

# 2023/2024 Budget, LRFP, COSA, and Rates

**Presented by Financial Stewardship to the Public Utility Board on August 10, 2022**

# Agenda

<b>Overview</b>	Challenges and Risks; Drivers, Impacts, Cost Savings and Mitigation	Jodi Collins
<b>Preliminary Budget</b>	O&M; Personnel; Supplies, Services, and Other Charges; Capital; Non-Rate Revenue	Alyssa Flores Brown
<b>Revenue</b>	Forecasting Accounts; Forecasting Demand; Revenue at Existing Rates	Andrew Zaremba
<b>Financial Forecasting</b>	Forecasting Summary; Base Case; Scenarios; Long-Range Financial Plan	Lyna Vo
<b>Cost of Service</b>	Cost of Service Analysis; Customer Classes	Andrew Zaremba
<b>Rate Design</b>	Recommendation; Monthly Bill; Customer Assistance; Regional Comparison; Grant & Loan Program	Andrew Zaremba
<b>Next Steps</b>	Timeline	Jodi Collins

# Budget and Rate Development Overview

**Good work and milestones completed in support of a responsible budget and rate proposal for 2023/2024.**

## Foundational Preparation

**Developed & presented 2021 Water Long-Range Financial Plan (LRFP)**

**Presented Budget Strategy & Overview to PUB**

**Reviewed & Updated Water Rate & Financial Policy Aligned with PUB Strategic Directives**

**Budget & Rate Workshop, PUB Supplemental Briefings, & GPFC Updates**

## Preliminary Budget Development

**Initial O&M, Capital & Non-Rate Revenue Budget Developed**

**Updated Demand Forecast & Water Sales at Existing Rates**

**Preliminary Proposal Informed Revenue Requirement & LRFP**

## Long-Range Financial Plan

**Updated Financial Forecast & Assumptions**

**Developed Financial Strategy & Scenarios**

**Recommending Gradual System Average Rate Adjustments Over the Planning Period**

## Cost of Service Analysis & Rate Design

**Allocated Expenses & Phased-in Adjustments**

**Recommending Class Rate Adjustments**

**Balanced Revenue Stability, Class Equity & Conservation**

**Developed Recommendation**

## Customer Outreach

**Conducted Customer Listening Session**

**Developing Plan & Story with Public Affairs & Communication**

**Scheduling Customer Outreach Engagements for August/September**

## PUB Feedback & Approvals

**Presenting Preliminary Budget Proposal, Rate Design, & LRFP 8/10/2022**

**Updated Budget & Rate Proposal to be Presented to PUB 9/28/2022**

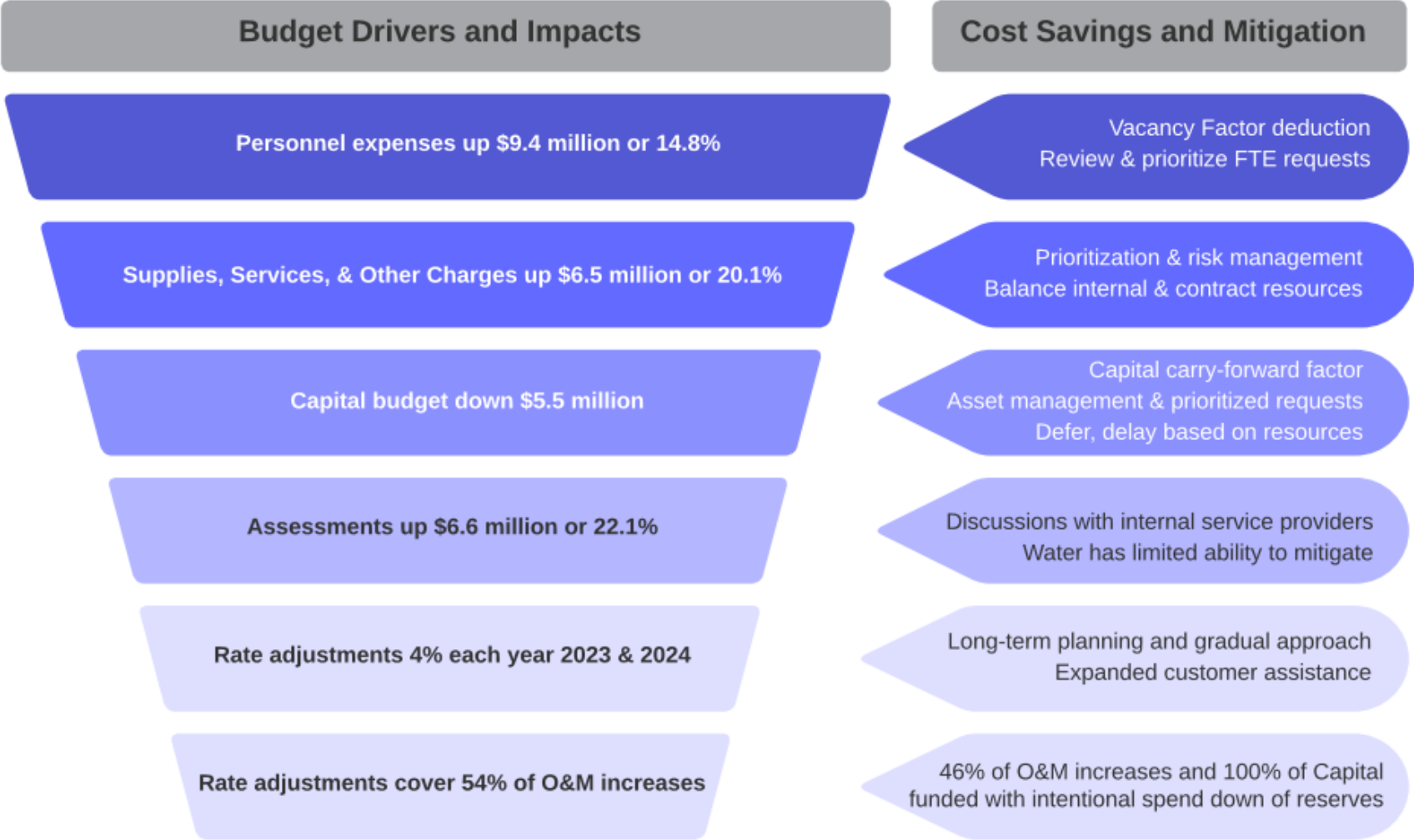
**Final Approvals in October/November**

# Challenges and Risks

- **Ongoing Impacts from 2020 Budget Development Cycle**
  - Lower rate adjustment in 2021: loss of about \$500k every year going forward
  - Lean budget and deferred resource requests for the 2021/22 budget: catch-up
- **Workforce, Inflation, and Supply Chain Issues**
  - Recruiting and retaining employees
  - Higher operational costs: from rent and utilities to fleet maintenance and fuel
  - Long-lead times and increased costs for certain supplies and materials
- **Uncertainties**
  - Aging receivables collection
  - Final Class & Compensation market adjustments for non-represented staff
  - General wage increases and market adjustments for represented staff
  - Costs for business system investments & innovation (SAP replacement, advanced analytics, access to data, enterprise resource management)
  - Long-term economic assumptions such as inflation and interest rates

# Drivers, Impacts, Cost Savings and Mitigation

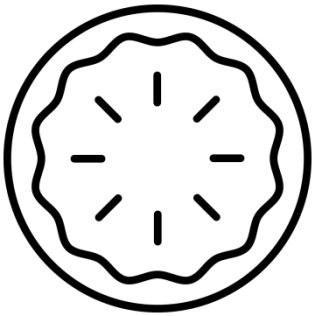
We strive to mitigate challenges and keep rates as low as is responsible to ensure that our rates remain affordable.



\*Expenses are preliminary

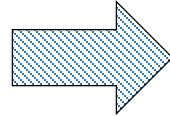
# Ratemaking Process

**How Big is  
the Pie?**

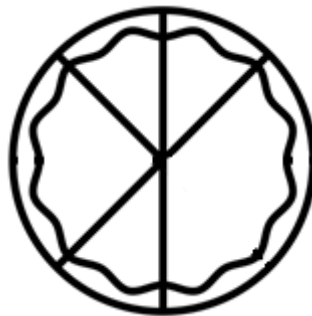


**Revenue  
Requirement**

Identifies revenue needed  
to sustain operations,  
according to financial  
plan

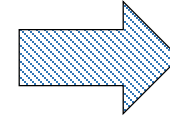


**How to Slice  
the Pie?**

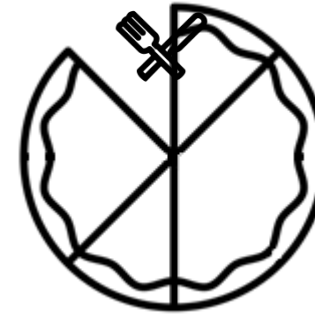


**Cost-of-Service Analysis  
(COSA)**

Divides revenue  
requirement into total  
amount to be paid by each  
customer class



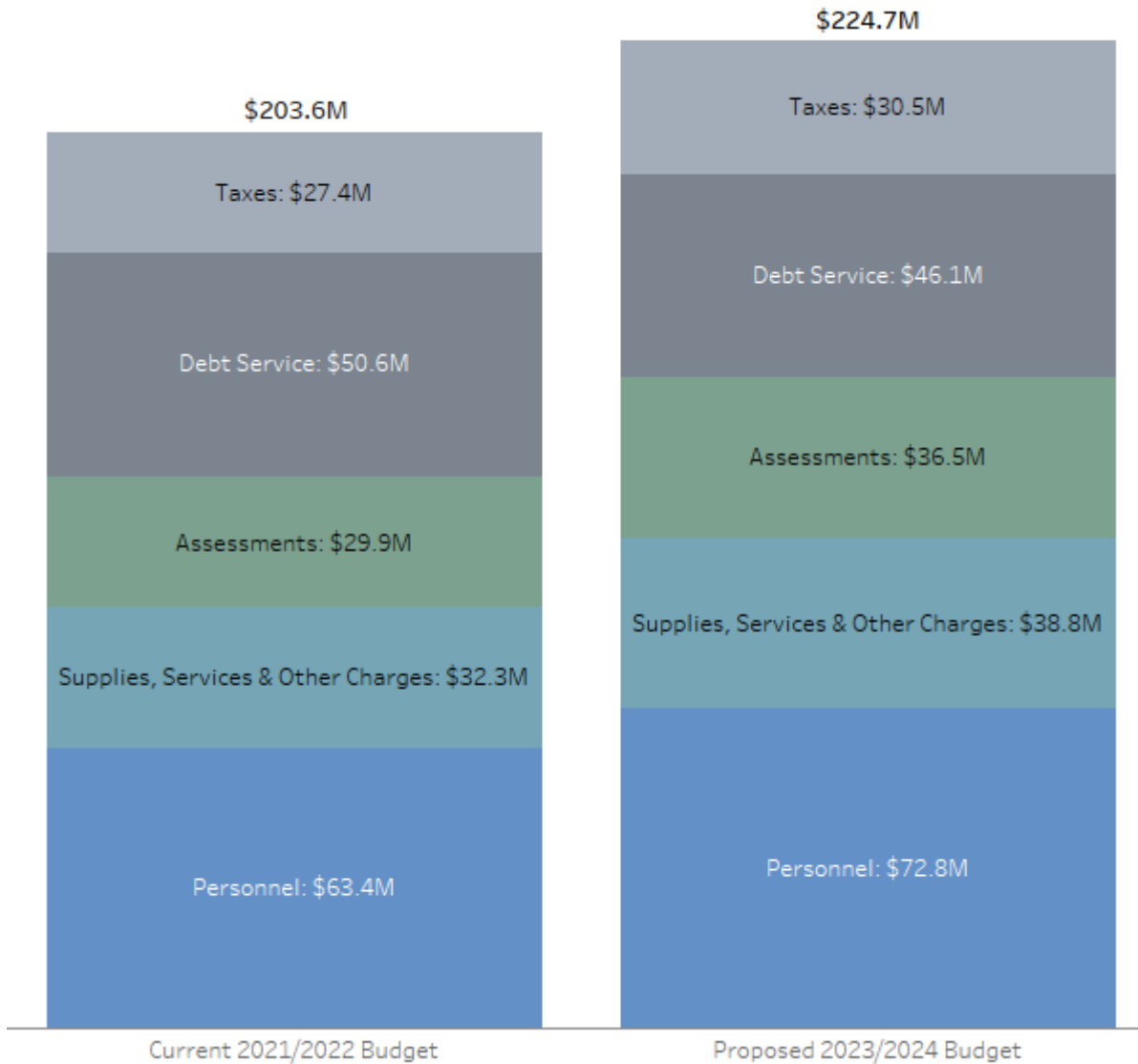
**How to Eat  
the Pie?**



**Rate Design**

Sets rate structure to bill  
each customer  
(*e.g.* fixed charge per month,  
volumetric rate per CCF, *etc.*)

# 2023/2024 Preliminary O&M Budget



- Overall Operations & Maintenance (O&M) is about **\$21.1M** higher in 2023/2024 than in 2021/2022
- Personnel costs higher by **\$9.4M**, increases in both salaries and benefits
- Supplies, Services & Other Charges increase **\$6.5M** due to multiple factors
- Assessments are over **16%** of total budget
- Taxes are a function of revenues, approximately **14%** of total budget
- Debt Service payoff of 2020 Bank Loan Refunding in 2023

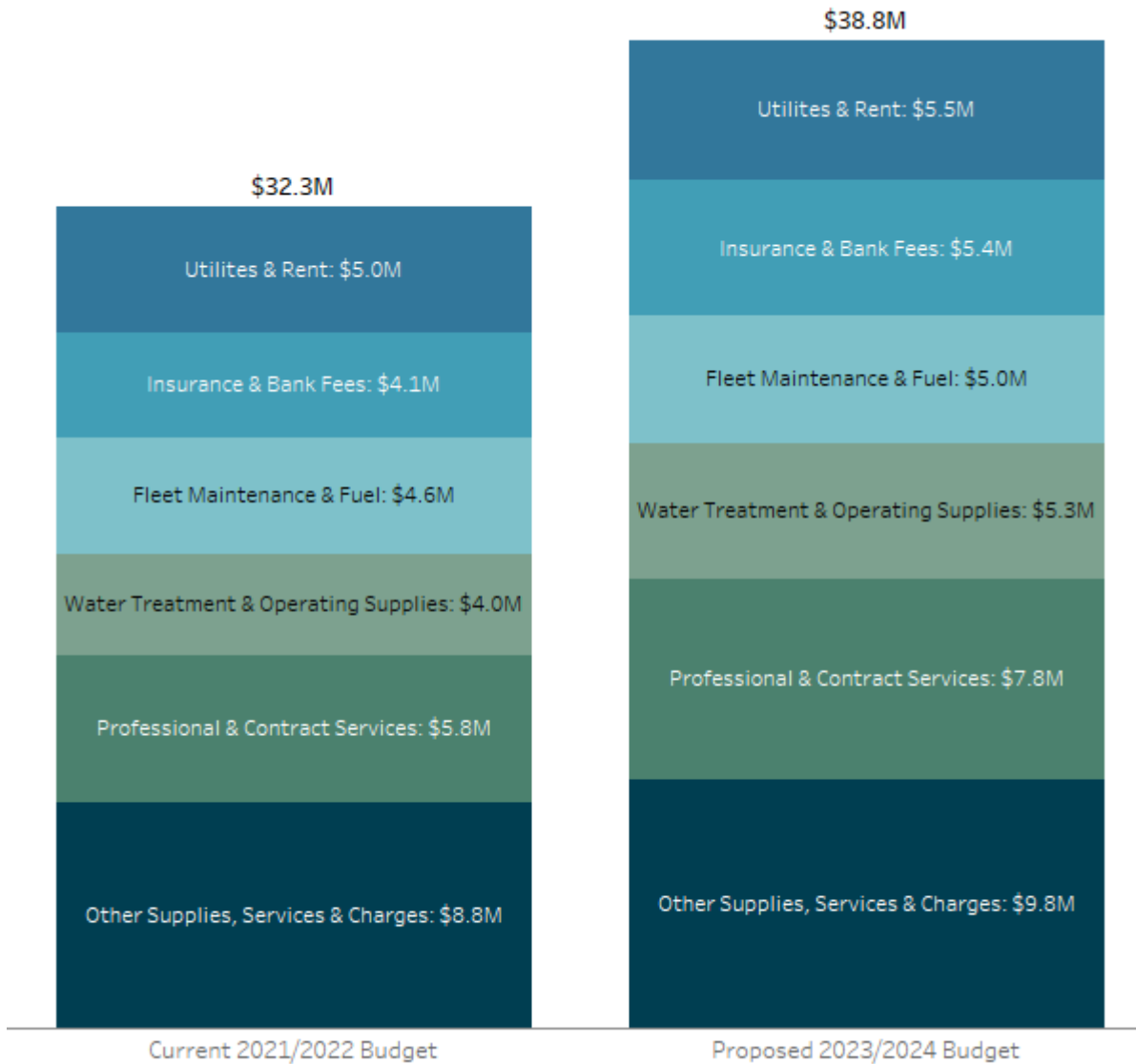
# Personnel Budget Overview



- Overall personnel is about **\$9.4M** higher in 2023/2024 than in 2021/2022
- Of the \$9.4M, **73% is for existing positions** and the remaining 27% is for 18 new positions
- Incorporates deferred market wage adjustments, general wage increases, increased benefits
- Assumes updated contracts for represented positions and Class & Comp study for non-represented
- Budget includes **\$7.1M** deduction to salaries and benefits for vacancy factor

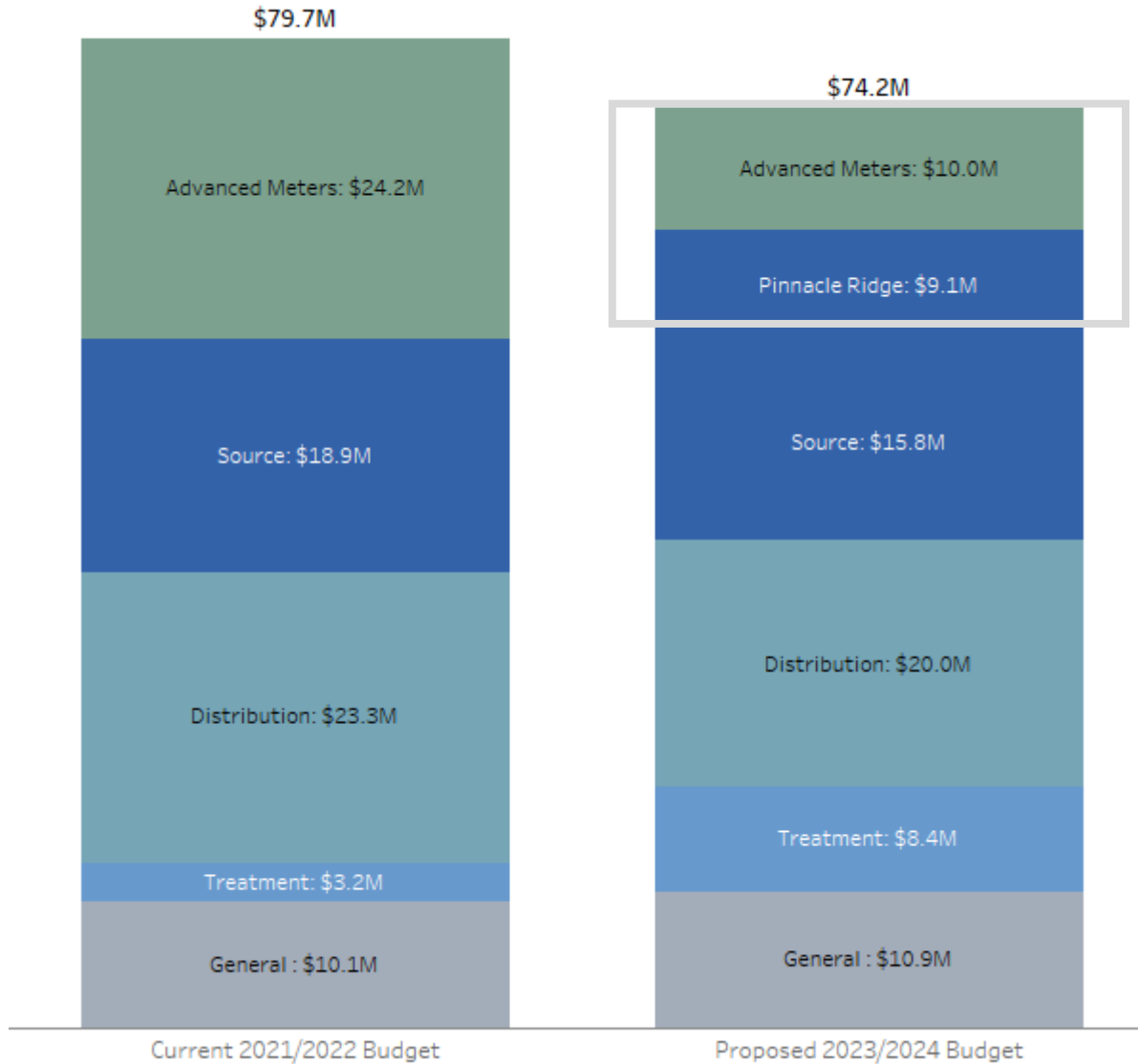


# Supplies, Services, and Other Charges



- Overall supplies, services, and other charges is about **\$6.5M** higher in 2023/2024 than in 2021/2022
- Utilities, rent, insurance, fees, fleet maintenance and fuel are about **\$15.9M**, over **40%** of the total
- Challenges: inflation of commodities, contract service cost increases, supply chain delays
- Mitigation: updating plans, understanding risks, internal knowledge & assignments

# 2023/2024 Preliminary Capital Budget



- Overall capital is about **\$5.5M** lower in 2023/2024 than in 2021/2022
- Funding sources vary by capital project
  - **\$25.4M** from Operating reserves
  - **\$48.8M** from Capital reserves
- 2021/2022 Budget reappropriation of **\$19.1M**
- Asset management tools & processes, project prioritization matrix based on values & constraints, resource planning

# 2023/2024 Preliminary Capital Budget

Projects don't end on December 31<sup>st</sup>.

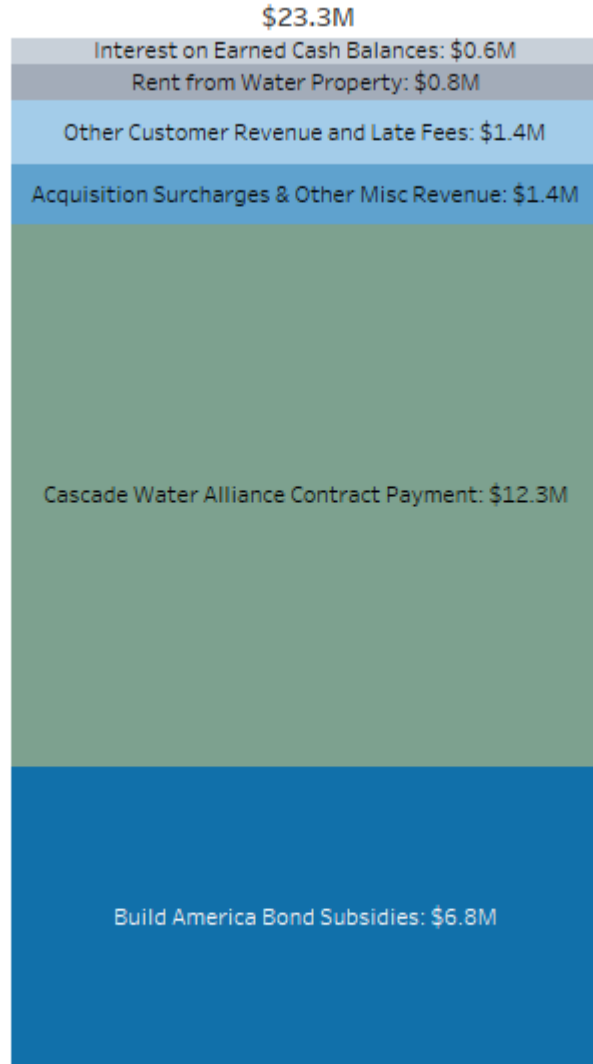


- Overall reappropriation is about **\$19.1M** from 2021/2022
- Budget for projects in flight (carry forward) may have reappropriated and new money
- Newly implemented “Carry Forward Factor” reduces capital budget by **10%** to account for reappropriated spending in the next biennium

\*Expenses are preliminary

# Non-Rate Revenue

Non-rate revenue helps buy down rate adjustments.

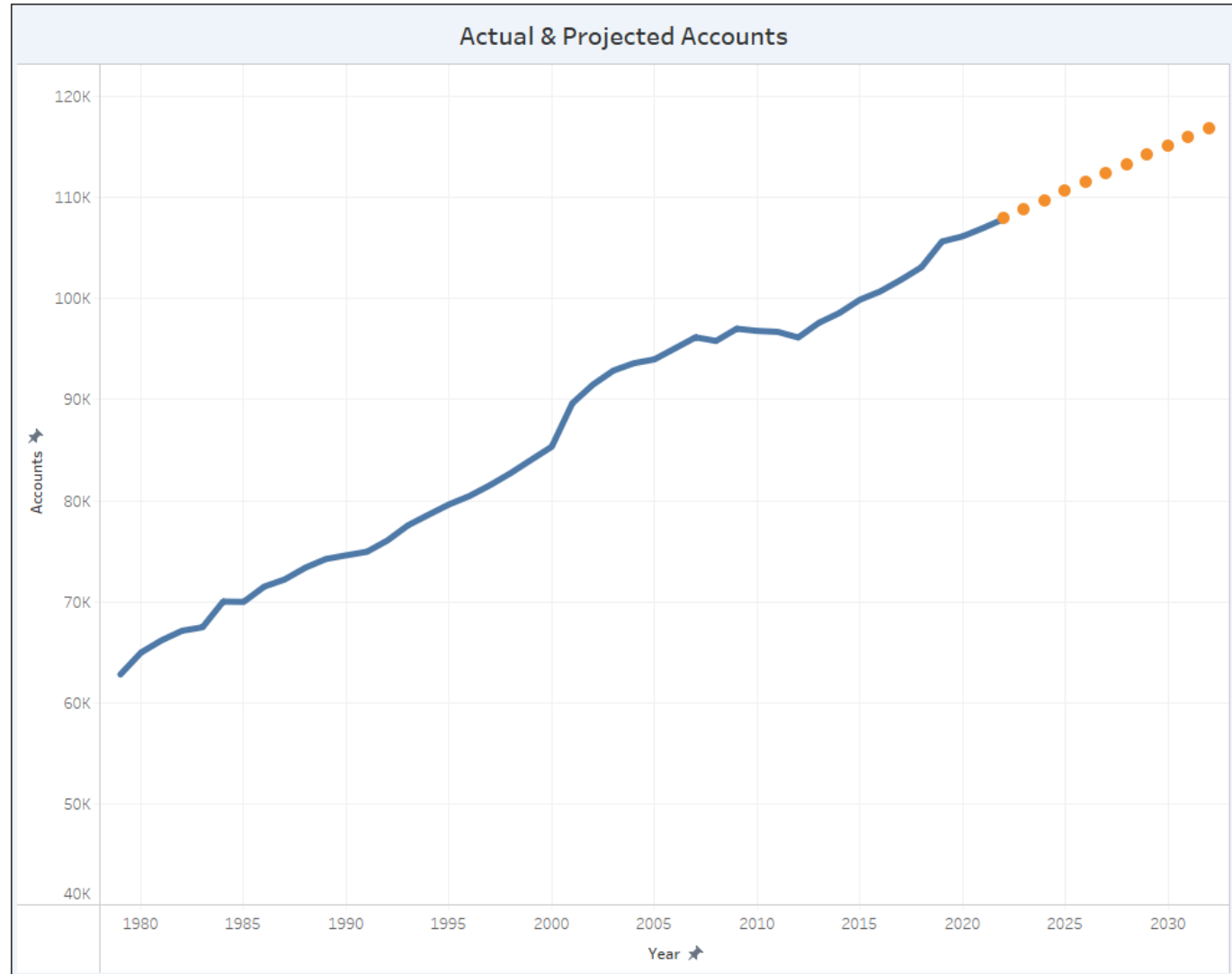


Proposed 2023/2024 Budget

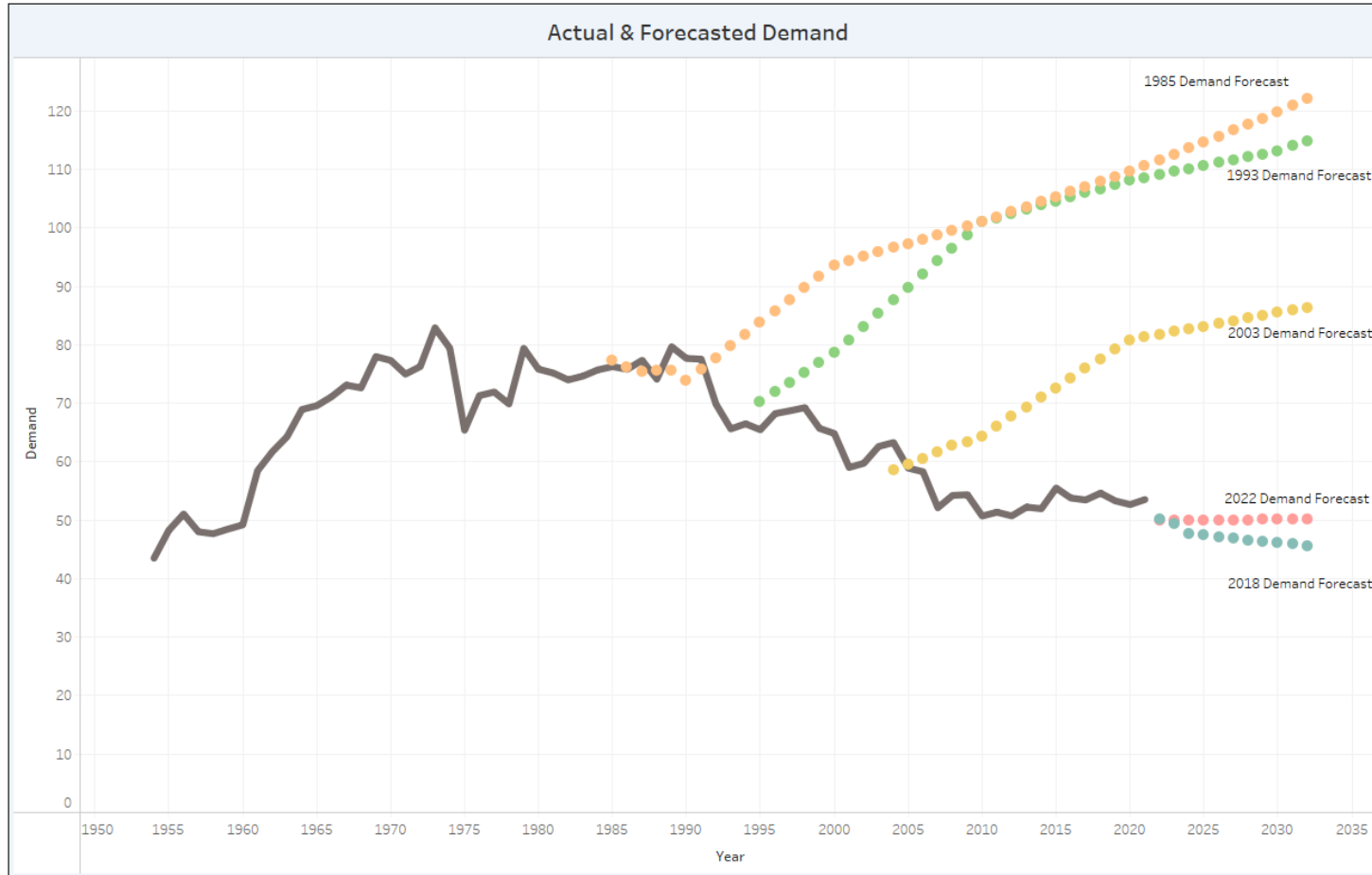
- Overall decrease is about **\$552K** from 2021/2022
- **10%** of total of our revenue
- Cascade Water Alliance contract revenue is limited term, drops to \$1.0M per year in 2030 and ends in 2042
- Build America Bond subsidies (BABs) offset interest expense for certain taxable revenue bonds

# Forecasting Accounts

- **Accounts are projected to grow by approximately 0.8% per year for the next 10 years**
- **Outside-city residential accounts make up approximately 80% of this growth**



# Forecasting Demand



- Demand per account for residential customers is still slightly declining
- Account growth is expected to keep total demand steady
- Total Demand is projected to grow by approximately 0.03% per year over the next 10 years

# Rate Revenue at Existing Rates

- Absent any rate adjustments, rate revenue is projected to increase by 0.5% per year over the upcoming biennium.

Total Revenues	2022	2023	2024
Single Family	\$ 50,445,815	\$ 50,819,694	\$ 51,196,101
Multi-Family	12,447,182	12,554,586	12,657,058
Commercial	11,451,075	11,327,118	11,211,641
Large Volume Commercial	2,232,329	2,232,329	2,232,329
Irrigation	3,476,119	3,426,565	3,378,283
Wholesale	2,898,400	2,898,400	2,898,400
Private Fire Protection	3,365,302	3,394,472	3,422,691
Public Fire - Tacoma	2,290,711	2,297,033	2,303,258
Public Fire - Outside City	1,968,929	2,001,442	2,034,141
Pulp Mill	7,314,878	7,314,878	7,314,878
<b>Total</b>	<b>\$ 97,890,739</b>	<b>\$ 98,266,516</b>	<b>\$ 98,648,780</b>

# Revenue Requirement and Financial Forecasting

The two-year budget informs the long-range plan and the long-range plan informs the two-year rate proposal.

## Budget & Revenue Requirement Development

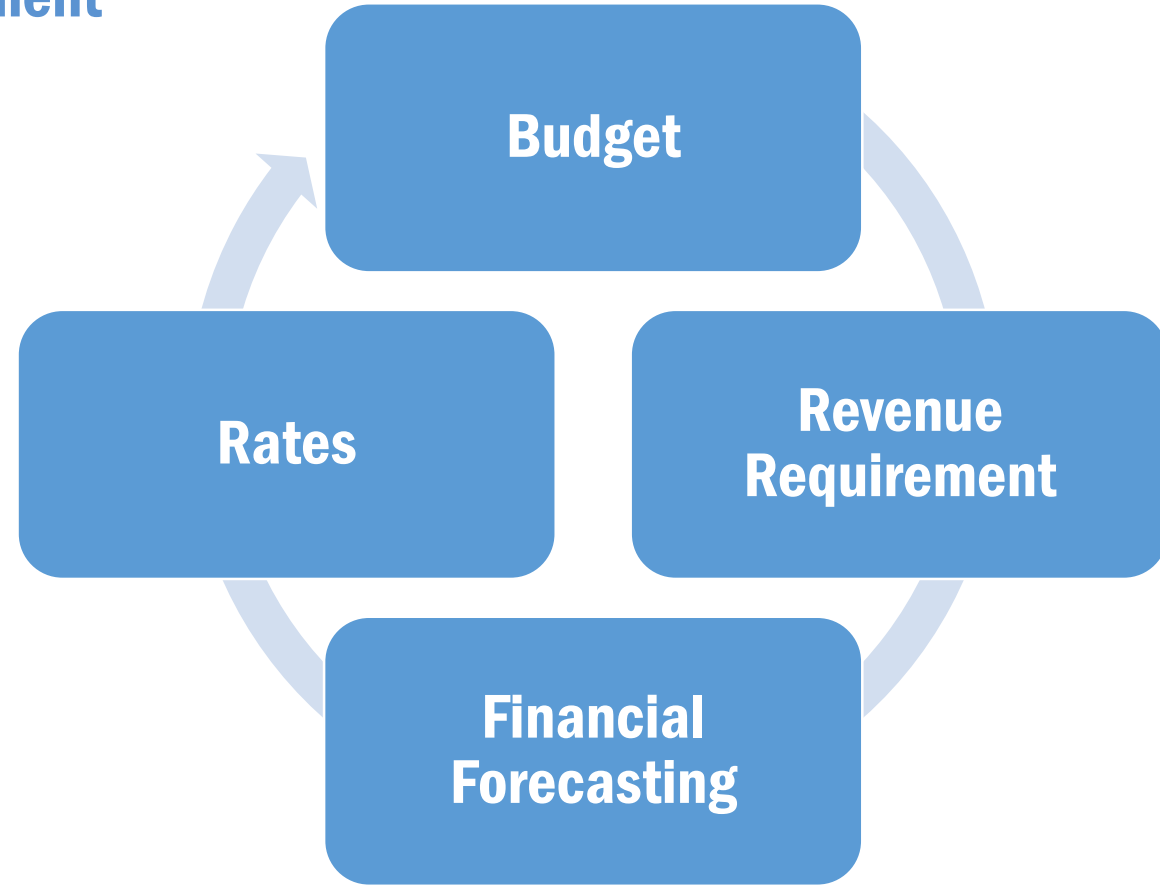
- O&M
- Capital
- Non-rate revenue
- Demand forecast

## Financial Forecasting

- Cost escalators
- Financial modeling
- Financial strategy

## Rates

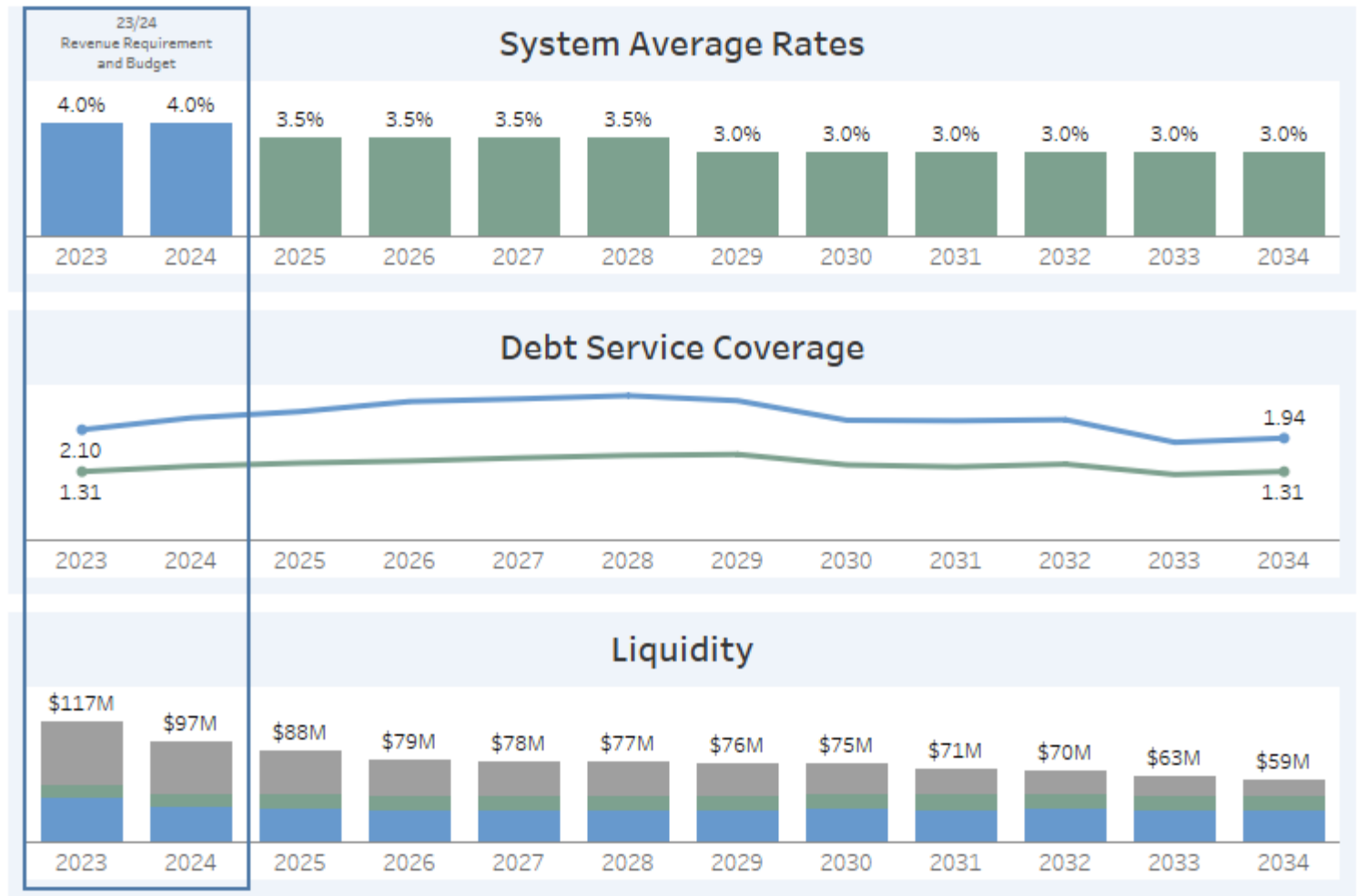
- System average rate proposal





# Long-Term Planning and Financial Forecasting

Establishing the base case to ensure gradualism.



## Rates

- 4.0% annual system average rates for 2023/2024

## Coverage

- Continue meeting debt service coverage requirements

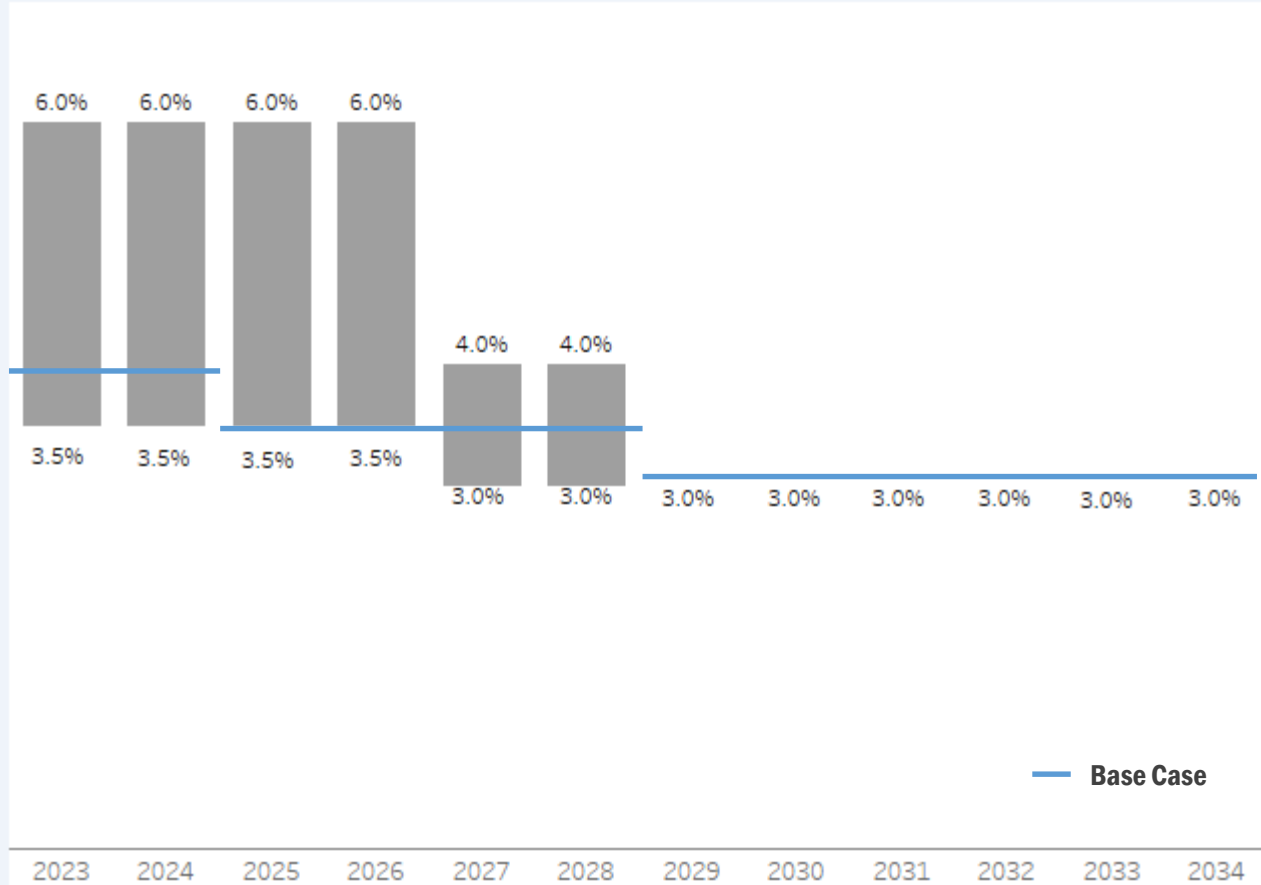
## Liquidity

- Management of reserves while meeting liquidity requirements

# Long-Term Planning and Financial Forecasting

Development of possible scenarios / uncertainties with similar ending rate trajectories and financial metrics.

Projected Range of System Average Rate Adjustments



## Base Case Assumptions

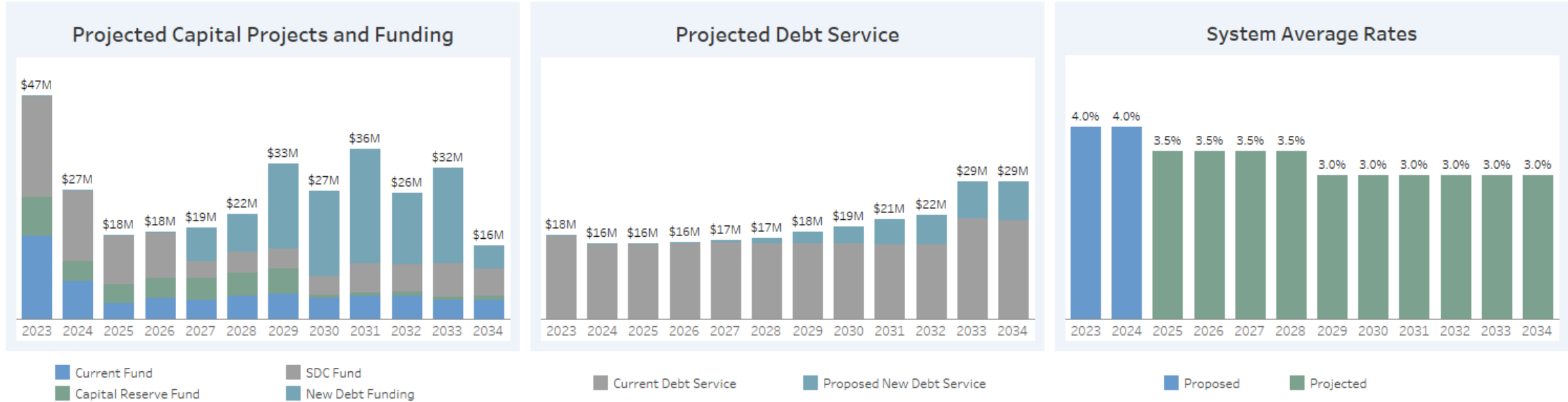
- Inflationary Costs (general, labor, etc)
- Incremental Franchise Fees
- System Account Growth
- Demand Growth
- Interest Earnings

## Scenario Development

- Loss of Large Customer
- Higher General Wage Increase
- Wholesale Opportunities

# Long-Term Planning and Financial Forecasting

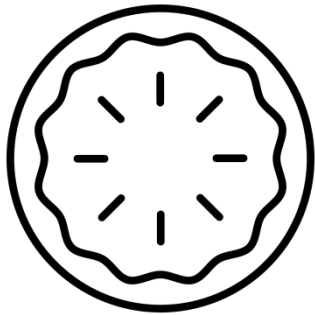
Anticipating projects, optimizing debt, and stabilizing rates for the long-term.



We base these projections on available information as of **2022**. If there are known circumstances that we need to plan for in 10 years and beyond, stable rate adjustments will put us in a good position for potential pinch points such as unforeseen revenue loss and increases in debt service.

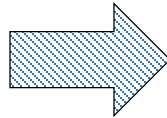
# Ratemaking Process

## How Big is the Pie?

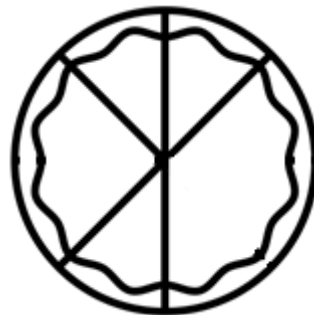


### Revenue Requirement

Identifies revenue needed to sustain operations, according to financial plan

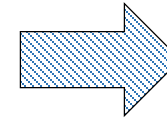


## How to Slice the Pie?

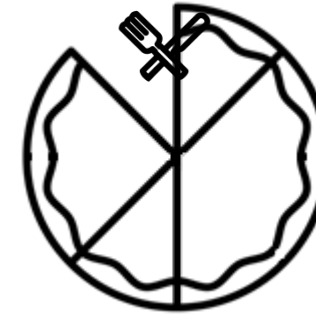


### Cost-of-Service Analysis (COSA)

Divides revenue requirement into total amount to be paid by each customer class



## How to Eat the Pie?



### Rate Design

Sets rate structure to bill each customer  
(*e.g.* fixed charge per month, volumetric rate per CCF, *etc.*)

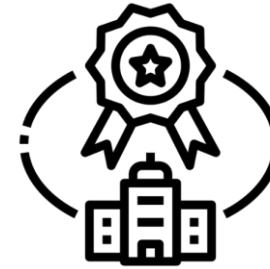
# Cost of Service Analysis (COSA)



**Allocates utility expenses equitably by assigning them to those who cause the costs**



**Provides bill stability and prevents large rate spikes by phasing in adjustments**



**The cost-of-service methodology is a well-tested industry standard**

# Tacoma Water Customer Classes

- Single-family and multifamily residences

- 99,615 accounts
- \$66.2M revenue

## Residential



- Small & medium sized businesses such as flower shops and small offices

- 4,720 accounts
- \$11.8M revenue

## Commercial



- Large industries which use more than 65,000 CCF per year, such as U.S. Oil and Boeing

- 6 accounts
- \$2.3M revenue

## Large Volume



- Dedicated irrigation meter for primarily outdoor use such as Point Defiance Park

- 1,047 accounts
- \$4.2M revenue

## Irrigation



- Warehouses with large fire sprinkling systems

- 1,583 accounts
- \$4.0M revenue

## Private Fire



- Other utilities such as City of Fife and Firgrove Mutual Water Company

- 22 accounts
- \$2.7M revenue

## Wholesale



- WestRock in the Tideflats

- 1 account
- \$7.3M revenue

## Pulp Mill

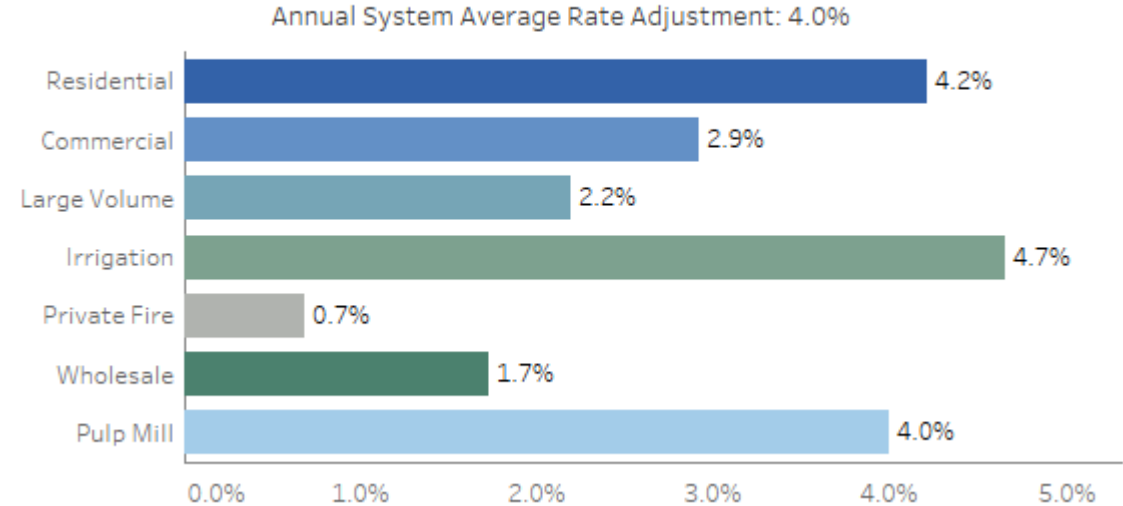


# Revenue Requirement & Cost of Service

Revenue Requirement by Customer Class

Class	Current Revenue	Revenue Requirement	Additional Revenue
Residential	135,503,853	144,169,820	8,665,968
Commercial	22,897,630	23,904,463	1,006,833
Large Volume	4,465,247	4,613,057	147,810
Irrigation	6,804,848	7,286,631	481,783
Private Fire	6,817,163	6,886,840	69,677
Wholesale	5,796,799	5,947,217	150,418
Pulp Mill	14,629,756	15,519,245	889,489
Grand Total	196,915,296	208,327,274	11,411,978

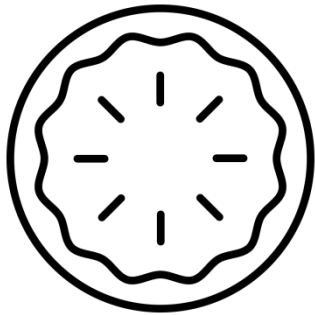
Proposed Annual Rate Adjustments by Customer Class



- Tacoma Water is recommending a 4.0% system average rate increase
- This increase assumes that the Cost-of-Service is phased in
- Recommendation is to apply the adjustment to both the fixed charge and volumetric rates (where applicable)

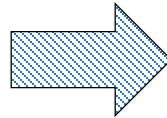
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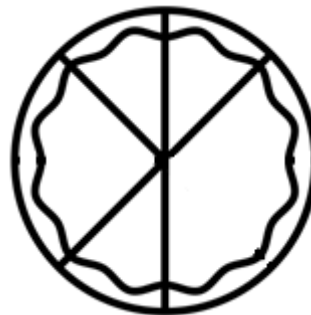


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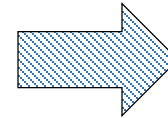


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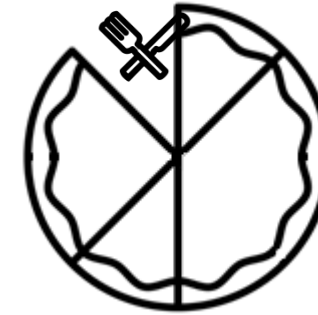


**Cost-of-Service Analysis  
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**How to Eat  
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**Rate Design**

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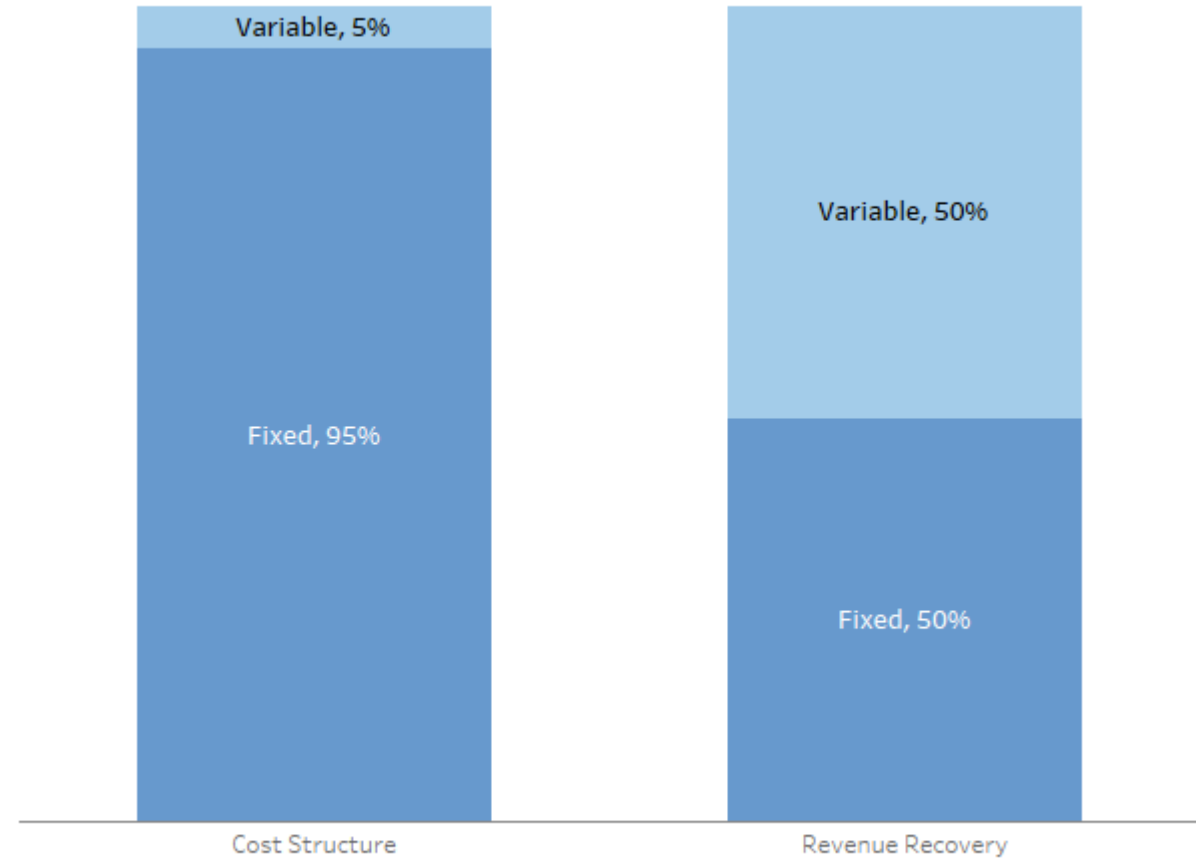
## Mismatched Costs and Revenues

**Water utilities exist in a capital-intensive business environment**

**Over 95% of costs are “fixed” in the very short-run; power, treatment, and solids handling are the only variable costs on this time horizon**

**Rate-design can be used to contribute to revenue stability, improve equity across customer classes, and send a conservation signal**

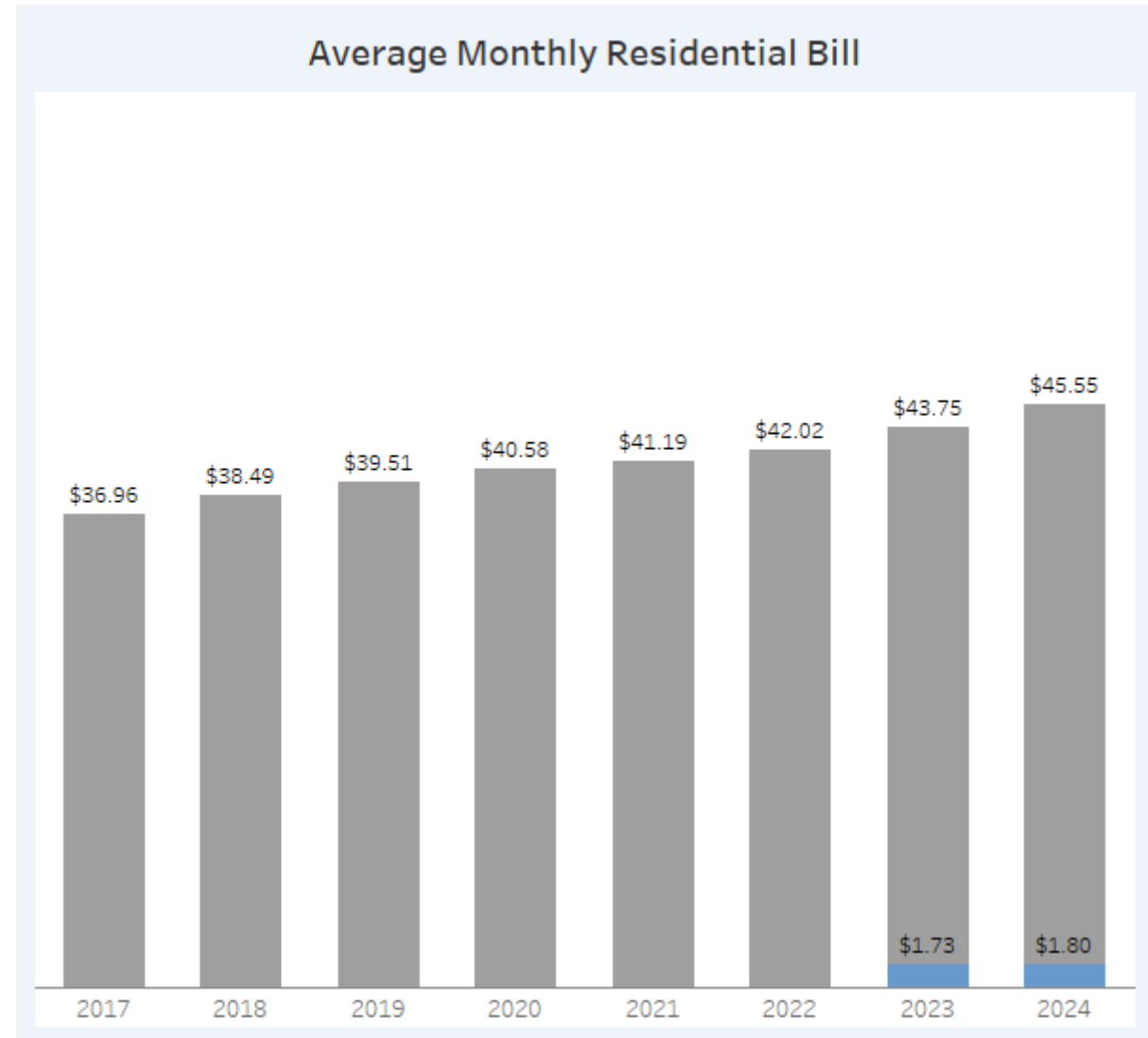
Water System Cost and Revenue Recovery Structure



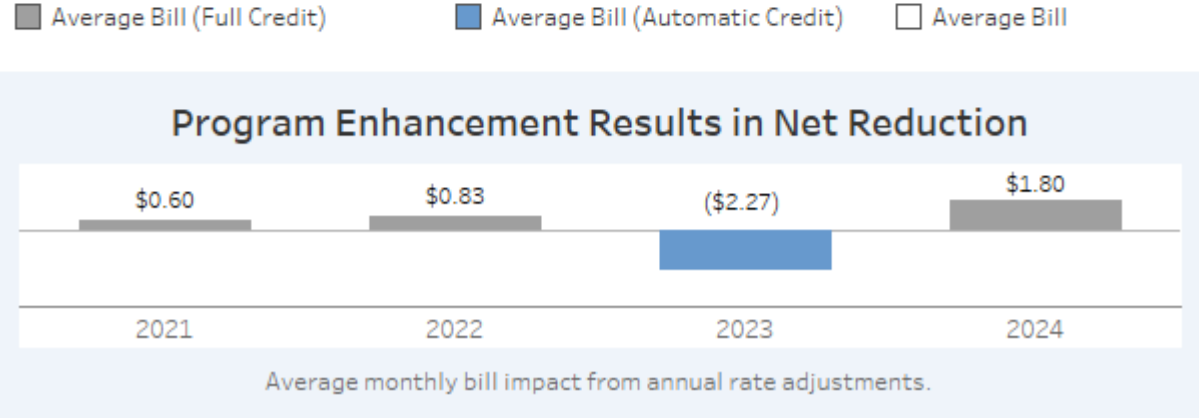
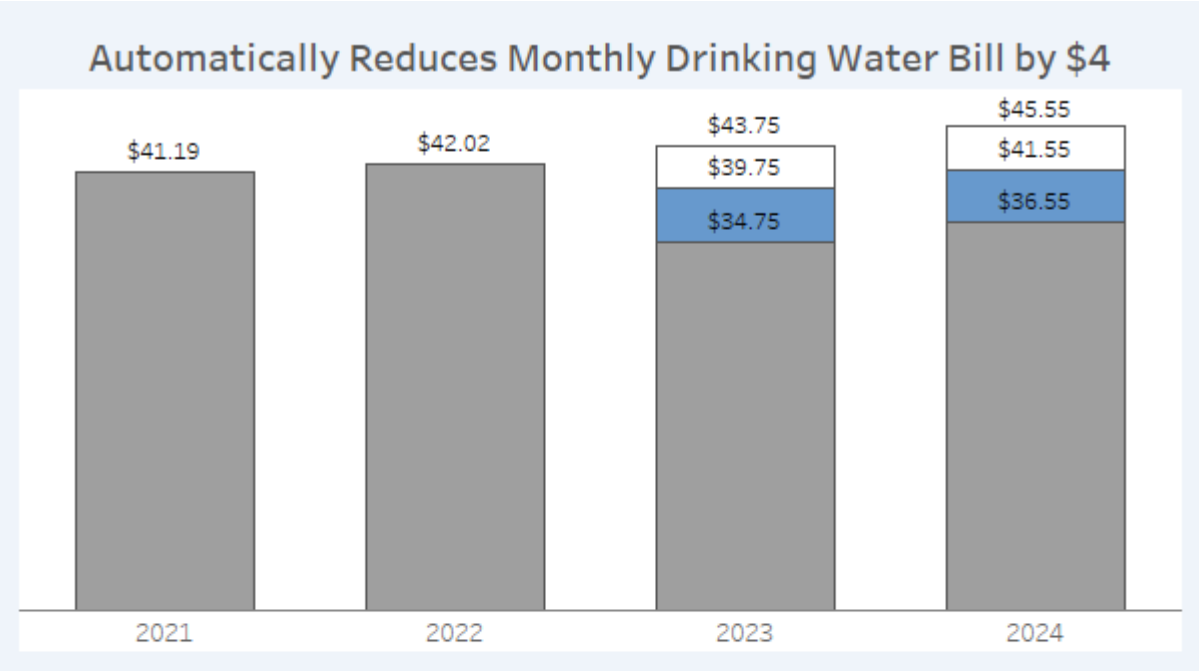
Cost represents expenses in terms of percentage.  
Revenue represents anticipated water sales in terms of percentage.

# Average Monthly Bill (Residential)

- The recommended changes result in an increase of \$1.73 per month in 2023 and \$1.80 per month in 2024 for the average inside-city residential customer
- Assumes a 5/8" meter, 6 CCF (4,488 gallons) of consumption during Winter months and 9 CCF (6,732 gallons) of consumption during summer months



# Enhanced Customer Assistance

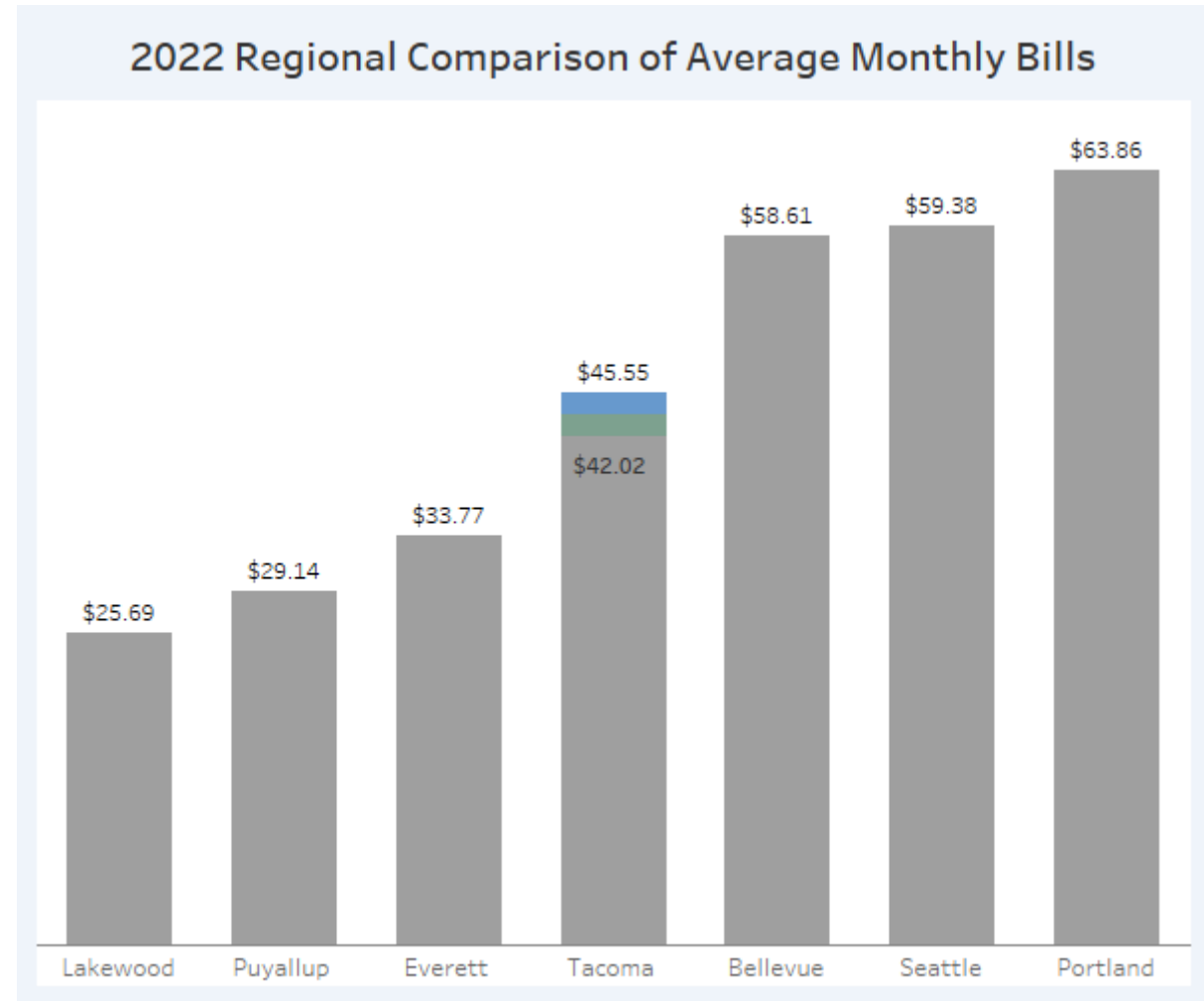


- For customers enrolled in our Bill Credit Assistance Plan (BCAP), automatic monthly bill credits will reduce their drinking water bill by \$4, offsetting rate adjustments for the next biennium
- In 2023, BCAP customers will see a net reduction in their drinking water bill (assuming similar usage)
- In 2024, monthly drinking water bills will look similar 2021 monthly bills (assuming similar usage)

# Tacoma Water Retail Rates are Competitive

**“Current retail rates are competitive for the region even with proposed rate increases and provide management with good revenue-raising flexibility.”**

**- Standard & Poor's  
Tacoma Water Credit Rating Review**



*This comparison assumes a single family consumes a monthly average 6 CCF (4,488 gallons) in winter months and 9 CCF (6,732 gallons) in summer months, with a 5/8" meter.*

# Expansion of Grant & Loan Program

## Program Details

- Grant or loan to replace customer side aged or leaking water line associated with advanced meter deployment
- \$5,000 grant for income-eligible and/or \$5,000 loan with zero interest for 84 months

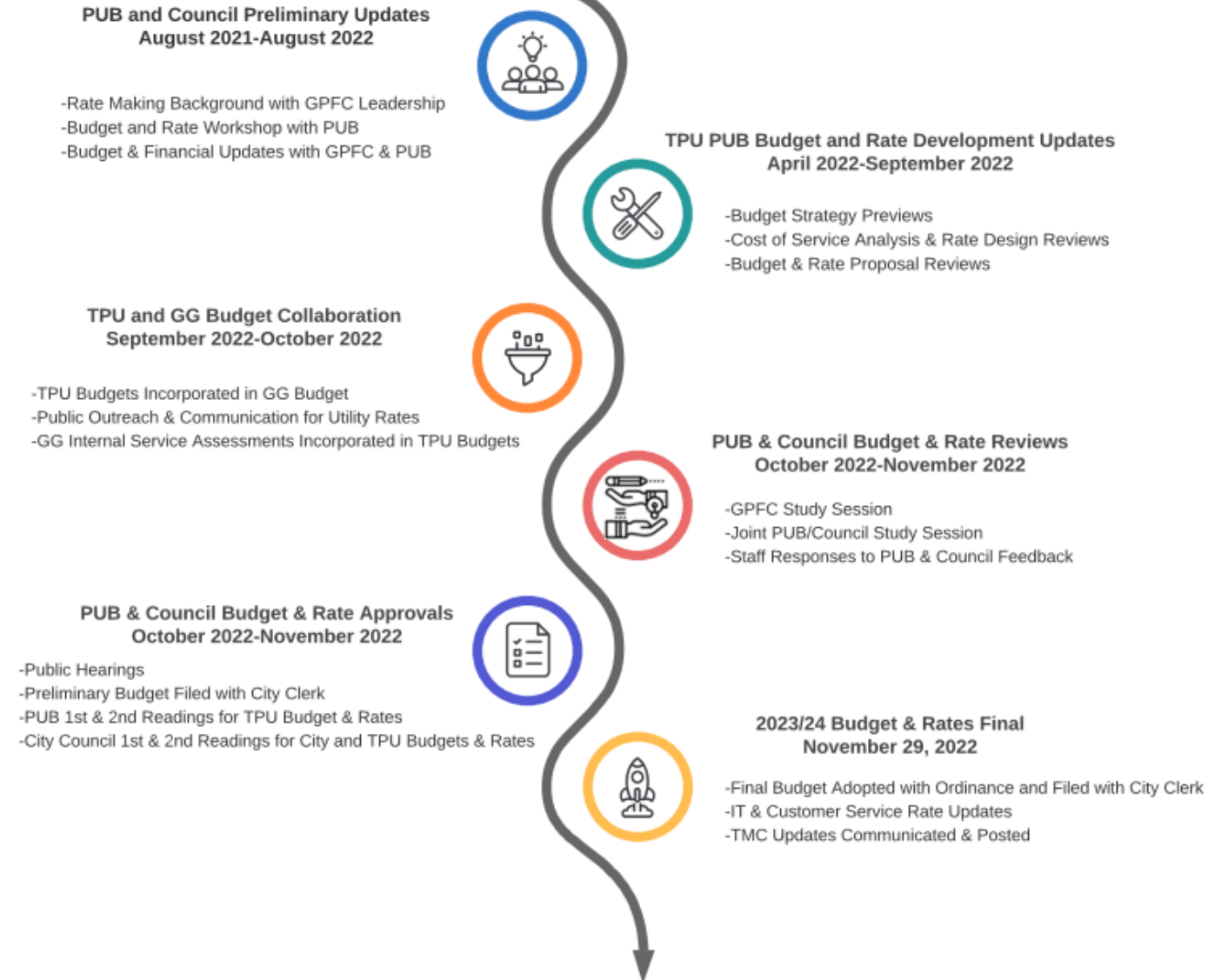
## Program Status May 2021 through May 2022

- 1 customer has received a grant of \$5,000
- What can we do to expand the program and help more customers?

## Program Expanded June 2022

- Eliminate 45-day window and advanced meter enabled program eligibility
- Establish a tiered funding priority
- Immediate results: 1 grant & 1 loan completed; 1 grant & 1 loan in progress

# Next Steps



# Appendix

# Appendix A; Assessments

Sender	Service Provider	2021-2022 (Current)	2023-2024 (Draft-AC)	Difference AC	Difference AC (%)
General Government	City Attorney's Office	843,258	953,669	110,411	13.1%
	City Council	41,265	44,063	2,798	6.8%
	City Manager	501,658	649,310	147,653	29.4%
	Community & Economic Development	148,716	152,179	3,463	2.3%
	Finance	2,255,988	2,829,397	573,409	25.4%
	Hearing Examiner	19,409	-	(19,409)	(100.0%)
	Human Resources	1,442,051	1,539,840	97,789	6.8%
	Information Technology	4,565,285	5,856,576	1,291,291	28.3%
	Public Works	831,928	848,442	16,513	2.0%
	Tacoma Fire	33,214	34,087	872	2.6%
	<b>Total</b>	<b>10,682,773</b>	<b>12,907,564</b>	<b>2,224,791</b>	<b>20.8%</b>
Tacoma Public Utilities	Administration	1,246,597	1,602,469	355,872	28.5%
	Customer Services	10,840,127	13,309,375	2,469,247	22.8%
	Public Affairs	2,776,646	3,199,900	423,254	15.2%
	Support Services	910,096	1,212,549	302,453	33.2%
	Utility Technology Services*	3,566,801	4,377,132	810,331	22.7%
	<b>Total</b>	<b>19,340,268</b>	<b>23,701,424</b>	<b>4,361,157</b>	<b>22.5%</b>
<b>Total</b>		<b>30,023,040</b>	<b>36,608,988</b>	<b>6,585,948</b>	<b>21.9%</b>

\*Utility Technology Services includes \$114,547 of RWSS budget



# Appendix B; Fixed, Variable Adjustments by Class

Customer Class	Annual	2023		2024	
	Average	Fixed	Variable	Fixed	Variable
Residential	4.2%	4.0%	5.4%	4.0%	5.4%
Commercial	2.9%	4.0%	2.1%	4.0%	2.1%
Large Volume	2.2%	4.0%	2.1%	4.0%	2.2%
Irrigation	4.7%	0.0%	4.7%	0.0%	4.6%
Private Fire	0.7%	0.7%	0.0%	0.7%	0.0%
Wholesale	1.7%	4.0%	0.6%	4.0%	0.5%
Pulp Mill	4.0%	4.0%	4.0%	4.0%	4.0%

# Appendix C; The Future Remains Uncertain

## Fed's Powell: Russia's war on Ukraine will worsen inflation

By **CHRISTOPHER RUGABER** Associated Press. Updated March 3, 2022, 5:11 p.m.

 1

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### What the 2008 Financial Crisis Tells Us About Today's Inflation Surge

Inflation models that central banks have used since the 1990s may no longer be adequate, an international monetary official warns

FINANCE


## Nobel economists were dead wrong on inflation: Don't expect an apology

BY CARL SCHRAMM, OPINION CONTRIBUTOR - 04/05/22 1:30 PM ET  
THE VIEWS EXPRESSED BY CONTRIBUTORS ARE THEIR OWN AND NOT OF THE HILL

OPINION  
PAUL KRUGMAN

## How High Inflation Will Come Down

March 24, 2022



Getty Images

The Washington Post  
Democracy Dies in Darkness

Opinions Editorial Board The Opinions Essay Global Opinions Voices Across America Post Opinión D.C., Md. & Va. Cartoons Newsletters

## Opinion: The Fed is charting a course to stagflation and recession

By **Lawrence H. Summers**  
Contributing columnist  
March 15, 2022 at 6:38 p.m. EDT

The Washington Post  
Democracy Dies in Darkness

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Letters to the Editor

## Opinion: Don't listen to Larry Summers on inflation

March 21, 2022 at 12:28 p.m. EDT

# Appendix D; Inflation and the Utility

Inflationary pressures have varying degrees of impact, depending on the goods or services consumed.

INFLATION	CONSUMER	UTILITY
Most Commonly Used Index	<p><b>Consumer Price Index (<a href="#">CPI</a>)</b></p> <p>The Consumer Price Index (CPI) is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services.</p>	<p><b>Engineering News-Record Construction Cost Index (<a href="#">CCI</a>)</b></p> <p>The CCI uses 200 hours of common labor, multiplied by the 20-city average rate for wages and fringe benefits.</p>
Other Commonly Used Indices	<ul style="list-style-type: none"><li>• <b>CPI: U.S. City Average (<a href="#">CPIAUCSL</a>)</b></li><li>• <b>CPI: Less Food and Energy (<a href="#">CPILFESL</a>)</b></li><li>• <b>Gross Domestic Product Implicit Price Deflator (<a href="#">GDPDEF</a>)</b></li></ul>	<ul style="list-style-type: none"><li>• <b>ENR Building Cost Index (<a href="#">BCI</a>)</b></li><li>• <b>ENR Materials Price Index (<a href="#">MPI</a>)</b></li><li>• <b>ENR Seattle Construction Cost Index (<a href="#">CCI</a>)</b></li><li>• <b>ENR Seattle Business Cost Index (<a href="#">BCI</a>)</b></li></ul>

**Budget and rates reflect the inflation experienced by a utility, but customers compare utility rate adjustments to general inflation.**

# Appendix E; CPI vs CCI vs Rates

Year	Consumer Price Index (Jan to Jan)	CPI (Indexed)	Construction Cost Index (Jan to Jan)	CCI (Indexed)	Tacoma Water Rate Adjustment (Annual)	Rates (Indexed)
2015	-0.2%	1.00	2.4%	1.02	4.0%	1.04
2016	1.2%	1.01	0.1%	1.03	4.0%	1.08
2017	2.5%	1.04	2.2%	1.05	4.0%	1.12
2018	2.1%	1.06	7.7%	1.13	4.0%	1.17
2019	1.5%	1.07	4.9%	1.18	2.5%	1.20
2020	2.5%	1.10	0.9%	1.20	2.5%	1.23
2021	1.4%	1.11	6.0%	1.27	1.5%	1.25
2022	7.5%	1.20	6.8%	1.35	2.0%	1.27

# Appendix F; Inflation and Labor

Year	General Wage Increase*	Consumer Price Index (Jan to Jan)	General Wage Increase (Indexed)	CPI (Indexed)
2015	2.5%†	-0.2%	1.00	1.00
2016	2.0%	1.2%	1.02	1.01
2017	2.5%†	2.5%	1.05	1.04
2018	3.0%	2.1%	1.08	1.06
2019	3.0%	1.5%	1.11	1.07
2020	3.0%	2.5%	1.14	1.10
2021	1.0%	1.4%	1.15	1.12
2022	2.0%	7.5%	1.18	1.20

\*Non-represented employees

†1% to 5% depending on classification