00 (B)	64,979	33.74%	33.74%
Multi-Family (A)	125,620,000	344,200	33.24%	2.75 (B)	946,550	36.50%	5.00 (B)	71,708	37.24%	37.24%
Commercial (A)	126,990,000	347,900	33.60%	2.10 (B)	730,590	28.17%	3.125 (B)	45,299	23.52%	23.52%
Industrial (A)	1,670,000	4,600	0.44%	1.65 (B)	7,590	0.29%	2.15 (B)	412	0.21%	0.21%
School (A)	6,060,000	16,600	1.60%	2.10 (B)	34,860	1.34%	3.125 (B)	2,161	1.12%	1.12%
Subtotal	374,170,000	1,025,200		2.51	2,577,315		4.32	184,561		
Public Fire Protection	3,741,700	10,300	0.99%		16,043	0.62%		8,021	4.17%	4.17%
TOTALS	377,911,700	1,035,500	100.00%		2,593,358	100%		192,582	100.00%	100.00%

(A) - Total non-wholesale consumption per Schedule 3c (pages 21-22).
(B) - Average maximum day and maximum hour factors as suggested by AWWA's Manual of Water Supply Practices.

CITY OF EVANSTON WATER UTILITY *Schedule 7b*
Unit Cost Calculation
Test Year 2009-2010
COST OF SERVICE - VERSION 2

	Total Cost (A)	Extra Capacity Demand Maximum Day	Extra Capacity Demand Maximum Hour	Base (Volume)	Customer Costs Equivalent Meters	Customer Costs Equivalent Services	Customer Costs Customer Billing (D)	Fire Protection	Unit Cost ($/ccf)
Unit cost of svc ($/unit)		$ 0.43850	$ 3.05169	$ 0.009	$ 17.67750	$ 10.84458	$ 0.09066		
Residential:									
Units of service (B)		857,725	64,979	113,830,000	11,499	10,935	64,696		
Allocated cost of service	$ 1,914,200	376,100	198,300	1,012,000	203,300	118,600	5,900		1.68
Multi-Family:									
Units of service (B)		946,550	71,708	125,620,000	5,781	3,362	15,277		
Allocated cost of service	1,890,800	415,100	218,800	1,116,800	102,200	36,500	1,400		1.51
Commercial:									
Units of service (B)		730,590	45,299	126,990,000	3,773	1,571	5,674		
Allocated cost of service	1,671,600	320,400	138,200	1,128,800	66,700	17,000	500		1.32
Industrial:									
Units of service (B)		7,590	412	1,670,000	121	57	210		
Allocated cost of service	22,200	3,300	1,300	14,900	2,100	600	0		1.33
School:									
Units of service (B)		34,860	2,161	6,060,000	277	83	174		
Allocated cost of service	81,600	15,300	6,600	53,900	4,900	900	0		1.35
Fire Protection: (C)									
Units of service (B)		16,043	8,021	3,741,700					
Allocated cost of service	94,600	7,000	24,500	33,400	-	-	-	29,700	
Total:									
Units of service		2,593,358	192,582	377,911,700	21,451	16,008	86,031	0	
Allocated cost of service	$ 5,675,000	$ 1,137,200	$ 587,700	$ 3,359,800	$ 379,200	$ 173,600	$ 7,800	$ 29,700	

(A) - Per Schedule 6a (page 56).
(B) - Units of service based on information per Schedule 7a (page 63) for maximum day, maximum hour and base and per Schedule 7c (page 65) for equivalent meters, equivalent services and customer billing.
(C) - Fire protection added to base for rate making.
(D) - Customer billing units per forecasted meters listed on Schedule 7c (page 65) multiplied by 6 billing periods due to bi-monthly billing.

CITY OF EVANSTON WATER UTILITY
Development of Meters and Allocation Ratios
Test Year 2009-2010
COST OF SERVICE - VERSION 2

Schedule 7c

FORECASTED METERS (Forecasted on Schedule 3f)

Size	Meters	Residential	Multi-Family	Commercial	Industrial	School	Total
5/8	11,989	10,002	1,532	442	11	2	11,989
3/4	590	370	199	20	1	-	590
1	1,023	376	437	196	11	3	1,023
1-1/2	229	31	103	86	5	4	229
2	431	4	249	157	7	14	431
3	47	-	20	23	-	4	47
4	23	-	6	16	-	1	23
6	4	-	-	3	-	1	4
8	3	-	-	3	-	-	3
12	0	-	-	-	-	-	0
16	0	-	-	-	-	-	0
36	0	-	-	-	-	-	0
60	0	-	-	-	-	-	0
Total	14,339	10,783	2,546	946	35	29	14,339
	Percent	75.20%	17.76%	6.60%	0.24%	0.20%	100.00%

CITY OF EVANSTON WATER UTILITY
Calculation of Volume Charges
Test Year 2009-2010
COST OF SERVICE - VERSION 2

Schedule 7d

	Billed Volume	Demand Ratio	Equivalent Volume	Cost Per Equivalent Volume	Computed Volume Charge	Computed Revenue
Base - Evanston (B)	3,741,700	1.0000	3,741,700	$ 1.37	$ 1.37	$ 5,126,129
Base - Evanston (C)	3,311,575	1.0000	3,311,575	1.54	$ 1.54	$ 5,099,825

	Revenue Requirement (A)		
Maximum Day	$ 1,137,242		
Maximum Hour	587,681		
Base (Volume)	3,359,932		
Fire Protection	29,695	Existing Rates	
	$ 5,114,551	$ 4,973,400	2.8%

(A) - Per Schedule 6c (page 58).

(B) - Total billed volume as listed per Schedule 3c (pages 21-22) less unbilled city and parks.

(C) - Only volume > 500 cubic feet billed using number of meters listed per Schedule 3c (pages 21-22) less unbilled city and parks multiplied by 500 cubic feet for 6 bi-monthly billings per year.

CITY OF EVANSTON WATER UTILITY *Schedule 7e*
Meter Charge Calculation
Test Year 2009-2010
COST OF SERVICE - VERSION 2

Meter Size			Unit Cost	Equivalent Meters	Equivalent Services		Cost $	Current	% Increase
3/4" & 5/8"	Meter related costs	(A)	2.94625	1.0		$	2.95		
	Service related costs	(B)	1.80743		1.0		1.81		
	Customer related costs	(C)	0.09066				0.09		
	Total						4.84		
	Total Rounded					$	4.80	5.40	-11%
1"									
	Meter related costs		2.94625	2.5		$	7.37		
	Service related costs		1.80743		1.3		2.35		
	Customer related costs		0.09066				0.09		
	Total						9.81		
	Total Rounded					$	9.80	10.80	-9%
1 1/2"									
	Meter related costs		2.94625	5.0			14.73		
	Service related costs		1.80743		2.0		3.61		
	Customer related costs		0.09066				0.09		
	Total						18.44		
	Total Rounded						18.40	20.20	-9%
2"									
	Meter related costs		2.94625	8.0			23.57		
	Service related costs		1.80743		3.0		5.42		
	Customer related costs		0.09066				0.09		
	Total						29.08		
	Total Rounded						29.10	31.80	-8%
3"									
	Meter related costs		2.94625	15.0			44.19		
	Service related costs		1.80743		4.0		7.23		
	Customer related costs		0.09066				0.09		
	Total						51.51		
	Total Rounded						51.50	56.00	-8%
4"									
	Meter related costs		2.94625	25.0			73.66		
	Service related costs		1.80743		5.0		9.04		
	Customer related costs		0.09066				0.09		
	Total						82.78		
	Total Rounded						82.80	89.70	-8%
6"	Meter related costs		2.94625	50.0			147.31		
	Service related costs		1.80743		6.0				
	Customer related costs		0.09066				0.09		
	Total						147.40		
	Total Rounded						147.40	158.20	-7%
8"	Meter related costs		2.94625	80.0			235.70		
	Service related costs		1.80743		7.0		12.65		
	Customer related costs		0.09066				0.09		
	Total						248.44		
	Total Rounded						248.40	267.80	-7%

(A) Factor computed as follows:
$ 17.67750 / 6 = $ 2.94625 Found on Schedule 7b (page 64)
(B) Factor computed as follows:
$ 10.84458 / 6 = $ 1.80743 Found on Schedule 7b (page 64)
(C) Factor computed as follows:
$ 0.09066 / 6 = $ 0.01511 Found on Schedule 7b (page 64)

CITY OF EVANSTON WATER UTILITY *Schedule 7f - 2*

Comparison of Total Revenues Generated With
Present and Computed Rates
Test Year 2009-2010

COST OF SERVICE - VERSION 2 - EVANSTON IMPACT ONLY - ONLY CONSUMPTION > 500 CUBIC FEET BILLED

	Calculated Rates	Commercial		Industrial		School	
		Units (A)	Revenue	Units (A)	Revenue	Units (A)	Revenue
Volume Charge	$ 1.54 /00 CF	1,241,530	$ 1,912,000	15,650	$ 24,100	59,730	$ 92,000

Meter Size		Meters	Billings	Revenues	Meters	Billings	Revenues	Meters	Billings	Revenues
5/8	$ 4.80 /Bi-Monthly	442	2,650	12,720	11	66	317	2	12	58
3/4	4.80 /Bi-Monthly	20	120	576	1	6	29	-	-	-
1	9.80 /Bi-Monthly	196	1,176	11,525	11	66	647	3	18	176
1 1/2	18.40 /Bi-Monthly	86	516	9,494	5	30	552	4	24	442
2	29.10 /Bi-Monthly	157	942	27,412	7	42	1,222	14	84	2,444
3	51.50 /Bi-Monthly	23	138	7,107	-	-	-	4	24	1,236
4	82.80 /Bi-Monthly	16	96	7,949	-	-	-	1	6	497
6	147.40 /Bi-Monthly	3	18	2,653	-	-	-	1	6	884
8	248.40 /Bi-Monthly	3	18	4,471	-	-	-	-	-	-
Subtotal		946	5,674	83,908	35	210	2,767	29	174	5,737
Total Revenues at Computed Rates				$ 1,995,908			$ 26,867			$ 97,737
Total Revenues at Current Rates				$ 1,970,945			$ 26,543			$ 96,747
$ Increase				$ 24,963			$ 323			$ 991
% Increase				1.27%			1.22%			1.02%

	Authorized Rates	Multi-Family		Residential		**Total**	
		Units (A)	Revenue	Units (A)	Revenue	**Units (A)**	**Revenue**
Volume Charge	$ 1.52 /00 CF	1,179,815	$ 1,816,900	814,820	$ 1,254,800	**3,311,545**	**$ 5,099,800**

Meter Size		Meters	Billings	Revenues	Meters	Billings	Revenues	**Meters**	**Billings**	**Revenues**
5/8	$ 5.40 /Bi-Monthly	1,532	9,193	44,127	10,002	60,010	288,048	**11,989**	**71,931**	**345,269**
3/4	5.40 /Bi-Monthly	199	1,194	5,731	370	2,220	10,656	**590**	**3,540**	**16,992**
1	10.80 /Bi-Monthly	437	2,622	25,696	376	2,256	22,109	**1,023**	**6,138**	**60,152**
1 1/2	20.20 /Bi-Monthly	103	618	11,371	31	186	3,422	**229**	**1,374**	**25,282**
2	31.80 /Bi-Monthly	249	1,494	43,475	4	24	698	**431**	**2,586**	**75,253**
3	56.00 /Bi-Monthly	20	120	6,180	-	-	-	**47**	**282**	**14,523**
4	89.70 /Bi-Monthly	6	36	2,981	-	-	-	**23**	**138**	**11,426**
6	158.20 /Bi-Monthly	-	-	-	-	-	-	**4**	**24**	**3,538**
8	267.80 /Bi-Monthly	-	-	-	-	-	-	**3**	**18**	**4,471**
Subtotal		2,546	15,277	139,561	10,783	64,696	324,934	**14,339**	**86,031**	**556,906**
Total Revenues at Computed Rates				$ 1,956,461			$ 1,579,734			$ 5,656,706
Total Revenues at Current Rates				$ 1,925,650			$ 1,510,027			$ 5,529,912
$ Increase				$ 30,811			$ 69,706			126,794
% Increase				1.60%			4.62%			2.3%
Offset to Revenues - per proforma										2,756,701
Revenue Forecasted from Current Rates - Evanston Only (B)										**$ 5,675,000**
$ Increase										**$ (18,294)**
% Increase										**-0.3%**

(A) - Only volume > 500 cubic feet billed using number of meters listed per Schedule 3c (pages 21-22) less unbilled city and parks multiplied by 500 cubic feet for 6 bi-monthly billings per year.