

Sewer Rate Study

City of Independence
Independence, Minnesota

November 9, 2016

CITY OF INDEPENDENCE, MINNESOTA
SEWER RATE STUDY
TABLE OF CONTENTS
November 9, 2016

	<u>Page No.</u>
INTRODUCTORY SECTION	
I. Introduction	3
II. Assumptions	4
III. Sewer Rate Study	5
Summary	7
SUPPLEMENTARY INFORMATION	
Sewer Fund	
Cash Flow Projections	
Schedule of Cash Flows - Current State	9
Schedule of Cash Flows - Scenario 1	10

INTRODUCTORY SECTION

CITY OF INDEPENDENCE
INDEPENDENCE, MINNESOTA

November 9, 2016

CITY OF INDEPENDENCE, MINNESOTA
SEWER RATE STUDY
November 9, 2016

I. INTRODUCTION

The City of Independence, Minnesota (the City) owns and operates sewer utilities. These services are provided to roughly 225 residential and commercial customers and charges for availability to another 26 parcels. The City estimates new connections as outlined on the assumptions page. Since the annual expectation for increased connections is fairly low, the City will need to rely primarily on rate increases in order to fund increased operating costs and future capital needs.

This rate study analyzes the cash flows of the sewer utilities and sewer access charge funds of the City. Sources and uses of cash are projected for the years ending December 31, 2016 to December 31, 2025. The study uses the current number and type of accounts to project future revenue at a suggested rate for each of the utility funds, each year.

Annual capital costs are projected separately for each of the funds for the projection period. The City has an updated capital improvement plan that goes from 2016 to 2025. Projections anticipate bonded street projects for each of the next five years.

The Sewer fund has had negative cash from operations for each of the previous three years presented. In order to fund future operations, capital and debt, it will be necessary to increase rates and consider establishing a sewer district for the all potential users of the system.

The financial projection is based on billings at the current rate inflated (current state) and billings increased over a 10 year period sufficient to generate positive cash flow (Scenario 1). Expense assumptions are outlined in the assumptions section on the following page and present, to the best of management's knowledge and belief, the City's expected results of cash flows for the projection period if such uses of cash occur. Accordingly, the projection reflects management's judgment, as of the date of this projection, of the expected conditions and the City's expected course of action if such usage and expense totals were attained. The presentation is designed to provide information to the City Council concerning recovery of expenses that might be achieved if rates were adjusted and should not be considered to be a presentation of expected future results. Accordingly, this projection may not be useful for other purposes. The assumptions disclosed herein are those that management believes are significant to the projection. Furthermore, there will usually be differences between projected and actual results, because events and circumstances frequently do not occur as expected and those differences may be material.

CITY OF INDEPENDENCE, MINNESOTA
SEWER RATE STUDY
November 9, 2016

II. ASSUMPTIONS

Overall Assumptions:

- Debt is based on estimated Bond issues and existing debt schedules
- 3% increase in revenue for inflation
- 3% increase for inflation for capital contributions
- 2% increase in expenditures for inflation
- 3% increase for cost of expansion
- 3% increase in other operating revenue
- .5% return for investment income.
- \$20,000 wage reduction in 2017 due to reallocating wages to reflect actual.
- \$35,000 capital outlay in 2017, financed by rates
- \$75,000 capital outlay in 2017, financed by the Lindgren Lane property sale
- \$80,000 transfer of Lindgren Lane property for parks
- Depreciation is not factored into operating expenses but is factored by establishing a cash reserve target based on the assumption of funding depreciation.

Current State:

- Current rates are to be continued assuming the above assumptions.
- An increase in three users per year and assessment fees in place for 9 units over the next 5 years

Scenario 1:

Summary - In Scenario 1, rates were increased to hit a cash target after 10 years. In order to achieve this goal, an increase of rates is as follows:

- Increase of rates of 8% in 2017 and 10% in years 2018 to 2019
- Increase of rates of 5% in following years
- Availability charges are increased to be half of the current residential rates. The current ordinance reflects the fact that outstanding availability lots were to be hooked up to the system by now.

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual Increase in Users	7	3	3	3	3	3	3	3	3	3	3
Total customers											
Residential	221	224	227	230	233	236	239	242	245	248	251
Commercial	1	1	1	1	1	1	1	1	1	1	1
Residential cluster	3	3	3	3	3	3	3	3	3	3	3
Residential Availability	26	26	41	41	41	41	41	41	41	41	41
	0	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Connection fee revenue											
\$ 1,160	\$ 8,120	\$ 3,480	\$ 3,480	\$ 3,480	\$ 3,480	\$ 3,480	\$ 3,480	\$ 3,480	\$ 3,480	\$ 3,480	\$ 3,480
Assessment fee		2	2	2	2	1					
\$ 9,550	\$ 19,100	\$ 19,100	\$ 19,100	\$ 19,100	\$ 19,100	\$ 9,550					

CITY OF INDEPENDENCE, MINNESOTA
SEWER RATE STUDY
November 9, 2016

III. SEWER RATE STUDY

Sewer utilities operating fund

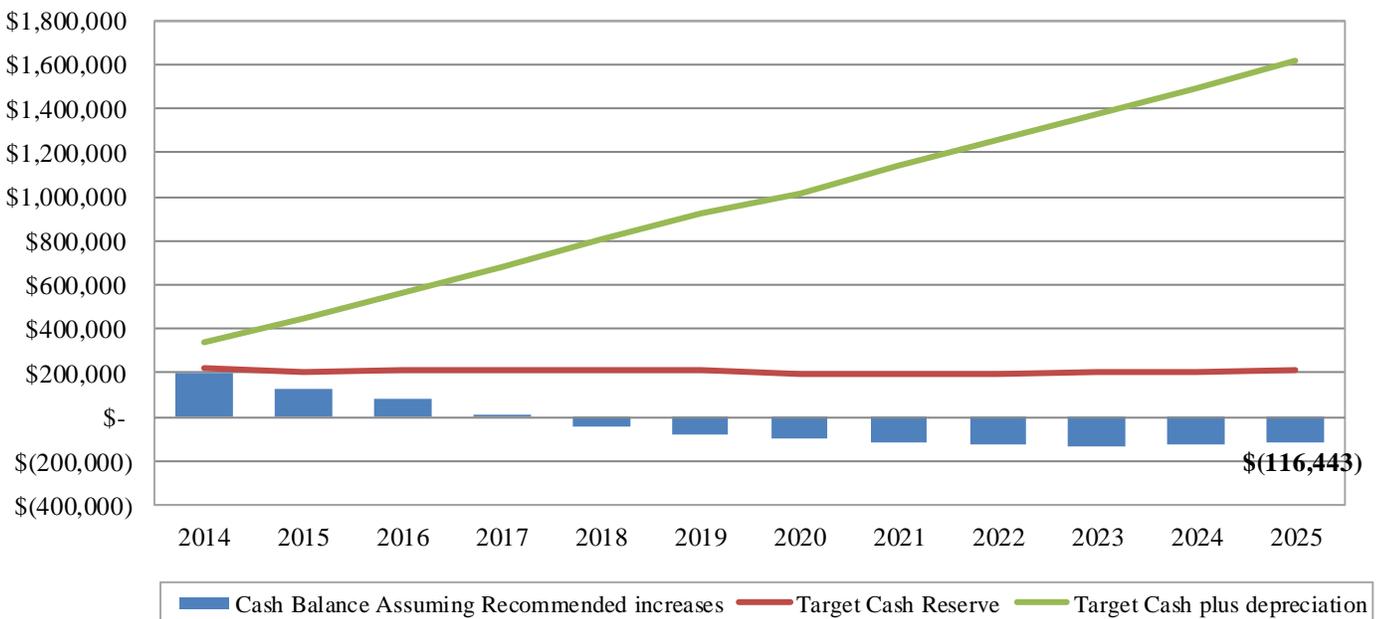
Goal

- Sewer Operating fund to maintain a targeted cash balance. Targeted cash balance for the fund refers to the following years' debt service obligations well as 50 percent of estimated operating costs. There isn't an amount built in for depreciation recovery.

Current state

The current rate for residential is \$168 per quarter, \$128 for availability and commercial is \$871 per quarter. Based on the current state with only inflationary increases in rates the cash balance of the fund is projected to be as follows:

Current State - Projected and Target Sewer Cash Balances



The City has sufficient special assessments and property taxes to fund debt service but does not have sufficient operating cash. In addition, the City is not addressing any funding for depreciation at the current time. The combination of these two issues will make it extremely difficult to fund future operations unless some significant rate changes are made.

CITY OF INDEPENDENCE, MINNESOTA
SEWER RATE STUDY
November 9, 2016

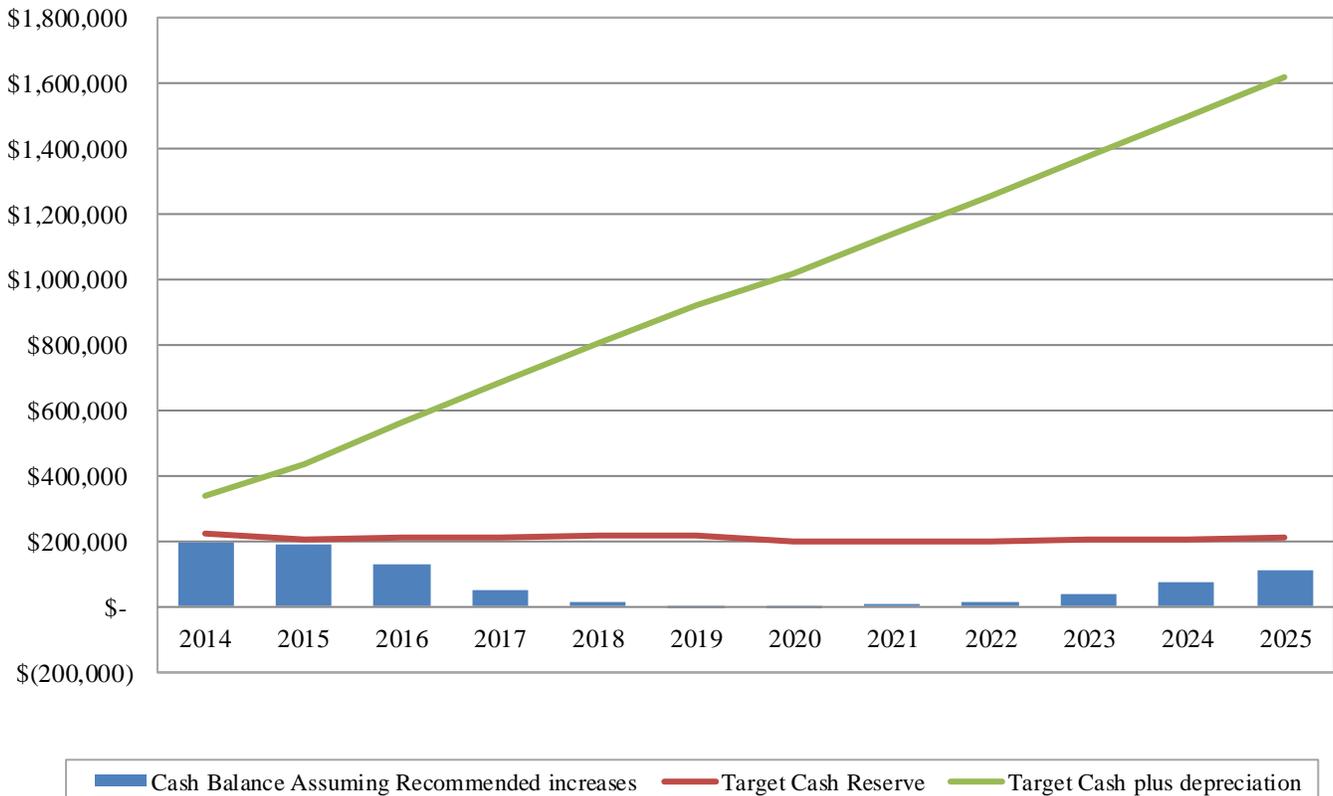
III. SEWER RATE STUDY - CONTINUED

Scenario 1- Inflates rates sufficient to generate positive operating cash and to generate a sufficient working capital target. Rates needed are identified below:

	Current rate	Current rate										
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Proposed Rate Quarterly		0%	0%	8%	10%	10%	5%	5%	5%	5%	5%	5%
Residential	\$ 168	\$ 168	\$ 168	\$ 181	\$ 200	\$ 220	\$ 231	\$ 242	\$ 254	\$ 267	\$ 280	\$ 294
Commercial	871	871	871	941	1,035	1,138	1,195	1,255	1,318	1,384	1,453	1,525
Residential cluster	77	77	77	83	91	100	105	110	116	122	128	134
Availability	32	32	32	91	100	110	115	121	127	133	140	147
Proposed Rate Annual												
Residential	\$ 672	\$ 672	\$ 672	\$ 726	\$ 798	\$ 878	\$ 922	\$ 968	\$ 1,017	\$ 1,067	\$ 1,121	1,177
Commercial	3,484	3,484	3,484	3,763	4,139	4,553	4,781	5,020	5,271	5,534	5,811	6,101
Residential cluster	306	306	306	330	364	400	420	441	463	486	510	536
Availability	128	128	128	363	399	439	461	484	508	534	560	588

If the rate increases are implemented as presented above, the cash balances of the fund will be as follows:

Scenario 1 - Projected and Target Sewer Cash Balances



Steadily increasing cash balances are achieved starting in 2019 and continue through the projection period. The City will then be on a path to building reserves for future capital repair and replacement that certainly will be needed. This is indicated by the increasing line for target cash plus depreciation.

CITY OF INDEPENDENCE, MINNESOTA
SEWER RATE STUDY
November 9 ,2016

Summary

As evidenced in the discussion above, maintaining the current structure, even if inflationary increases are done, is not an option. It appears that Scenario 1 rate increases will allow the City to achieve its targeted cash balance by the end of the 10 year projection period and start to build cash reserves that will be needed for future repair and replacement.

SUPPLEMENTARY INFORMATION

CITY OF INDEPENDENCE
INDEPENDENCE, MINNESOTA

November 9, 2016

CITY OF INDEPENDENCE, MINNESOTA
SEWER FUND
SCHEDULE OF CASH FLOWS - CURRENT STATE
FOR THE YEARS ENDED DECEMBER 31, 2014 TO 2015 (ACTUAL) AND 2016 TO 2025 (ESTIMATED)

	Actual 2014	Actual 2015	3.00% Budgeted 2016	3.00% Budgeted 2017	3.00% Estimated 2018	3.00% Estimated 2019	3.00% Estimated 2020	3.00% Estimated 2021	3.00% Estimated 2022	3.00% Estimated 2023	3.00% Estimated 2024	3.00% Estimated 2025
CASH FLOWS FROM OPERATING ACTIVITIES												
Receipts from customers	\$ 162,083	\$ 160,054	\$ 169,801	\$ 180,142	\$ 191,113	\$ 202,752	\$ 215,099	\$ 228,199	\$ 242,096	\$ 256,840	\$ 272,481	\$ 289,075
Payments to suppliers and vendors	(191,252)	(153,298)	(156,364)	(159,491)	(162,681)	(165,935)	(169,253)	(172,638)	(176,091)	(179,613)	(183,205)	(186,869)
Payments to and on behalf of employees	(62,077)	(72,583)	(74,035)	(71,515)	(72,946)	(74,405)	(75,893)	(77,411)	(78,959)	(80,538)	(82,149)	(83,792)
NET CASH PROVIDED BY OPERATING ACTIVITIES	(91,246)	(65,827)	(60,597)	(50,864)	(44,514)	(37,588)	(30,047)	(21,850)	(12,954)	(3,311)	7,127	18,414
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES												
Transfers in	-	-	-	80,000	-	-	-	-	-	-	-	-
NET CASH PROVIDED BY NONCAPITAL FINANCING ACTIVITIES	-	-	-	80,000	-							
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES												
Special assessments	81,323	82,663	64,959	63,333	61,708	60,082	58,456	56,830	55,204	53,579	51,953	50,327
Property taxes	11,650	10,705	15,010	13,652	12,295	15,957	14,225	12,272	15,569	13,351	16,382	13,883
Acquisition of capital assets	(8,414)	(13,617)	-	(110,000)	-	-	-	-	-	-	-	-
Connection fees received	46,838	14,741	22,580	22,580	22,580	22,580	13,030	3,480	3,480	3,480	3,480	-
Principal paid on bonds payable	(70,000)	(70,000)	(70,000)	(75,000)	(80,000)	(80,000)	(60,000)	(60,000)	(60,000)	(65,000)	(65,000)	(70,000)
Interest paid on bonds payable	(25,767)	(24,218)	(22,458)	(20,491)	(18,201)	(15,674)	(13,530)	(11,775)	(9,915)	(7,929)	(5,816)	(3,570)
NET CASH PROVIDED (USED) BY CAPITAL AND RELATED FINANCING ACTIVITIES	35,630	275	10,092	(105,926)	(1,619)	2,945	12,181	807	4,338	(2,519)	998	(9,360)
CASH FLOWS FROM INVESTING ACTIVITIES												
Interest received on investments	1,218	465	651	402	20	(210)	(385)	(476)	(583)	(629)	(662)	(624)
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(54,398)	(65,088)	(49,854)	(76,388)	(46,112)	(34,853)	(18,250)	(21,519)	(9,199)	(6,460)	7,464	8,430
CASH AND CASH EQUIVALENTS, JANUARY 1	249,784	195,386	130,299	80,444	4,056	(42,056)	(76,909)	(95,159)	(116,678)	(125,877)	(132,337)	(124,873)
CASH AND CASH EQUIVALENTS, DECEMBER 31	\$ 195,386	\$ 130,299	\$ 80,444	\$ 4,056	\$ (42,056)	\$ (76,909)	\$ (95,159)	\$ (116,678)	\$ (125,877)	\$ (132,337)	\$ (124,873)	\$ (116,443)
Target Cash	\$ 222,432	\$ 207,158	\$ 207,657	\$ 210,995	\$ 216,015	\$ 215,843	\$ 196,103	\$ 196,799	\$ 197,440	\$ 203,004	\$ 203,493	\$ 208,901
Excess		\$ (76,860)	\$ (127,213)	\$ (206,939)	\$ (258,071)	\$ (292,752)	\$ (291,262)	\$ (313,477)	\$ (323,317)	\$ (335,341)	\$ (328,366)	\$ (325,344)

CITY OF INDEPENDENCE, MINNESOTA
SEWER FUND
SCHEDULE OF CASH FLOWS - SCENARIO 1
FOR THE YEARS ENDED DECEMBER 31, 2012 TO 2015 (ACTUAL) AND 2016 TO 2025 (ESTIMATED)

	Actual 2014	Actual 2015	3.00% Estimated 2016	3.00% Estimated 2017	3.00% Estimated 2018	3.00% Estimated 2019	3.00% Estimated 2020	3.00% Estimated 2021	3.00% Estimated 2022	3.00% Estimated 2023	3.00% Estimated 2024	3.00% Estimated 2025
CASH FLOWS FROM OPERATING ACTIVITIES												
Receipts from customers	\$ 162,083	\$ 164,008	\$ 158,258	\$ 178,937	\$ 199,222	\$ 221,780	\$ 235,638	\$ 250,328	\$ 265,892	\$ 282,392	\$ 299,871	\$ 318,395
Payments to suppliers and vendors	(191,252)	(150,337)	(156,364)	(159,491)	(162,681)	(165,935)	(169,253)	(172,638)	(176,091)	(179,613)	(183,205)	(186,869)
Payments to and on behalf of employees	(62,077)	(66,523)	(74,035)	(71,515)	(72,946)	(74,405)	(75,893)	(77,411)	(78,959)	(80,538)	(82,149)	(83,792)
NET CASH PROVIDED BY OPERATING ACTIVITIES	(91,246)	(52,852)	(72,141)	(52,070)	(36,405)	(18,559)	(9,508)	279	10,842	22,241	34,517	47,734
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES												
Transfers in	-	-	-	80,000	-	-	-	-	-	-	-	-
NET CASH PROVIDED BY NONCAPITAL FINANCING ACTIVITIES	-	-	-	80,000	-							
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES												
Special assessments	81,323	110,392	64,959	63,333	61,708	60,082	58,456	56,830	55,204	53,579	51,953	50,327
Property taxes	11,650	10,705	15,010	13,652	12,295	15,957	14,225	12,272	15,569	13,351	16,382	13,883
Acquisition of capital assets	(8,414)	-	-	(110,000)	-	-	-	-	-	-	-	-
Connection fees received	46,838	17,824	22,580	22,580	22,580	22,580	13,030	3,480	3,480	3,480	3,480	-
Principal paid on bonds payable	(70,000)	(70,000)	(70,000)	(75,000)	(80,000)	(80,000)	(60,000)	(60,000)	(60,000)	(65,000)	(65,000)	(70,000)
Interest paid on bonds payable	(25,767)	(24,218)	(22,458)	(20,491)	(18,201)	(15,674)	(13,530)	(11,775)	(9,915)	(7,929)	(5,816)	(3,570)
NET CASH PROVIDED (USED) BY CAPITAL AND RELATED FINANCING ACTIVITIES	35,630	44,703	10,092	(105,926)	(1,619)	2,945	12,181	807	4,338	(2,519)	998	(9,360)
CASH FLOWS FROM INVESTING ACTIVITIES												
Interest received on investments	1,218	977	941	636	249	60	(18)	(5)	1	77	176	354
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(54,398)	(7,172)	(61,108)	(77,360)	(37,775)	(15,554)	2,655	1,082	15,181	19,798	35,691	38,728
CASH AND CASH EQUIVALENTS, JANUARY 1	249,784	195,386	188,214	127,106	49,746	11,971	(3,584)	(929)	153	15,335	35,133	70,824
CASH AND CASH EQUIVALENTS, DECEMBER 31	\$ 195,386	\$ 188,214	\$ 127,106	\$ 49,746	\$ 11,971	\$ (3,584)	\$ (929)	\$ 153	\$ 15,335	\$ 35,133	\$ 70,824	\$ 109,552
Target Cash	\$ 222,432	\$ 202,648	\$ 207,657	\$ 210,995	\$ 216,015	\$ 215,843	\$ 196,103	\$ 196,799	\$ 197,440	\$ 203,004	\$ 203,493	\$ 208,901
Excess	\$ (14,434)	\$ (80,551)	\$ (161,249)	\$ (204,044)	\$ (219,427)	\$ (197,032)	\$ (196,646)	\$ (182,105)	\$ (167,871)	\$ (132,669)	\$ (99,349)	