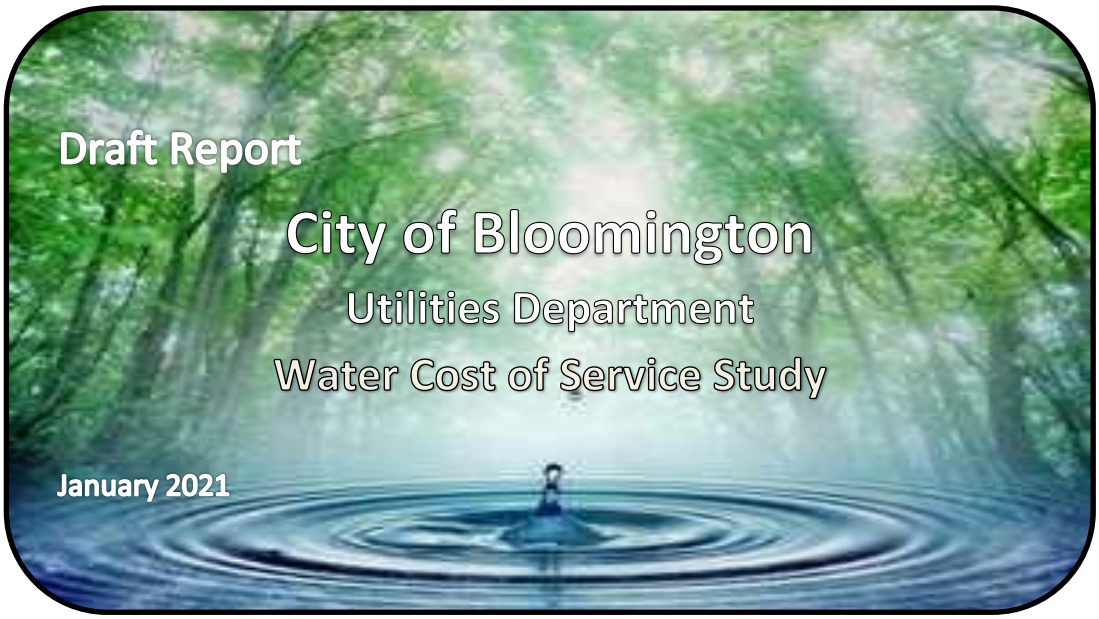
Bookmarks

Utility Full	City of Bloomington Utilities Department
Utility Short	The City
Report Title	Water Cost of Service Study
Report sentence	water cost of service study
Report Date	January 2021
Page Header	Water Report
Historic Year	2020
Contact	Vic Kelson
Title	Director
Address	600 E. Miller Drive
City State Zip	Bloomington, IN 47401
Report Status	Draft Report
Test Year	2020
Financial FC End	2024
TY Operating Income	$1.62M
Final Operating Income	$1.26M
Test Year Op Inc Target	$1.58M
Final Year Op Inc Target	$917,250
TY Cash	$6.15M
FC End Cash	$2.18M
TY Cash Rec	$2.8M
FC End Cash Rec	$2.69M
Net Equity	$9.5M
Losses	28%
Revenue Requirement	$19,549,172
Unit	thousand gallons
Units	thousand gallons
Billing Stats	April 2019 – March 2020



Utility Financial Solutions, LLC

Specializing in Cost of Service,
Rate Design, and Financial Analysis

This page intentionally left blank

Utility Financial Solutions, LLC

January 2021

Vic Kelson
Director
City of Bloomington Utilities Department
600 E. Miller Drive
Bloomington, IN 47401

Dear Mr. Kelson;

We are pleased to present the Draft Report for the water cost of service study for the City of Bloomington Utilities Department (The City). This report was prepared to provide The City with a comprehensive examination of its existing rate structure by an outside party.

The specific purposes of this rate study are:

- Determine water utility's revenue requirements for fiscal year 2020
- Identify cross-subsidies that may exist between rate classes
- Recommend rate adjustments needed to meet targeted revenue requirements
- Identify the appropriate monthly customer charge for each customer class

This report includes results of the water cost of service study and recommendations on future rate designs.

This report is intended for information and use by the utility and management for the purposes stated above and is not intended to be used by anyone except the specified parties.

Sincerely,

Utility Financial Solutions, LLC
Mark Beauchamp
CPA, MBA, CMA
185 Sun Meadow Ct
Holland, MI 49424

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

Contents

1. Introduction

This report was prepared to provide the City of Bloomington Utilities Department (The City) with a water cost of service study and a comprehensive examination of its existing rate structure by an outside party. The specific purposes of the study are identified below:

1) **Analyze water utility's revenue requirements for fiscal year 2020**. The City's revenue requirements were projected in two phases by Crowe LLP and utilized in the cost of service analysis. Phase I represents annual revenue requirements for 2021 – 2023. Phase II represents annual revenue requirements for 2024 – 2025. Each phase included adjustments for the following:

    a. Capital improvement plan projected over next five years
    b. Taxes other than income taxes
    c. Average Annual Lease Payment for AMI and Solar Lease
    d. Average Annual Extensions and Replacements

2) ***Identify cross-subsidies that may exist between rate classes.*** Cross-subsidies exist when certain customer classes subsidize the water costs of other customers. The rate study identifies if cross-subsidies exist and practical ways to reduce the subsidies. The cost of service study was completed using 2020 actual revenues and expenses.

3) ***Recommend rate adjustments needed to meet targeted revenue requirements.*** The primary purpose of this study is to identify the rate adjustments needed to meet targeted revenue requirements.

4) ***Identify the appropriate monthly customer charge for each customer class.*** The monthly customer charge consists of fixed costs to service customers.

2. Cost of Service Summary

Utility Rate Process

The City retained Utility Financial Solutions, LLC to review utility rates and cost of service and make recommendations on the appropriate course of action. This report includes results of the water cost of service and unbundling study and recommendations on future rate designs.

Cost of Service Summary Results: Water Department

A cost of service study was completed to determine the cost of providing service to each class of customers and to assist in design of water rates for customers. A cost of service study consists of the following general steps:

1) Classify utility expenses into common cost pools.
2) Allocate costs to customer classes based on the classes' contribution to utility expenses.
3) Compare revenues received from each class to the cost of service.

The cost of service summary is included as Table 1 which compares the projected cost to serve each class with the revenue received from each class. The "% change" column is the revenue adjustment necessary to meet projected cost of service requirements. The cost of service summary uses the current rates, including any adjustment factors.

Table 1 – Cost of Service Summary

	Phase I			Phase II (Cumulative)		
Customer Class	Cost of Service ($)	Projected Revenues ($)	% Change	Cost of Service ($)	Projected Revenues ($)	% Change
5/8" Meter	489,818	455,857	7.5%	509,045	455,857	11.7%
3/4" Meter	1,307,476	1,425,945	-8.3%	1,374,553	1,425,945	-3.6%
1" Meter	388,017	431,447	-10.1%	412,980	431,447	-4.3%
1.5" Meter	124,475	106,092	17.3%	131,537	106,092	24.0%
2" Meter	180,534	167,130	8.0%	192,990	167,130	15.5%
3" Meter	60,243	67,392	-10.6%	64,315	67,392	-4.6%
4" Meter	84,235	99,968	-15.7%	90,351	99,968	-9.6%
6" Meter	132,642	164,801	-19.5%	142,817	164,801	-13.3%
8" Meter	26,747	36,542	-26.8%	29,158	36,542	-20.2%
10" Meter	11,159	14,121	-21.0%	12,166	14,121	-13.8%
Residential and Multi Family	6,289,355	5,943,896	5.8%	6,904,052	5,943,896	16.2%
Comm, Gov, Interdept Usage	3,021,933	2,491,162	21.3%	3,313,989	2,491,162	33.0%
Industrial	204,062	148,842	37.1%	224,112	148,842	50.6%
Wholesale	3,046,266	2,479,465	22.9%	3,294,760	2,479,465	32.9%
Indiana University Usage	1,085,103	840,125	29.2%	1,175,137	840,125	39.9%
Irrigation Usage	914,295	385,328	137.3%	1,020,953	385,328	165.0%
Fire Protection	1,501,621	1,630,512	-7.9%	1,745,579	1,630,512	7.1%
Total	$ 18,867,983	$ 16,888,625	11.7%	$ 20,638,493	$ 16,888,625	22.2%

Cost of Service Components: Water Department

The purpose of a cost of service study is to allocate costs between flow (Commodity Costs) and customer service costs (Customer Costs). The cost of service study was based on recognized procedures from the American Water Works Association.

Customer Costs are costs associated with serving customers regardless of their usage or demand characteristics. Customer costs include the operation and maintenance expenses related to meters and services, meter reading costs, billing and collection costs. The customer costs were allocated on the basis of the relative cost of meters and services and the number of customers.

Commodity Costs are costs that tend to vary with the quantity of water used, as well as costs associated with purchasing, pumping and distributing water to customers. Commodity costs include wholesale water purchase costs plus pumping stations and transmission lines.

The revenue requirements for the study are set on the utility basis. Table 2 details the current monthly charge and provides a comparison with cost of service. We recommend the utility move toward the cost of service monthly charge.

Table 2 – Comparison of Monthly Charge with Cost of Service

	Phase I	Phase II	
Customer Class	Cost of Service Meter $/Month	Cost of Service Meter $/Month	Current Meter $/Month
5/8" Meter	$ 6.33	$ 6.58	$ 5.89
3/4" Meter	7.21	7.58	7.86
1" Meter	9.52	10.14	10.59
1.5" Meter	21.58	22.80	18.39
2" Meter	28.30	30.25	26.20
3" Meter	54.13	57.79	60.55
4" Meter	83.90	89.99	99.57
6" Meter	158.66	170.83	197.13
8" Meter	215.70	235.15	294.69
10" Meter	309.99	337.94	392.24

Table 3 outlines the COS commodity rates compared to the current commodity charge. The rates below are not the recommended rates. They are used as a guide to move toward cost of service slowly over time.

Table 3 – Comparison of Monthly Commodity Charge with Cost of Service

	Phase I	Phase II	
Customer Class	Cost of Service Commodity by Class	Cost of Service Commodity by Class	Current Commodity Charge
Residential and Multi Family	$ 3.95	$ 4.33	$ 3.73
Comm, Gov, Interdept Usage	3.83	4.20	3.16
Industrial	4.00	4.40	2.92
Wholesale	2.94	3.18	2.39
Indiana University Usage	3.06	3.32	2.37
Irrigation Usage	8.11	9.06	3.42

Determination of Meter Equivalents

A meter equivalent is the maximum capacity of the utility's smallest meter size compared with the maximum capacity of other meters. The meter equivalent ratios are standard factors used by AWWA.

Table 4 – Meter Capacity Factors

Meter Size	Meter Capacity Ratios 5/8"
0.63	1.00
0.75	1.50
1.00	2.50
1.50	5.00
2.00	8.00
3.00	15.00
4.00	25.00
6.00	50.00
8.00	80.00
10.00	115.00
12.00	215.00

*Table of capacity factors was calculated using theoretical volume capacity of each meter size.

**The table can be interpreted as a 2-inch meter has 8 times more potential capacity than a 1-inch meter.

Customer Charge Breakdown

Table 5 outlines the COS customer charges compared to the current customer charge. The rates below are not the recommended rates, but a guide for future designs of water rates.

Table 5 – Comparison of Monthly Customer Charge with Cost of Service

	Phase I	Phase II	
Customer Class	Cost of Service Meter $/Month	Cost of Service Meter $/Month	Current Meter $/Month
5/8" Meter	$ 6.33	$ 6.58	$ 5.89
3/4" Meter	7.21	7.58	7.86
1" Meter	9.52	10.14	10.59
1.5" Meter	21.58	22.80	18.39
2" Meter	28.30	30.25	26.20
3" Meter	54.13	57.79	60.55
4" Meter	83.90	89.99	99.57
6" Meter	158.66	170.83	197.13
8" Meter	215.70	235.15	294.69
10" Meter	309.99	337.94	392.24

The customer charge consists of expenses related to, 1) providing a minimum amount of water to the residential customer, and 2) servicing a meter on the customer's premises; together they reflect the cost for availability of service. The methodology used in this study is consistent with methodologies and practices used by AWWA. The customer charge includes two types of charges called minimum system and direct charges. A further discussion of these charges follows.

Minimum System Charges: Utilities provide water lines to connect customers to the water transmission system, pumping stations, reservoirs, and subsequently the water treatment facilities. The cost to provide the minimum level of service is allocated to each meter size based on the potential capacity of the customer's meter. For cost of service purposes, the total cost of the water distribution infrastructure is broken into two components:

1. The minimum system costs, in effect provide a customer with the minimum capacity and should be recovered through the customer charge.
2. Demand-related costs are additional infrastructure costs of providing customers with capacity in the water system for usage greater than the minimum amounts and should be recovered through the usage component.
3. The study used a 2" line as the minimum sizing requirement

The customer charge cost-based rate breakdown for meter sizes under Phase I are listed in Table 6 and Phase II are listed in Table 7 .

Table 6 – Customer Charge Breakdown Phase I

Phase I

Rate Class - Monthly Unit Costs	Meters	Services	Cust. Serv.	Distribution Facilities	Billing	Total Customer COS	Current Customer Charge
5/8" Meter	$ 3.10	$ 0.16	$ 0.40	$ 1.44	$ 1.24	$ 6.33	$ 5.89
3/4" Meter	3.10	0.23	0.48	2.16	1.24	7.21	7.86
1" Meter	3.66	0.39	0.64	3.60	1.24	9.52	10.59
1.5" Meter	11.40	0.78	0.96	7.21	1.24	21.58	18.39
2" Meter	13.01	1.24	1.28	11.53	1.24	28.30	26.20
3" Meter	27.02	2.33	1.92	21.62	1.24	54.13	60.55
4" Meter	40.19	3.88	2.55	36.03	1.24	83.90	99.57
6" Meter	73.76	7.77	3.83	72.07	1.24	158.66	197.13
8" Meter	81.62	12.43	5.11	115.30	1.24	215.70	294.69
10" Meter	118.75	17.87	6.39	165.75	1.24	309.99	392.24

Table 7 – Customer Charge Breakdown Phase II

Phase II

Rate Class - Monthly Unit Costs	Meters	Services	Cust. Serv.	Distribution Facilities	Billing	Total Customer COS	Current Customer Charge
5/8" Meter	$ 3.10	$ 0.15	$ 0.40	$ 1.69	$ 1.24	$ 6.58	$ 5.89
3/4" Meter	3.10	0.23	0.48	2.53	1.24	7.58	7.86
1" Meter	3.66	0.38	0.64	4.21	1.24	10.14	10.59
1.5" Meter	11.41	0.77	0.96	8.43	1.24	22.80	18.39
2" Meter	13.02	1.23	1.28	13.48	1.24	30.25	26.20
3" Meter	27.04	2.30	1.92	25.28	1.24	57.79	60.55
4" Meter	40.22	3.84	2.56	42.13	1.24	89.99	99.57
6" Meter	73.81	7.68	3.84	84.26	1.24	170.83	197.13
8" Meter	81.67	12.29	5.12	134.82	1.24	235.15	294.69
10" Meter	118.82	17.67	6.40	193.81	1.24	337.94	392.24

Customer Service	Personnel cost to service accounts
Meters	Installation, operation, and maintenance costs of meter
Services	Installation, operation, and maintenance cost of service drop
Distribution Facilities	Installation and maintenance cost of minimum sized distribution system
Billing	Billing and collection costs

Commodity Charge Breakdown

Table 8 outlines the COS commodity rates compared to the current commodity charge. The rates below are not the recommended rates, but a guide for future designs of water rates.

Table 8 – Comparison of Monthly Commodity Charge with Cost of Service

	Phase I	Phase II	
Customer Class	Cost of Service Commodity by Class	Cost of Service Commodity by Class	Current Commodity Charge
Residential and Multi Family	$ 3.95	$ 4.33	$ 3.73
Comm, Gov, Interdept Usage	3.83	4.20	3.16
Industrial	4.00	4.40	2.92
Wholesale	2.94	3.18	2.39
Indiana University Usage	3.06	3.32	2.37
Irrigation Usage	8.11	9.06	3.42

The cost based commodity rates are broken down between rate classes and listed for Phase I in Table 9 and Phase II in Table 10.

Table 9 – Commodity Charge Breakdown Phase I

Phase I

Rate Class - Monthly Unit Costs	Treatment	Distribution	Transmission	Total Customer COS	Current Customer Charge
Residential and Multi Family	$ 2.60	$ 0.82	$ 0.53	$ 3.95	$ 3.73
Comm, Gov, Interdept Usage	2.55	0.77	0.51	3.83	3.16
Industrial	2.62	0.84	0.54	4.00	2.92
Wholesale	2.45	-	0.48	2.94	2.39
Indiana University Usage	2.55	-	0.51	3.06	2.37
Irrigation Usage	4.42	2.56	1.14	8.11	3.42

Table 10 – Commodity Charge Breakdown Phase II

Phase II

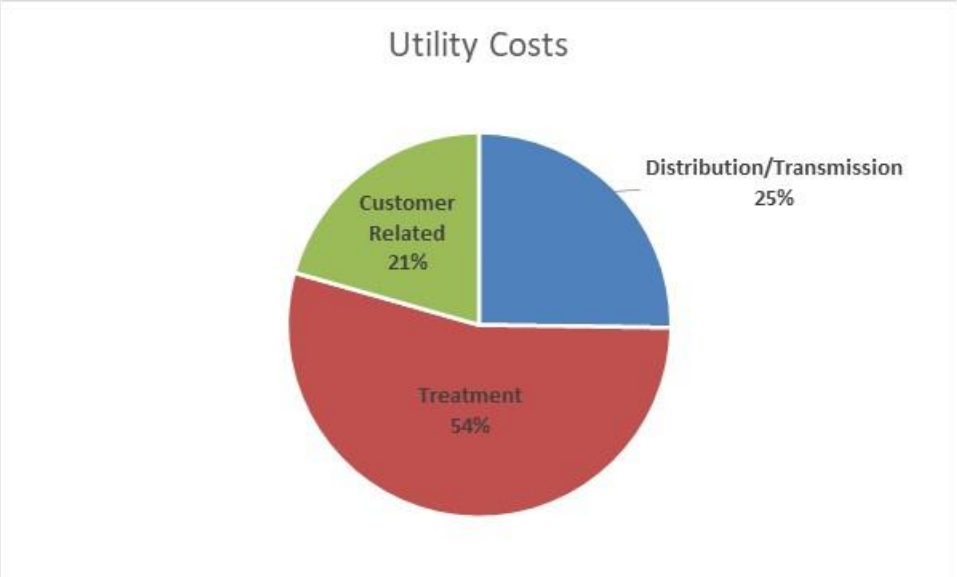
Rate Class - Monthly Unit Costs	Treatment	Distribution	Transmission	Total Customer COS	Current Customer Charge
Residential and Multi Family	$ 2.78	$ 0.95	$ 0.60	$ 4.33	$ 3.73
Comm, Gov, Interdept Usage	2.73	0.89	0.58	4.20	3.16
Industrial	2.81	0.97	0.61	4.40	2.92
Wholesale	2.63	-	0.55	3.18	2.39
Indiana University Usage	2.73	-	0.59	3.32	2.37
Irrigation Usage	4.80	2.97	1.29	9.06	3.42

Treatment	Cost related to source of supply and treatment of water
Transmission	Cost to transport between the treatment plant and local distribution lines
Distribution	The usage component of the distribution facilities

Unbundling Process

The cost of treatment, distribution, customer-related, and fire protection are identified as part of the unbundling process and are the first step in determining unbundled charges to customers. The total Phase II revenue requirements adjusted for other operating revenues of $20,638,493 are separated into three categories identified in Figure 1.

Figure 1 – Breakdown of Cost Structure

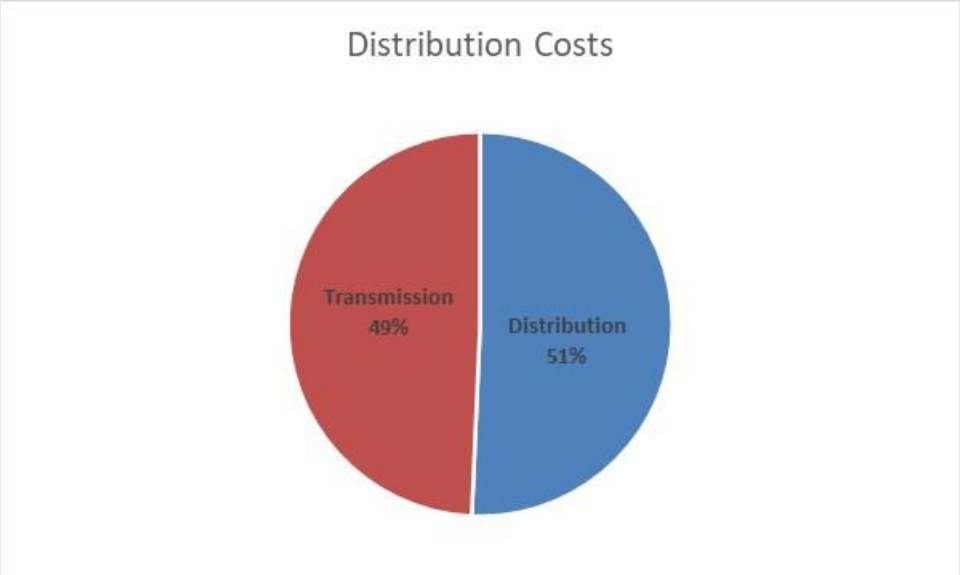


The expenses consist of customer-related costs 21%, distribution costs 25%, treatment costs 54%. These components are broken down into each of the subcomponents and are identified in the following sections.

Distribution Cost Breakdown

Total distribution costs of $5.12 million for Phase II are broken down into the main components Figure 2 below: Distribution and Transmission.

Figure 2 – Breakdown of Distribution Costs



For cost of service purposes, cost of mains 16 inches and above were classified as transmission and below 16 inches as distribution. Each of these components are allocated to customer groups based on certain factors established in the study, such as the length of line extensions to reach certain customer classes. The distribution-related costs are separated into the customer charge based on the cost to provide a minimum amount of water to the customer, and the usage component expressed as a rate per thousand gallons. Transmission costs are allocated into the usage component of the rates.

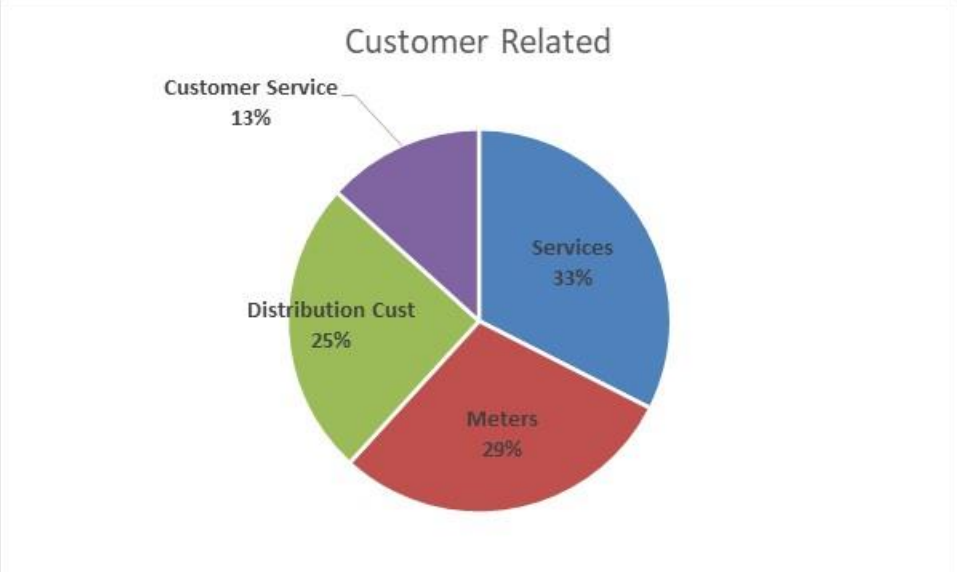
Treatment Cost Breakdown

Total treatment costs for Phase II were $11.27 million.

Customer-Related Cost Breakdown

The City's total expenses for customer-related costs are $4.25 million for Phase II. The cost is broken down into the following components in Figure 3.

Figure 3 – Breakdown of Customer Costs



Direct customer-related costs are allocated to rate classes based on cost of meters, minimum sizing requirements, customer service and billing costs for each customer class and meter size.

Private Fire Protection Cost Breakdown

The cost based private fire protection rates are broken down by meter size and listed for Phase I in Table 11 and Phase II in Table 12 below.

Table 11 – Private Fire Protection Breakdown Phase I

Phase I

Private Fire Meter Size (Inches)	Monthly Rate	Customer and Billing	Cost of Service Meter $/Month	Current Meter $/Month	% Change
4	$ 9.66	$ 1.24	$ 10.89	$ 9.86	10%
6	28.05	1.24	29.29	27.40	7%
8	59.77	1.24	61.01	56.15	9%
10	107.49	1.24	108.73	98.34	11%
12	173.63	1.24	174.86	155.05	13%

Table 12 – Private Fire Protection Breakdown Phase II

Phase II

Private Fire Meter Size (Inches)	Monthly Rate	Customer and Billing	Cost of Service Meter $/Month	Current Meter $/Month	% Change
4	$ 11.13	$ 1.24	$ 12.37	$ 9.86	25%
6	32.32	1.24	33.56	27.40	22%
8	68.88	1.24	70.12	56.15	25%
10	123.88	1.24	125.12	98.34	27%
12	200.09	1.24	201.33	155.05	30%

Public Fire Protection Cost Breakdown

The cost based public fire protection rates are broken down by meter size and listed for Phase I in Table 13 and Phase II in

Table 14 below.

Table 13 – Public Fire Protection Breakdown Phase I

Phase I

Meter Size	Cost of Service Meter $/Month	Current Meter $/Month	% Change
Fire Pro 5/8" Meter In	$ 1.86	$ 1.96	-5%
Fire Pro 3/4" Meter In	2.79	2.93	-5%
Fire Pro 1" Meter In	4.65	4.89	-5%
Fire Pro 1.5" Meter In	9.30	9.78	-5%
Fire Pro 2" Meter In	14.87	15.64	-5%
Fire Pro 3" Meter In	27.89	34.23	-19%
Fire Pro 4" Meter In	46.48	58.67	-21%
Fire Pro 6" Meter In	92.96	122.27	-24%
Fire Pro 8" Meter In	148.74	176.06	-16%
Fire Pro 10" Meter In	213.81	283.63	-25%
Fire Pro 5/8" Meter Out	2.92	3.28	-11%
Fire Pro 3/4" Meter Out	4.38	4.93	-11%
Fire Pro 1" Meter Out	7.30	8.22	-11%
Fire Pro 1.5" Meter Out	14.60	16.41	-11%
Fire Pro 2" Meter Out	23.37	26.29	-11%
Fire Pro 3" Meter Out	43.81	57.50	-24%
Fire Pro 4" Meter Out	73.02	98.53	-26%
Fire Pro 6" Meter Out	146.05	205.29	-29%
Fire Pro 8" Meter Out	233.68	295.60	-21%
Fire Pro 10" Meter Out	602.47	476.27	26%

Table 14 – Public Fire Protection Breakdown Phase II

Phase II

Meter Size	Cost of Service Meter $/Month	Current Meter $/Month	% Change
Fire Pro 5/8" Meter In	$ 2.17	$ 1.96	10%
Fire Pro 3/4" Meter In	3.25	2.93	11%
Fire Pro 1" Meter In	5.41	4.89	11%
Fire Pro 1.5" Meter In	10.83	9.78	11%
Fire Pro 2" Meter In	17.33	15.64	11%
Fire Pro 3" Meter In	32.48	34.23	-5%
Fire Pro 4" Meter In	54.14	58.67	-8%
Fire Pro 6" Meter In	108.28	122.27	-11%
Fire Pro 8" Meter In	173.25	176.06	-2%
Fire Pro 10" Meter In	249.05	283.63	-12%
Fire Pro 5/8" Meter Out	3.40	3.28	4%
Fire Pro 3/4" Meter Out	5.10	4.93	3%
Fire Pro 1" Meter Out	8.50	8.22	3%
Fire Pro 1.5" Meter Out	17.01	16.41	4%
Fire Pro 2" Meter Out	27.21	26.29	4%
Fire Pro 3" Meter Out	51.02	57.50	-11%
Fire Pro 4" Meter Out	85.03	98.53	-14%
Fire Pro 6" Meter Out	170.07	205.29	-17%
Fire Pro 8" Meter Out	272.11	295.60	-8%
Fire Pro 10" Meter Out	517.39	476.27	9%

Combined Cost Summary

Table 15 compares the cost of service rates for each customer class with the current rates. Charging these rates would directly match the cost of providing service to each customer class shown below.

Table 15 – Total Costs by Customer Class

Customer Class	Phase I Cost of Service Meter $/Month	Phase II Cost of Service Meter $/Month	Current Meter $/Month	Variance from Phase II
5/8" Meter	$ 6.33	$ 6.58	$ 5.89	12%
3/4" Meter	7.21	7.58	7.86	-4%
1" Meter	9.52	10.14	10.59	-4%
1.5" Meter	21.58	22.80	18.39	24%
2" Meter	28.30	30.25	26.20	15%
3" Meter	54.13	57.79	60.55	-5%
4" Meter	83.90	89.99	99.57	-10%
6" Meter	158.66	170.83	197.13	-13%
8" Meter	215.70	235.15	294.69	-20%
10" Meter	309.99	337.94	392.24	-14%

Customer Class	Phase I Cost of Service Commodity by Class	Phase II Cost of Service Commodity by Class	Current Commodity Charge	Variance from Phase II
Residential and Multi Family	$ 3.95	$ 4.33	$ 3.73	16%
Comm, Gov, Interdept Usage	3.83	4.20	3.16	33%
Industrial	4.00	4.40	2.92	51%
Wholesale	2.94	3.18	2.39	33%
Indiana University Usage	3.06	3.32	2.37	40%
Irrigation Usage	8.11	9.06	3.42	165%

The table above compares the current customer charges with the cost-based customer charges and identifies the cost-based commodity rates for each class.

3. Significant Assumptions

This section outlines the procedures used to develop the cost of service for The City and the related significant assumptions.

Unit Sales

Actual usage units from April 2019 through March 2020 were used in the study.

Revenue Requirements

Revenue requirements were projected by Crowe LLP for Phase I and Phase II.

Table 16 – Revenue Requirements

Description	Phase I	Phase II
Operation & Maintenance Expenses	$ 10,456,788	$ 10,482,255
Annual Debt Service	5,771,928	6,459,471
Annual Lease Payment: Advance Meter Infrastructure	456,755	456,755
Annual Lease Payment: Solar Lease	189,646	189,646
Average Annual Extensions and Replacements	2,809,000	3,866,500
Total Cost of Service	$ 19,684,117	$ 21,454,627
Less Other Operating Revenues	(816,134)	(816,134)
Total Revenue Requirements	**$ 18,867,983**	**$ 20,638,493**

4. Water Department Proposed Rate Design

The City may consider a rate design for Phase I and Phase II to meet revenue requirements and move the charges toward cost of service over time. Table 17 provides a proposed rate design by rate component for Phase I and Phase II.

Table 17 – Proposed Rate Design

	Current	Phase 1	Phase 2
Meter Size			
5/8" Meter	$ 5.89	$ 6.45	$ 6.58
3/4" Meter	7.86	7.86	7.86
1" Meter	10.59	10.59	10.59
1.5" Meter	18.39	22.07	22.80
2" Meter	26.20	30.25	30.25
3" Meter	60.55	60.55	60.55
4" Meter	99.57	99.57	99.57
6" Meter	197.13	197.13	197.13
8" Meter	294.69	294.69	294.69
10" Meter	392.24	392.24	392.24
Fire Pro 5/8" Meter In	1.96	2.17	2.17
Fire Pro 3/4" Meter In	2.93	3.25	3.25
Fire Pro 1" Meter In	4.89	5.41	5.41
Fire Pro 1.5" Meter In	9.78	10.83	10.83
Fire Pro 2" Meter In	15.64	17.32	17.32
Fire Pro 3" Meter In	34.23	34.23	34.23
Fire Pro 4" Meter In	58.67	58.67	58.67
Fire Pro 6" Meter In	122.27	122.27	122.27
Fire Pro 8" Meter In	176.06	176.06	176.06
Fire Pro 10" Meter In	283.63	283.63	283.63
Fire Pro 5/8" Meter Out	3.28	3.40	3.40
Fire Pro 3/4" Meter Out	4.93	5.10	5.10
Fire Pro 1" Meter Out	8.22	8.50	8.50
Fire Pro 1.5" Meter Out	16.41	17.01	17.01
Fire Pro 2" Meter Out	26.29	27.21	27.21
Fire Pro 3" Meter Out	57.50	57.50	57.50
Fire Pro 4" Meter Out	98.53	98.53	98.53
Fire Pro 6" Meter Out	205.29	205.29	205.29
Fire Pro 8" Meter Out	295.60	295.60	295.60
Fire Pro 10" Meter Out	476.27	496.83	517.40
Private Fire 4" or Less	9.86	11.83	12.37
Private Fire 6"	27.40	32.88	33.56
Private Fire 8"	56.15	67.38	70.12
Private Fire 10"	98.34	118.01	125.11
Private Fire 12"	155.05	186.06	201.33
Commodity Charge ('000 Gallons)			
Residential and Multi Family	$ 3.73	$ 4.09	$ 4.54
Comm, Gov, Interdept Usage	3.16	3.79	4.20
Industrial	2.92	3.50	4.20
Wholesale	2.39	2.81	3.18
Indiana University Usage	2.37	2.78	3.31
Irrigation Usage	3.42	4.10	4.92
Total Revenue	$ 16,888,625	$ 18,868,132	$ 20,631,124
Total Revenue Annual Change		11.7%	9.3%
Total Revenue Cummulative Change		11.7%	22.2%

Utility Financial Solutions
185 Sun Meadow Ct.
Holland, MI 49424
Phone: 616-393-9722
Fax: 616-393-9721

Accountant's Compilation Report

Governing Body
City of Bloomington Utilities Department

The accompanying forecasted statements of revenues and expenses of the City of Bloomington Utilities Department (utility) were compiled for the year ending December 31, 2020 in accordance with guidelines established by the American Institute of Certified Public Accountants.

The purpose of this report is to assist management in forecasting revenue requirements and determining the cost to service each customer class. This report should not be used for any other purpose.

A compilation is limited to presenting, in the form of a forecast; information represented by management and does not include evaluation of support for any assumptions used in projecting revenue requirements. We have not audited the forecast and, accordingly, do not express an opinion or any other form of assurance on the statements or assumptions accompanying this report.

Differences between forecasted and actual results will occur since some assumptions may not materialize and events and circumstances may occur that were not anticipated. Some of these variations may be material. Utility Financial Solutions has no responsibility to update this report after the date of this report.

This report is intended for information and use by the governing body and management for the purposes stated above. This report is not intended to be used by anyone except the specified parties.

UTILITY FINANCIAL SOLUTIONS

Mark Beauchamp,
President, Utility Financial Solutions, LLC
Holland, MI
January 2021

Appendix A – Supplemental Information

After Phase II rates are implemented, cross subsidization is greatly reduced. However, some cross subsidization will remain. Table 18 shows the over and under recovery after implementation of the Phase II rate design. A positive value implies over-recovery to offset costs for other classes.

Table 18 – Summary of Over (Under) Recovery

Over/Under Recovery	Phase 2
Meter Size	
5/8" Meter	-
3/4" Meter	51,452
1" Meter	18,484
1.5" Meter	-
2" Meter	-
3" Meter	3,079
4" Meter	9,621
6" Meter	21,988
8" Meter	7,384
10" Meter	1,955
Fire Pro 5/8" Meter In	-
Fire Pro 3/4" Meter In	-
Fire Pro 1" Meter In	-
Fire Pro 1.5" Meter In	-
Fire Pro 2" Meter In	-
Fire Pro 3" Meter In	1,634
Fire Pro 4" Meter In	3,900
Fire Pro 6" Meter In	10,352
Fire Pro 8" Meter In	292
Fire Pro 10" Meter In	1,245
Fire Pro 5/8" Meter Out	-
Fire Pro 3/4" Meter Out	-
Fire Pro 1" Meter Out	-
Fire Pro 1.5" Meter Out	-
Fire Pro 2" Meter Out	-
Fire Pro 3" Meter Out	1,147
Fire Pro 4" Meter Out	1,930
Fire Pro 6" Meter Out	3,382
Fire Pro 8" Meter Out	470
Private Fire 4" or Less	-
Private Fire 6"	-
Private Fire 8"	-
Private Fire 10"	-
Private Fire 12"	
Commodity Charge ('000 Gallons)	
Residential and Multi Family	330,794
Comm, Gov, Interdept Usage	-
Industrial	(9,833)
Wholesale	-
Indiana University Usage	-
Irrigation Usage	(466,056)