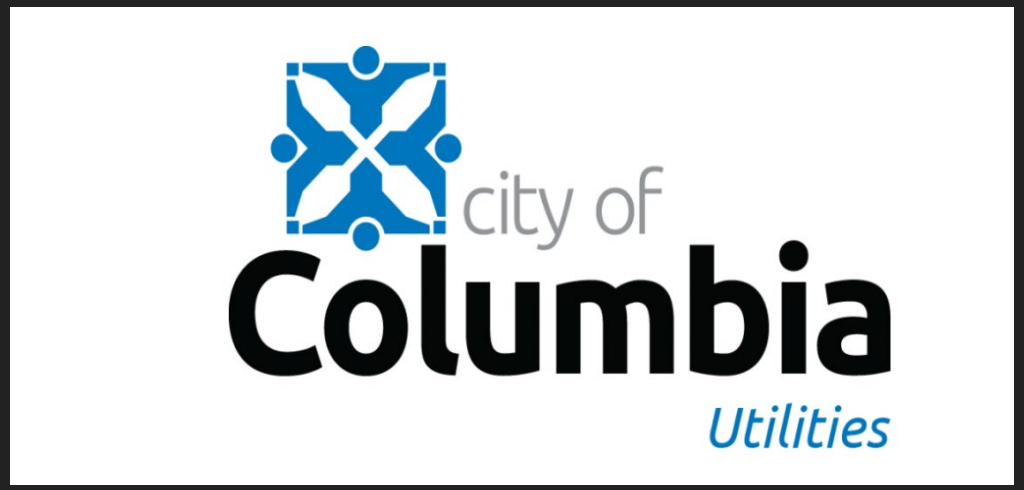
Rates 101 Presentation

Columbia, MO

Stantec Financial Services

Agenda



- Introduction to Stantec
- Rate Study Process
  - Revenue Sufficiency
  - Cost of Service
  - Rate Design
  - Customer Impacts
- Project Timeline

400+
Combined years of experience

35+
Specialists in utility financial management

>375
Communities served

1.5K
studies in the last 10 years

>550
Utilities in our benchmarking database

$4B+
Debt supported in the past five years

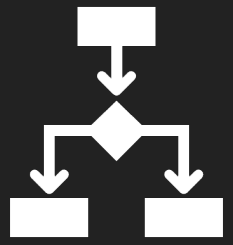
A Rate Study is a Series of Connected Investigations

How Much?

Revenue Sufficiency

- Maintain policies & targets
- Fund system investment needs
- Achieve sustainable funding of operations

From Whom?



Defensible Allocation Methods

- Utilize industry accepted approaches
- Maintain inter and intra class proportionality
- Define correct and appropriate units of service

How to Collect?

Simple & Sustainable Rates

- Collect revenue proportional to services provided
- Balance affordability and financial objectives
- Accomplish revenue stability

Revenue Requirements

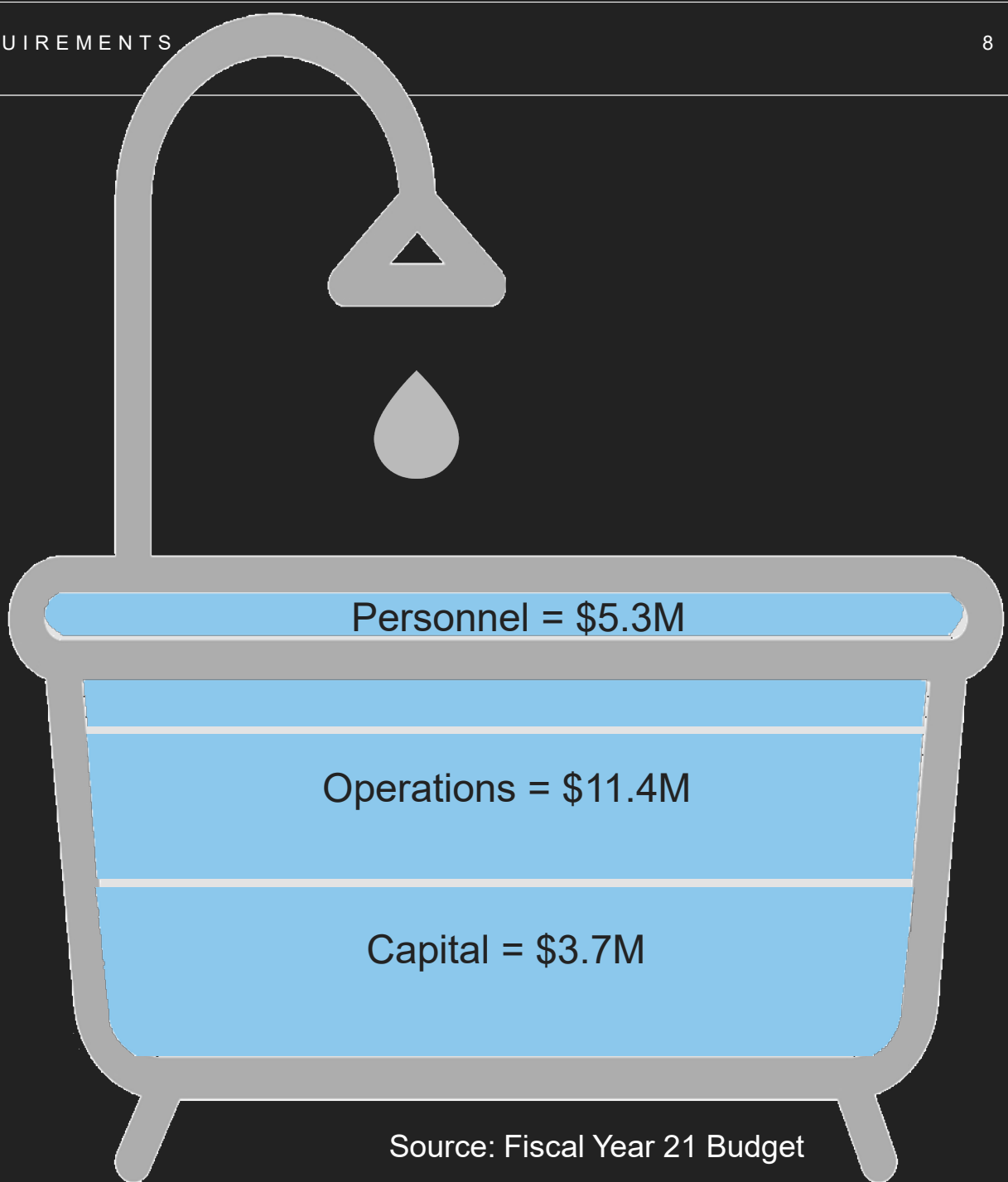
How much?

Typical Components of Utility Revenue Requirements

What is the cost to **empty** your trash and recycling bins?

Source: Fiscal Year 21 Budget

What is the cost to drain a tub?



Source: Fiscal Year 21 Budget

10-Year Financial Management Plan

FAMS Financial Analysis & Management System | By Stantec

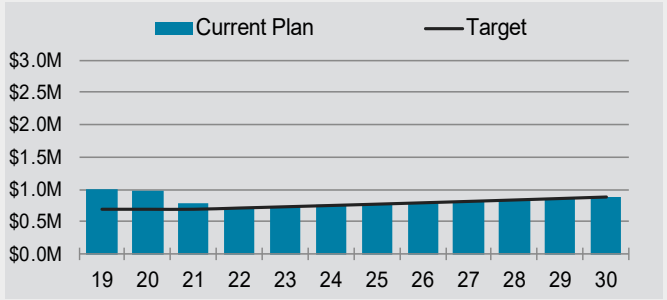
ANYTOWN, USA - SOLID WASTE

Stantec

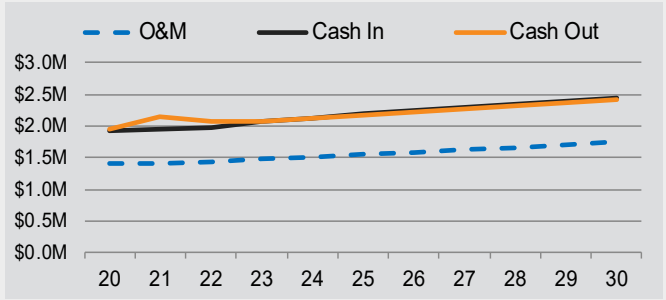
CALC SAVE CTRL LAST OVR

	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2025	FY 2030
Solid Waste Rate Plan	0.00%	0.00%	0.00%	4.33%	1.46%	1.28%	1.34%	1.34%	1.36%	1.37%	1.39%	7.23%	14.71%
Senior-Lien DSC	3.04	3.24	2.87	2.98	2.95	2.98	3.03	3.09	3.15	3.21	3.27		
Total Single Family Bill	$18.00	$18.00	$18.00	$18.78	$19.05	$19.30	$19.56	$19.82	$20.09	$20.36	$20.65		

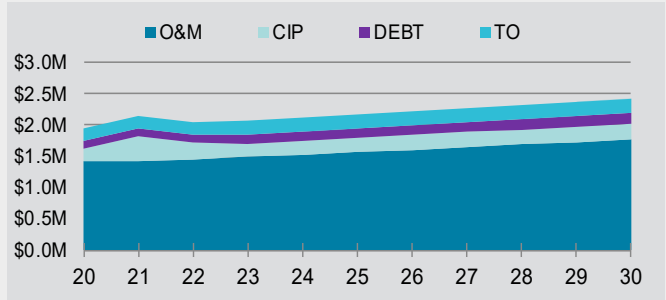
Operating Fund



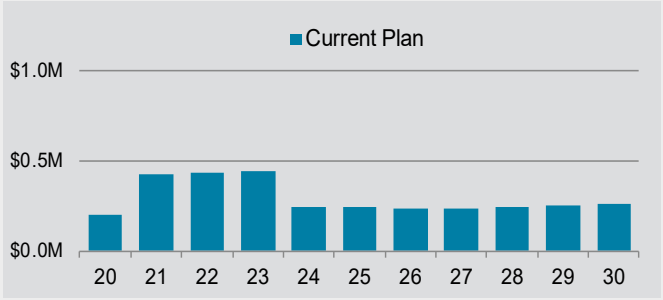
Revenues vs. Expenses



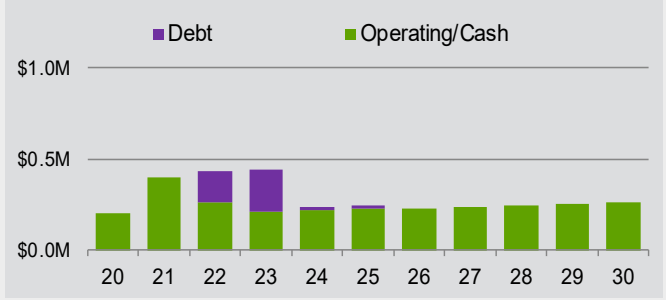
Expenses by Type



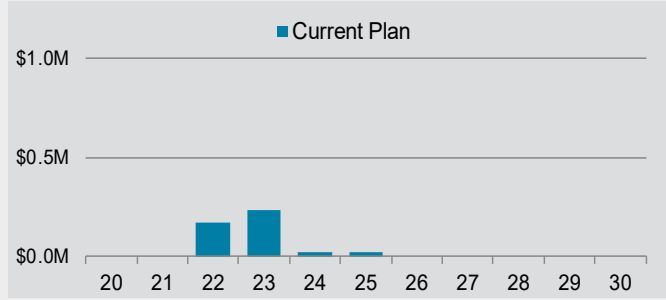
CIP Spending



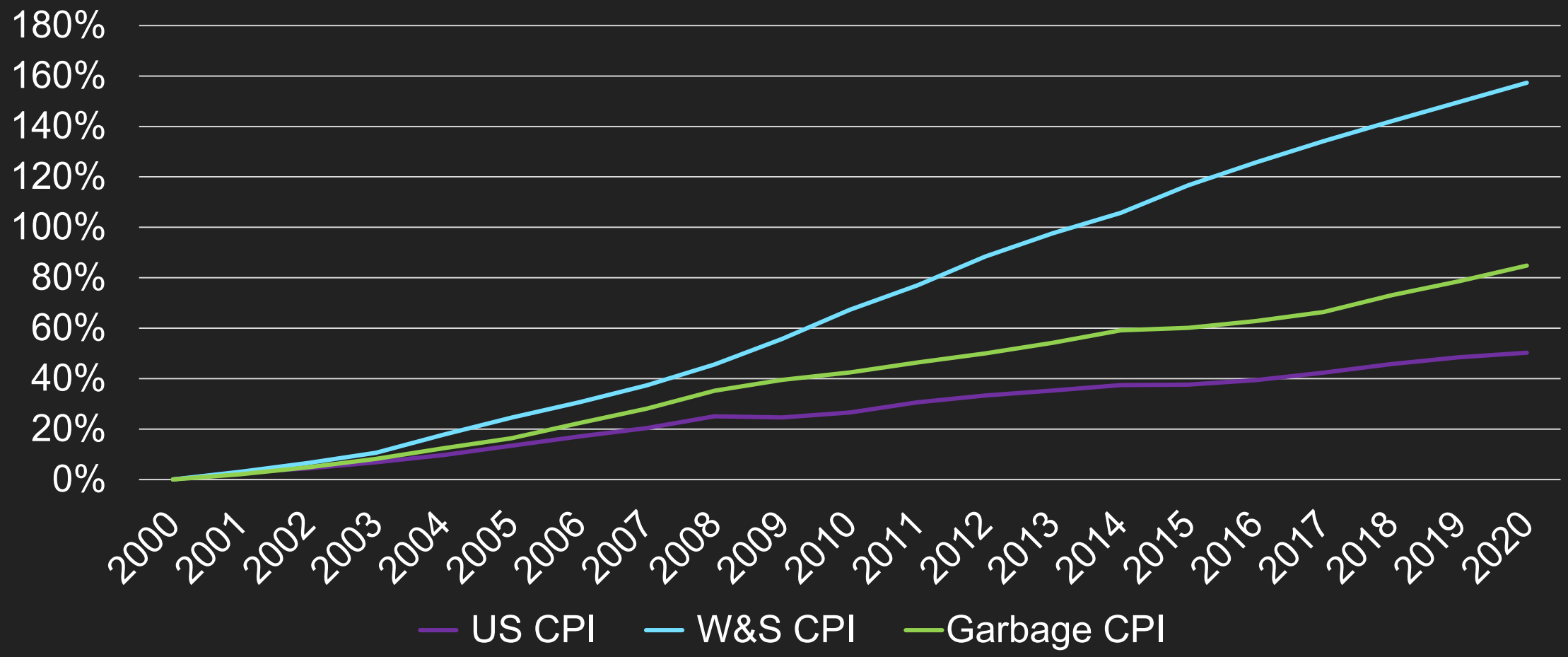
CIP Funding



Borrowing



Utilities Face Steeper Cost Increases than Overall Inflation



Key items that will move the needle

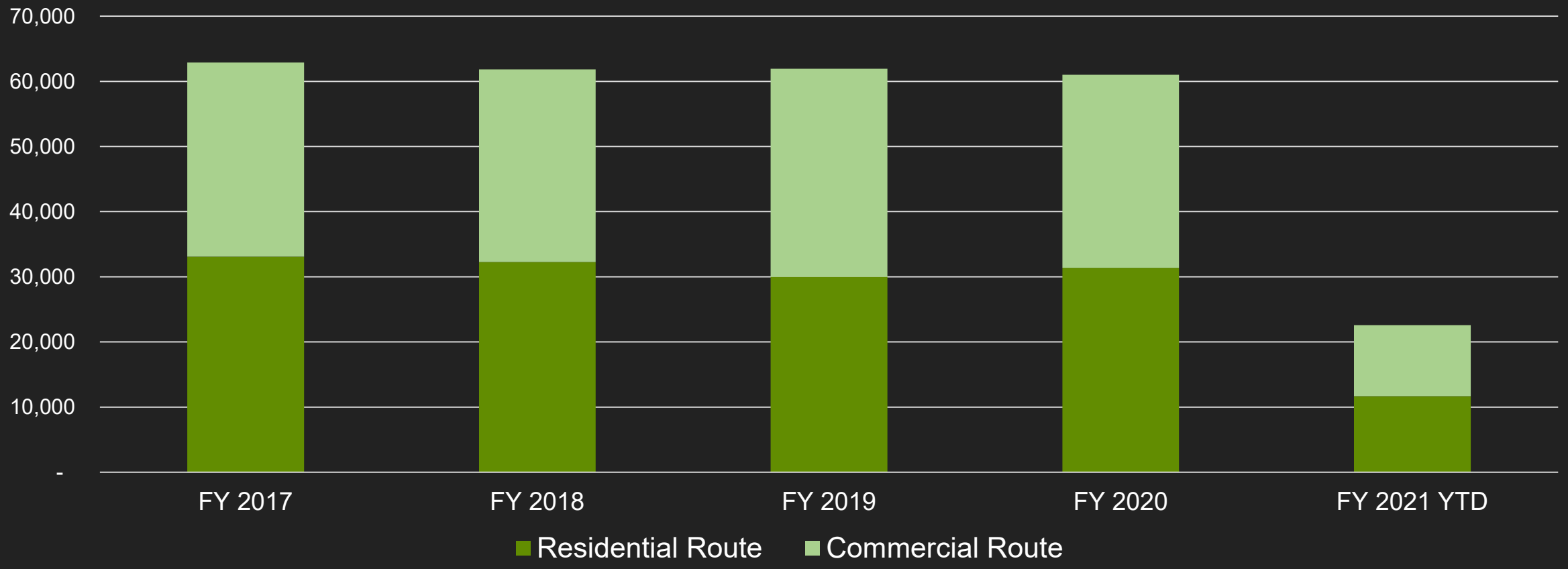
- Capital Investment Needs
- Operating Cost Pressures
- Recycling Market Conditions
- Regulatory Environment

Cost of Service

From Whom?

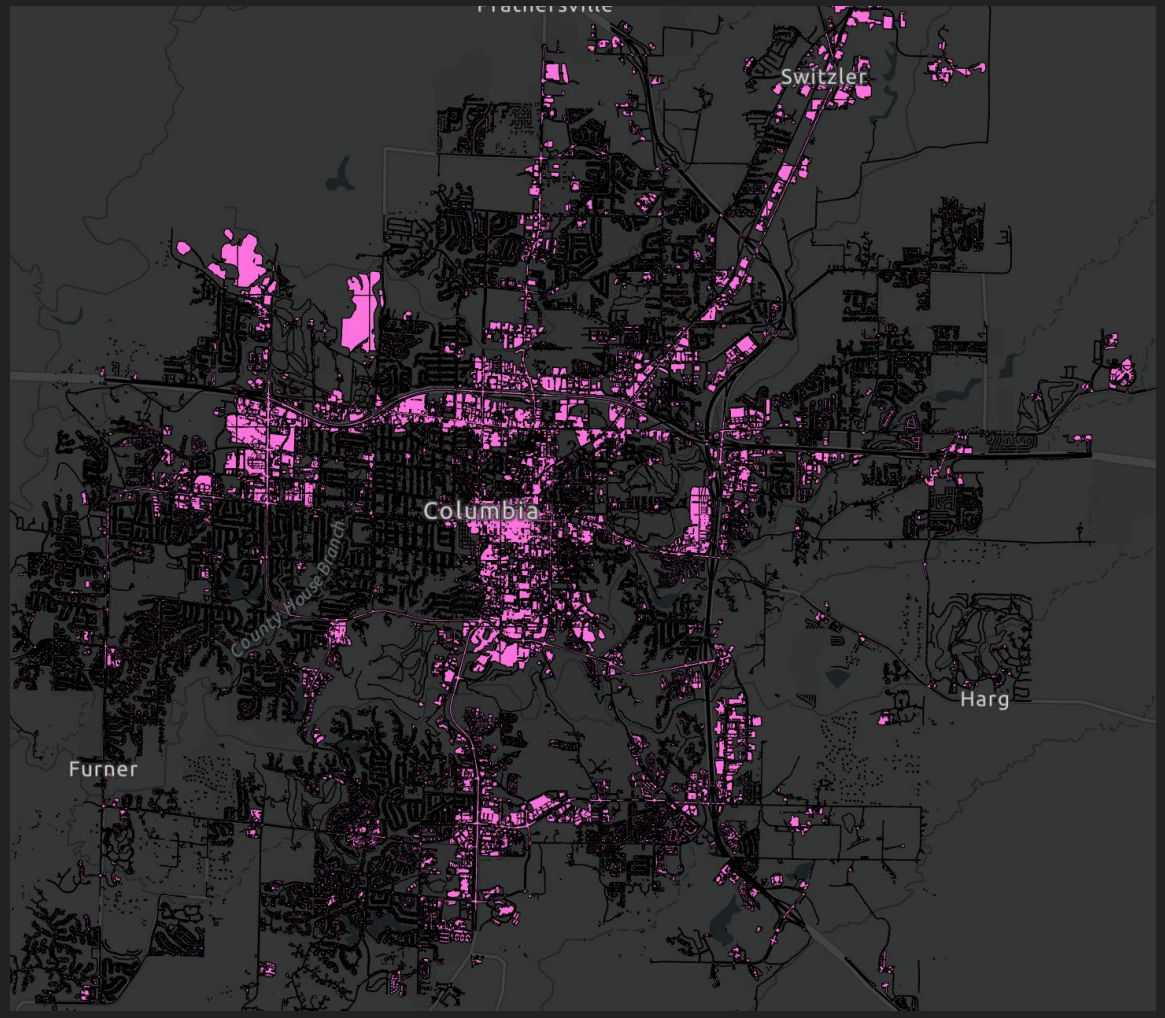
Deep Dive into Customer Data

Example: Tonnage Collected by Customer Class



Deep Dive into Customer Data

Example: Impervious Area for Stormwater



Allocate System Costs to Functions

Cost Causation Method

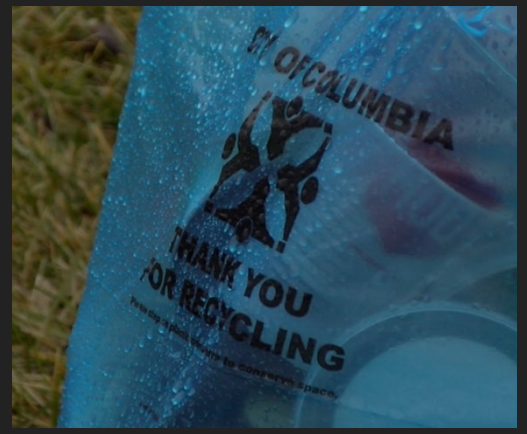
FY 2022 Revenue Requirement

Less: Offsetting Revenues from Miscellaneous Charges

Collection	Materials Processing	Disposal
Residential Refuse		
Residential Recycling		
Commercial Front Load		
Commercial Rear Load		
Commercial Roll-Off		
Commercial Recycling		

Measuring How Customers Use Services

Customer Type	Collection	Materials Processing	Disposal
Residential Refuse	# of Pickups and Containers	Tonnage Container Size Residential Bags	Tonnage Container Size Residential Bags
Residential Recycling			
Commercial Front Load			
Commercial Rear Load			
Commercial Roll Off			
Commercial Recycling			



Miscellaneous Fee Calculation

Identify costs and activities for each service and populate in Stantec's cost template

Labor

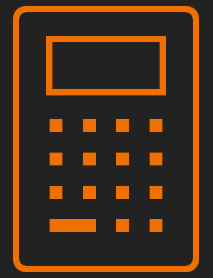
- How much time does each role spend to perform this service?

Equipment/Vehicles

- What pieces of equipment or vehicles are utilized to perform the service?

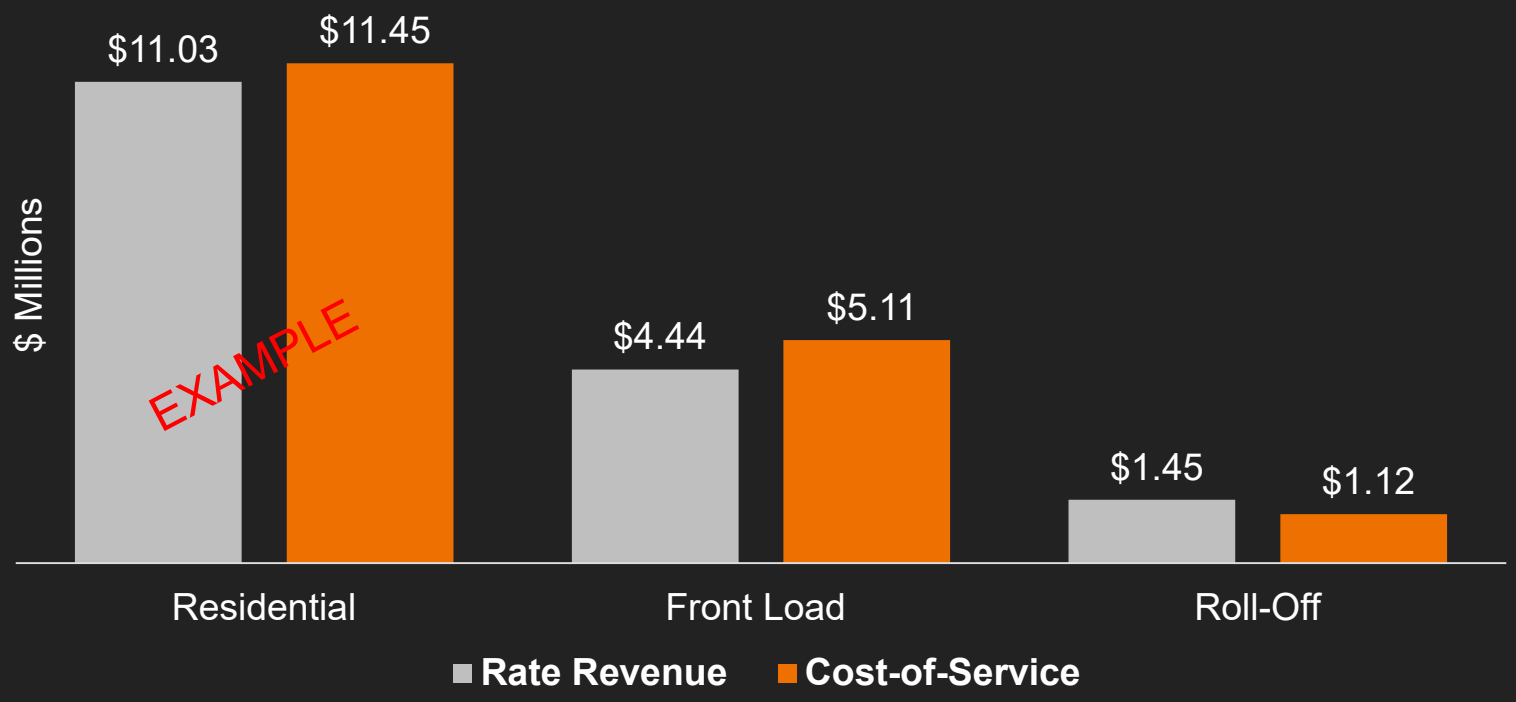
Materials

- What materials are used as part of this service?



Hours Spent (Customer Service, Utility Tech) X Costs per Hour (Labor, vehicles & equipment) + Unit Costs (Materials) = **Cost of Service**

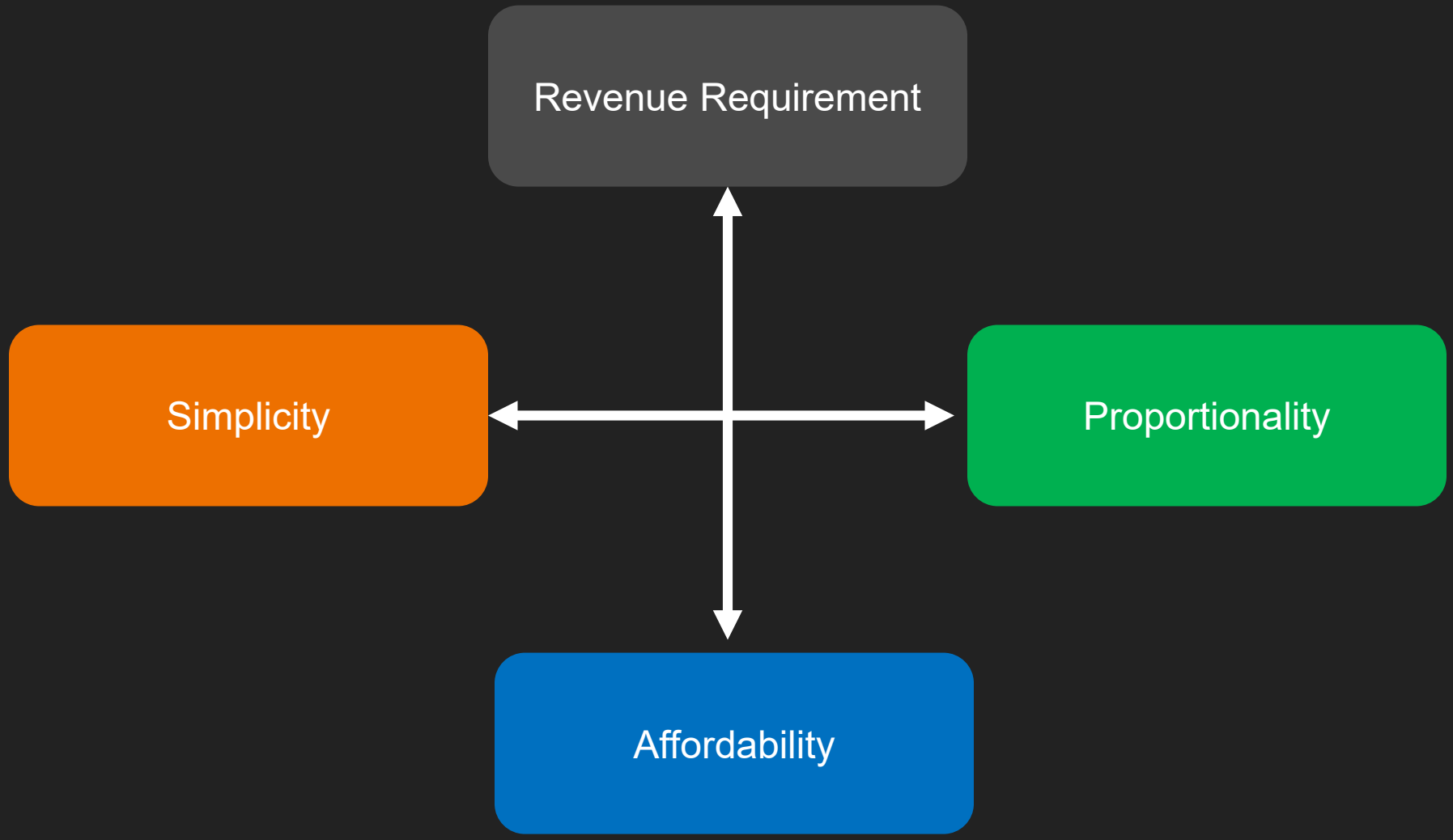
Example Cost to Serve vs. Current Revenue



Rate Design

How to Collect?

Rate Structure-Balancing Objectives



Elements of Solid Waste Rate Structures

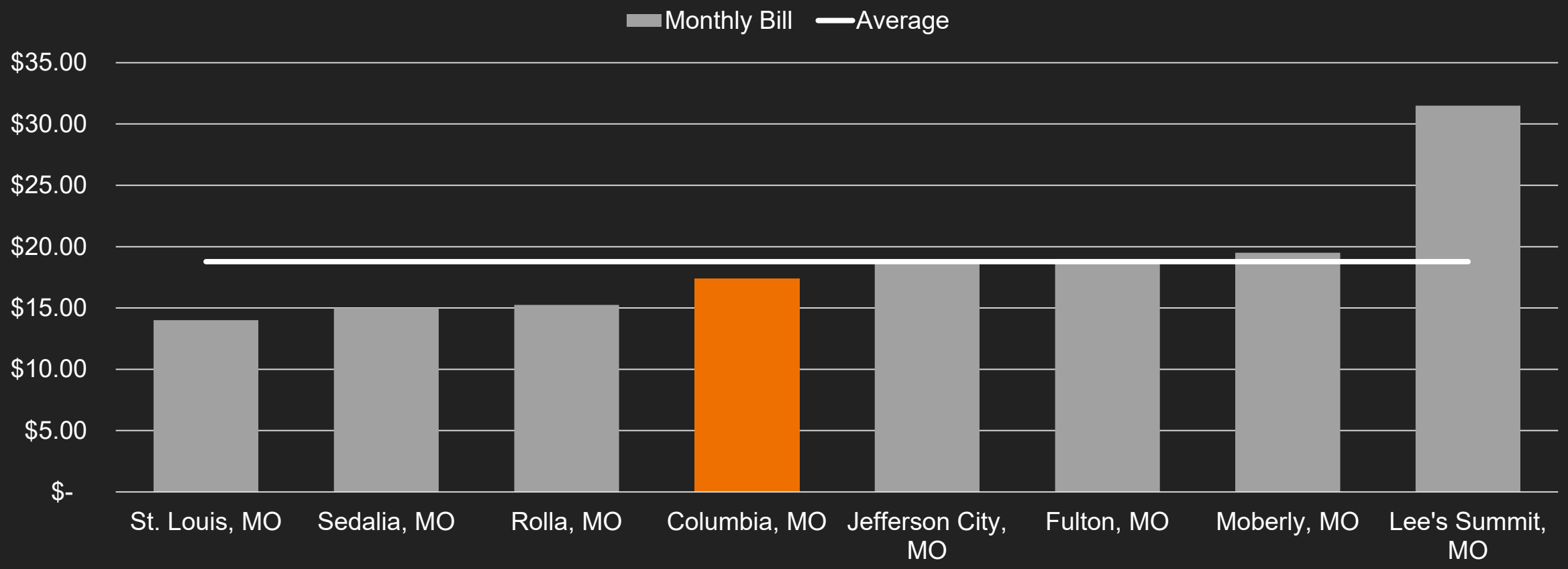
Cost Component	How Charge is Applied
Collection Cost	Per Pickup
Disposal Cost	Container Size # of Bags
Recycling Processing Cost	

Elements of Wastewater Rate Structures

Cost Component	How Charge is Applied
Customer Cost	Base Monthly Charge
Collection Cost	Volume (1,000s of Gallons)
Treatment Cost	

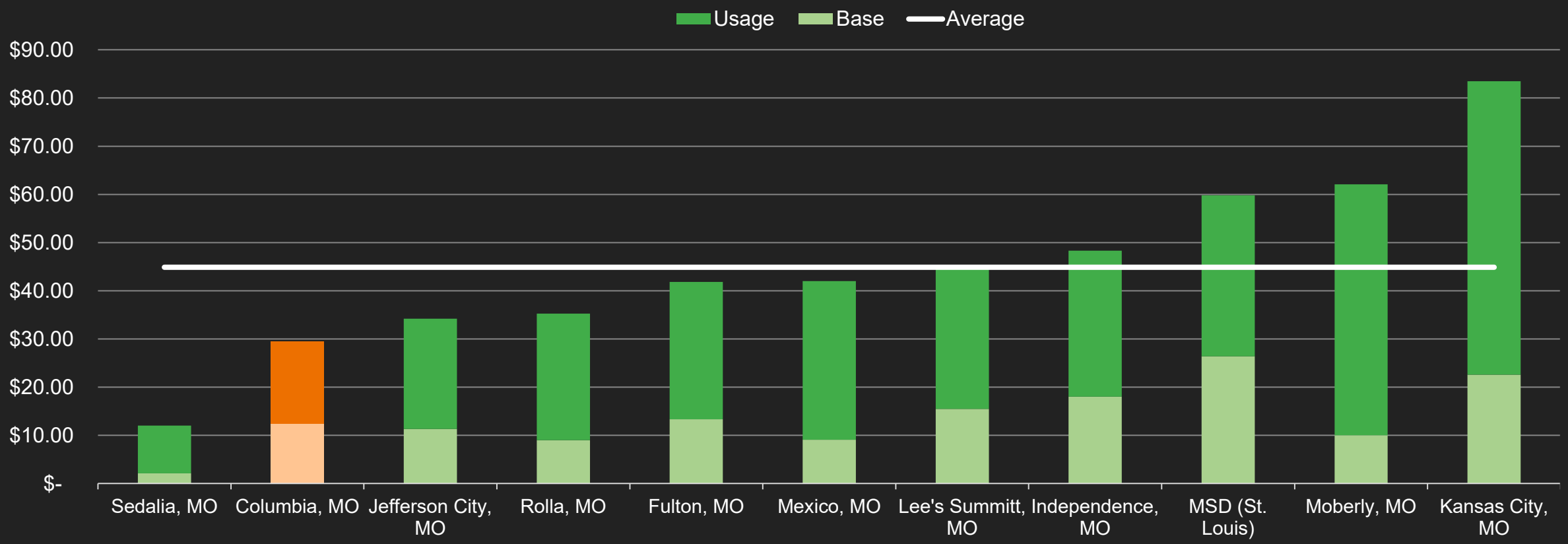
Rate Comparisons are Rather Complex

Typical Monthly Residential Solid Waste Bill Survey



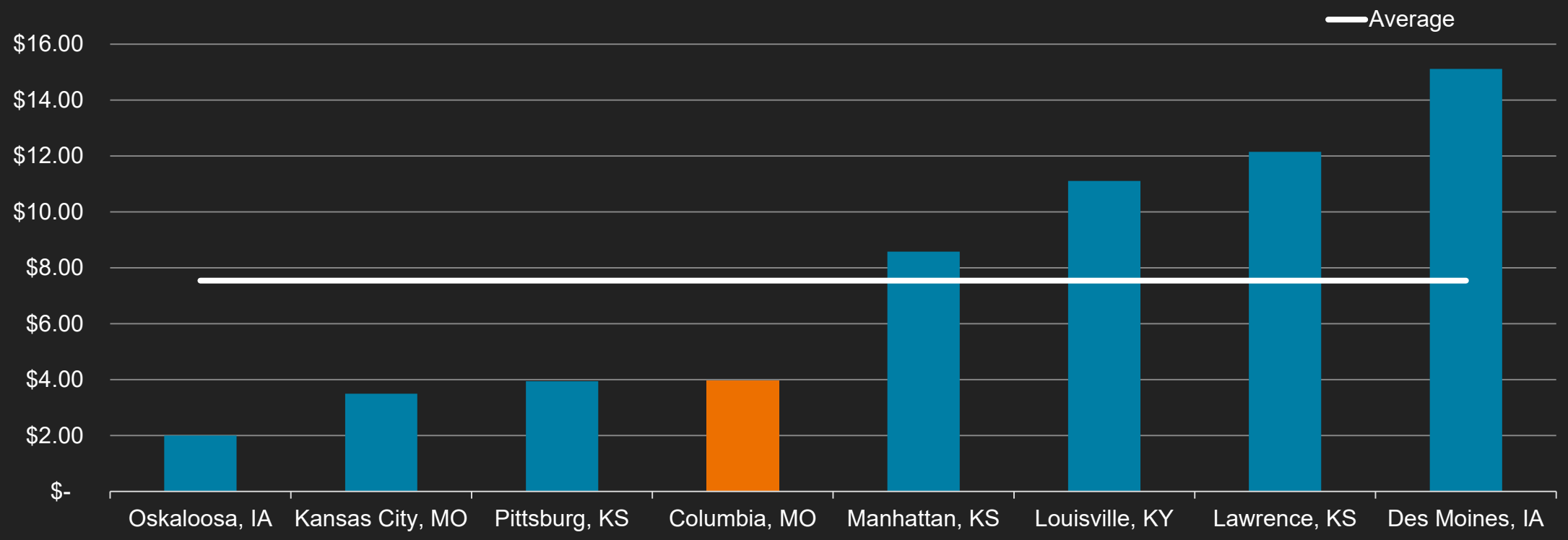
Rate Comparisons are Rather Complex

Typical Monthly Residential Sewer Bill Survey @ 5,000 gallons



Rate Comparisons are Rather Complex

Typical Monthly Residential Stormwater Bill



Customer Impacts

Example Residential

Inside City Single Family 3/4" Meter Monthly Water & Sewer Bill Calculations						
Monthly Use (Gal)	% of Bills	Agg. %	Current (FY 13)	Proposed (FY 14)	$ Chg	% Chg
-	9.7%	9.7%	$ 22.16	$ 22.01	$ (0.15)	-0.7%
1,000	5.7%	15.4%	$ 29.03	$ 28.79	$ (0.24)	-0.8%
2,000	9.4%	24.7%	$ 35.90	$ 35.57	$ (0.33)	-0.9%
3,000	11.6%	36.3%	$ 42.77	$ 42.35	$ (0.42)	-1.0%
4,000	**11.9%**	**48.2%**	**$ 49.64**	**$ 49.13**	**$ (0.51)**	**-1.0%**
5,000	10.3%	58.5%	$ 56.51	$ 56.44	$ (0.07)	-0.1%
6,000	**8.2%**	**66.7%**	**$ 63.89**	**$ 63.75**	**$ (0.14)**	**-0.2%**
7,000	6.2%	72.9%	$ 71.27	$ 71.06	$ (0.21)	-0.3%
8,000	4.8%	77.7%	$ 78.65	$ 78.37	$ (0.28)	-0.4%
9,000	3.6%	81.3%	$ 86.03	$ 86.45	$ 0.42	0.5%
10,000	2.7%	84.0%	$ 93.41	$ 94.53	$ 1.12	1.2%
11,000	2.3%	86.3%	$ 100.79	$ 102.61	$ 1.82	1.8%
12,000	1.8%	88.2%	$ 108.17	$ 110.69	$ 2.52	2.3%
13,000	1.4%	89.6%	$ 115.55	$ 120.14	$ 4.59	4.0%
14,000	1.2%	90.8%	$ 122.93	$ 129.59	$ 6.66	5.4%
15,000	1.1%	91.9%	$ 130.31	$ 139.04	$ 8.73	6.7%
16,000	0.9%	92.8%	$ 133.27	$ 148.49	$ 15.22	11.4%
17,000	0.8%	93.5%	$ 136.23	$ 157.94	$ 21.71	15.9%
18,000	0.6%	94.2%	$ 139.19	$ 167.39	$ 28.20	20.3%
19,000	0.6%	94.8%	$ 142.15	$ 176.84	$ 34.69	24.4%
20,000	0.5%	95.2%	$ 145.11	$ 186.29	$ 41.18	28.4%

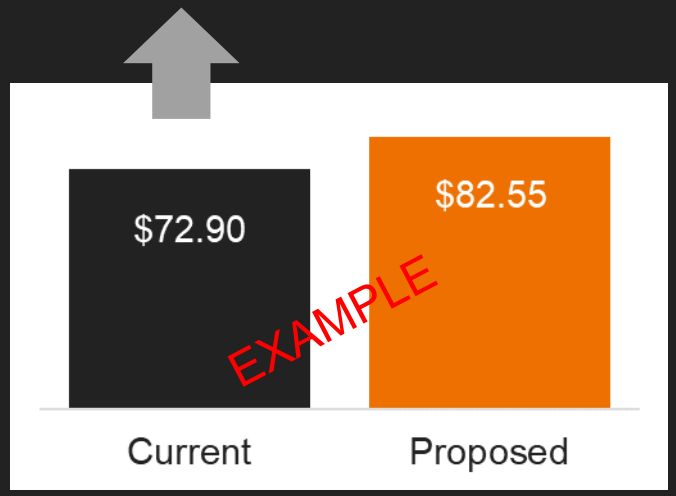
Example Non Residential

Industrial User Monthly Bill Impact Calculations							
Customer	Services	Avg. Monthly Usage (Gal)	Meter Size(s)	Current (FY 2013) Total Charges[1]	Proposed (FY 2014) Total Charges[1]	$ Chg	% Chg
Dart	WA/IW	2,230,000/ 670,000	6"	$ 8,064	$ 6,758	$ (1,307)	-16.2%
Siemens	WA/IW	180,000/ 960,000	1.5"	$ 15,206	$ 22,243	$ 7,037	46.3%
J. Hardie	WA/IW	2,430,000/ 4,110,000	4",8"	$ 23,828	$ 16,899	$ (6,929)	-29.1%
Paradise	WA/IW	80,000/ 2,920,000	2"	$ 18,591	$ 18,511	$ (80)	-0.4%
Sunshine	WA/IW	5,340,000/ 4,400,000	2",8"	$ 43,073	$ 43,224	$ 151	0.4%
Total				**$ 108,761**	**$ 107,634**	**$ (1,127)**	**-1.0%**

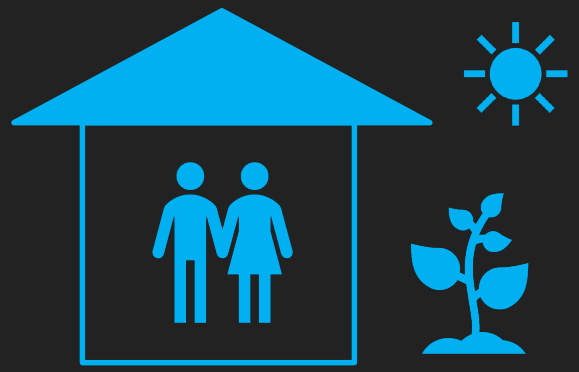
1 - Includes water, wastewater, and high strength surcharges.

Example Residential

Customer with water, sewer, solid waste and stormwater service
Two person household with indoor use 4,000 gallons per month



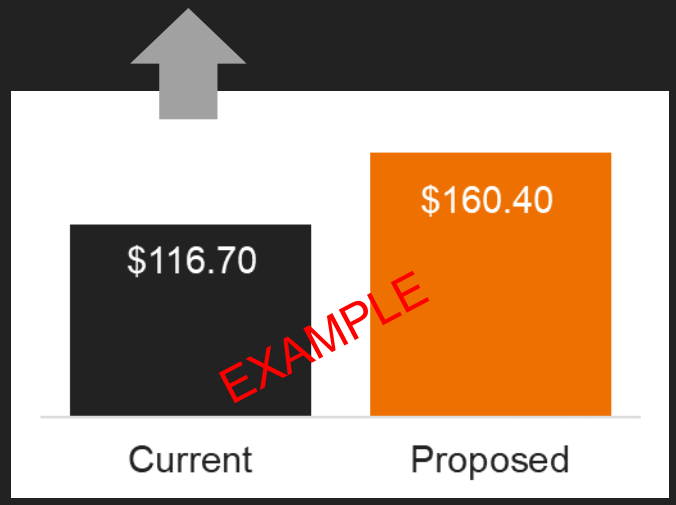
$ Change: $9.66
% Change: 13.2%



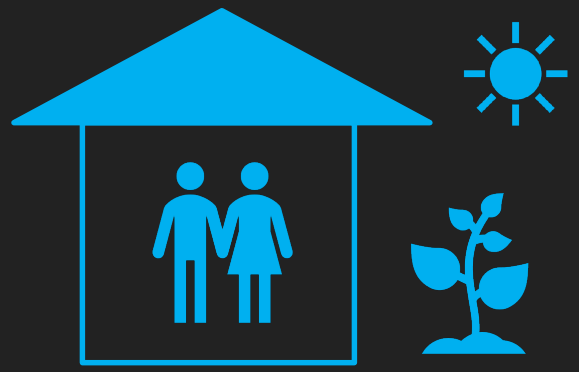
- 3/4” Meter
- 4,000 gal water use
- 4,000 gal sewer use
- 1 dwelling unit (stormwater)
- Standard solid waste services

Example Residential

Customer with water, sewer, solid waste and stormwater service
Two person household with indoor use 6,000 gallons per month



$ Change: $43.70
% Change: 37.4%



- 3/4” Meter
- 6,000 gal water use
- 6,000 gal sewer use
- 2 dwelling units (stormwater)
- Standard solid waste services

Example Commercial Rate Impacts by Container Size

Container Type	Current Rate per Pickup	Calculated Rate per Pickup	$ Change
2 Cubic Yard Dumpster	$67.03	$69.04	$2.01
4 Cubic Yard Dumpster	$74.81	$77.05	$2.25
6 Cubic Yard Dumpster	$83.52	$86.03	$2.51
8 Cubic Yard Dumpster	$93.62	$96.43	$2.81
Roll-Off Container	$295.05 per pull	$295.05 per pull	$0.00 per pull

Rate Study Timeline

Key Meeting Dates

Meeting Topic	Target Date
Special Meeting: Rate Study 101 with FAAC	Monday March 29
Public Meeting #1: Rate Study 101	Tuesday April 20
Revenue Sufficiency Working Sessions	April 26-30
Cost of Service Working Sessions	June 7-11
Rate Design Working Sessions	July 19-23
Miscellaneous Fees & Connection Fees Working Sessions	July 26-30
Public Meeting #2: Rate Study Results	Aug 30-Sept 3
Council Work Session: Presentation of Results	October

Project Team:

Andrew Burnham
Project Director

Kyle Stevens
Project Manager

Morgan Brosch
Lead Analyst

Questions/Comments

Stantec