

# Rail Rate Policy

May 13<sup>th</sup>, 2020

Dan McCabe

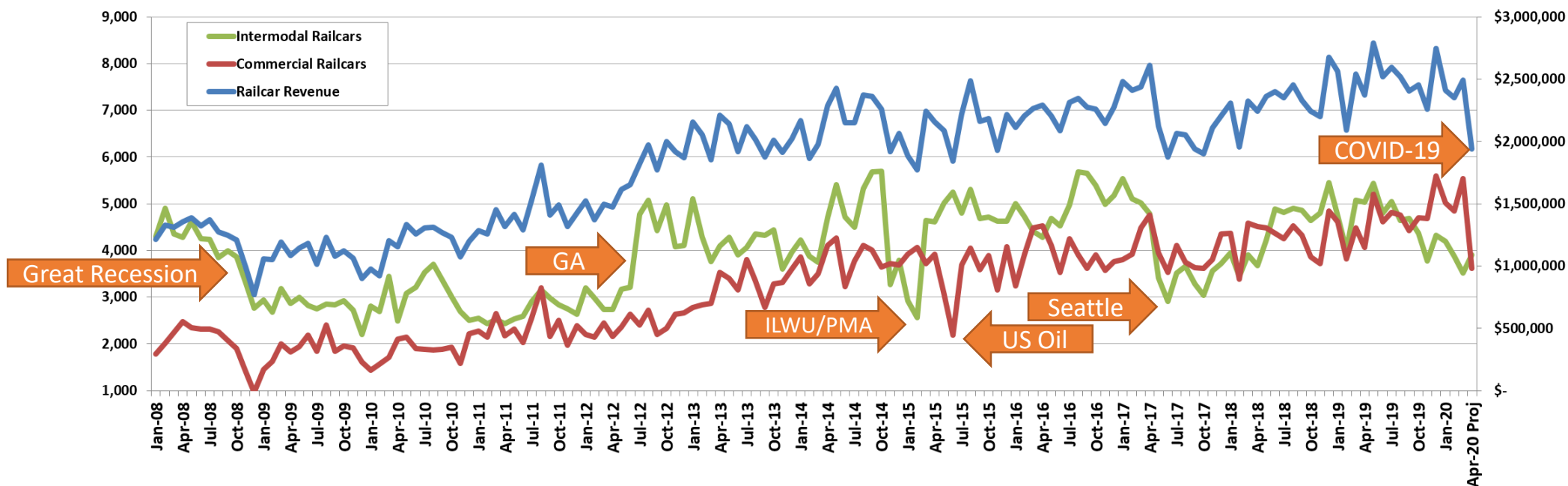
[dmccabe@cityoftacoma.org](mailto:dmccabe@cityoftacoma.org)

# Policy Objectives

- A. Rail rates should be cost based and adequate to recover Tacoma Rail's costs.
- B. Rail rates should be stable.
- C. Rail rates should ensure sufficient resource planning and acquisition for reliable service while being as competitive as possible.
- D. Rail rates should have a customer involvement and review process.

# Goals of Proposed Changes

- Rail rates are based on best estimates of rail volumes at the time of budget
  - Adjusted annually as necessary
- Utilize temporary or unanticipated upswings in business volumes
  - To balance temporary or unanticipated downswings in business
  - To support railroad infrastructure and asset investment opportunities



# Proposed Changes

## B. Rail rates should be stable.

1. Rates will be based on best estimates of rail volume.  
Operating surpluses due to unanticipated rail volume growth may be applied to the Volume Investment Fund.

<b>TACOMA RAIL</b> TACOMA PUBLIC UTILITIES	FT TMBL 8807-I
<b>TACOMA MUNICIPAL BELT LINE RAILWAY</b>	
<b>FREIGHT TARIFF TMBL 8807-I</b> (Cancels Tariff TMBL 8807-H)	
<b>NAMING</b> <b>SWITCHING AND OTHER TERMINAL CHARGES</b> <b>AS PROVIDED IN SECTION 1 HEREIN</b>	
<b>APPLYING AT ALL LOCATIONS ON THE</b> <b>TACOMA MUNICIPAL BELT LINE RAILWAY</b> <b>(TACOMA RAIL)</b>	
<hr/>	
This tariff is also applicable on intrastate traffic, except where expressly provided to the contrary in connection with particular items.	
<hr/>	
ISSUED: December 10, 2018	EFFECTIVE: January 1, 2019
<hr/>	
Dale W. King, Superintendent 2601 SR 509 North Frontage Road Tacoma, WA 98421	

# Proposed Changes

C. Rail rates should ensure sufficient resource planning and acquisition for reliable service while being as competitive as possible.

4. Tacoma Rail maintains a Volume Investment Fund that provides revenue requirement flexibility during times of unanticipated economic downturns or capital spending that may be used to offset the necessity of rate increases. Use of the fund will be limited to:
  - a. Workforce stability to ensure adequate staffing for rail volume rebound after a downturn.
  - b. Locomotive upgrades to sustain Tacoma Rail's environmental leadership goals.
  - c. Timely acquisition, replacement and upgrade of infrastructure and capital assets.
  - d. Grant or debt matching opportunities.

# Questions & comments

Dan McCabe

[dmccabe@cityoftacoma.org](mailto:dmccabe@cityoftacoma.org)

**DRAFT**

**TACOMA PUBLIC UTILITIES  
TACOMA RAIL**

**RAIL RATE POLICY  
AMENDED  
January 2021**

# Tacoma Public Utilities Tacoma Rail

- ☐ **Purpose** The purpose of this policy is to establish the Department's policy regarding the operation, maintenance, and construction of the Department's railway system within Tacoma Rail's service area.

☐

## II. Objective for Rail Rate Policy

- ☐ Rail rates should be cost based and adequate to recover Tacoma Rail's operating costs.

- ☐ Rates should be set to cover the full cost of the service.

- ☐ Rates should be set to cover the full cost of the service, including the cost of the infrastructure, the cost of the equipment, and the cost of the labor.

- ☐ Rates should be set to cover the full cost of the service, including the cost of the infrastructure, the cost of the equipment, and the cost of the labor.

☐

## III. Policies

- ☐ Rail rates should be cost based and adequate to recover Tacoma Rail's operating costs.

- ☐ Rates should be set to cover the full cost of the service, including the cost of the infrastructure, the cost of the equipment, and the cost of the labor.

- ☐ Rates should be set to cover the full cost of the service, including the cost of the infrastructure, the cost of the equipment, and the cost of the labor.

- ☐ Rates should be set to cover the full cost of the service, including the cost of the infrastructure, the cost of the equipment, and the cost of the labor.

- ☐ Rates should be set to cover the full cost of the service, including the cost of the infrastructure, the cost of the equipment, and the cost of the labor.

- ☐ Rates should be set to cover the full cost of the service, including the cost of the infrastructure, the cost of the equipment, and the cost of the labor.

- ☐ Rates should be set to cover the full cost of the service, including the cost of the infrastructure, the cost of the equipment, and the cost of the labor.

- ☐ Rates should be set to cover the full cost of the service, including the cost of the infrastructure, the cost of the equipment, and the cost of the labor.

☐

☐



[illegible][illegible]

R   d  d  r  r   
 d  r  r  r  r  r 

[illegible][illegible]

R r d d

r.

[illegible]

1. Die folgenden Aussagen sind wahr oder falsch? Begründen Sie!  
 a)  $\mathbb{R}$  ist ein faktorieller Ring. Wahr  
 b)  $\mathbb{R}[x]$  ist faktoriell. Wahr  
 c)  $\mathbb{R}[x, y]$  ist faktoriell. Wahr  
 d)  $\mathbb{R}[x, y]$  ist faktoriell. Falsch  
 e)  $\mathbb{R}[x, y]$  ist faktoriell. Wahr  
 f)  $\mathbb{R}[x, y]$  ist faktoriell. Wahr  
 g)  $\mathbb{R}[x, y]$  ist faktoriell. Wahr  
 h)  $\mathbb{R}[x, y]$  ist faktoriell. Wahr  
 i)  $\mathbb{R}[x, y]$  ist faktoriell. Wahr  
 j)  $\mathbb{R}[x, y]$  ist faktoriell. Wahr  
 k)  $\mathbb{R}[x, y]$  ist faktoriell. Wahr  
 l)  $\mathbb{R}[x, y]$  ist faktoriell. Wahr  
 m)  $\mathbb{R}[x, y]$  ist faktoriell. Wahr  
 n)  $\mathbb{R}[x, y]$  ist faktoriell. Wahr  
 o)  $\mathbb{R}[x, y]$  ist faktoriell. Wahr  
 p)  $\mathbb{R}[x, y]$  ist faktoriell. Wahr  
 q)  $\mathbb{R}[x, y]$  ist faktoriell. Wahr  
 r)  $\mathbb{R}[x, y]$  ist faktoriell. Wahr  
 s)  $\mathbb{R}[x, y]$  ist faktoriell. Wahr  
 t)  $\mathbb{R}[x, y]$  ist faktoriell. Wahr  
 u)  $\mathbb{R}[x, y]$  ist faktoriell. Wahr  
 v)  $\mathbb{R}[x, y]$  ist faktoriell. Wahr  
 w)  $\mathbb{R}[x, y]$  ist faktoriell. Wahr  
 x)  $\mathbb{R}[x, y]$  ist faktoriell. Wahr  
 y)  $\mathbb{R}[x, y]$  ist faktoriell. Wahr  
 z)  $\mathbb{R}[x, y]$  ist faktoriell. Wahr

[illegible]

**Redwood** a Rail's environmental  
differences.

000000000000000000r000000000000d0000r0d0000000r0r000r00

00d000000000000000.

[illegible]

1. The Board shall have the authority to set the rates of return on the capital of the Corporation, and to set the rates of return on the debt of the Corporation, and to set the rates of return on the equity of the Corporation.

2. The Board shall have the authority to set the rates of return on the capital of the Corporation, and to set the rates of return on the debt of the Corporation, and to set the rates of return on the equity of the Corporation.

3. The Board shall have the authority to set the rates of return on the capital of the Corporation, and to set the rates of return on the debt of the Corporation, and to set the rates of return on the equity of the Corporation.

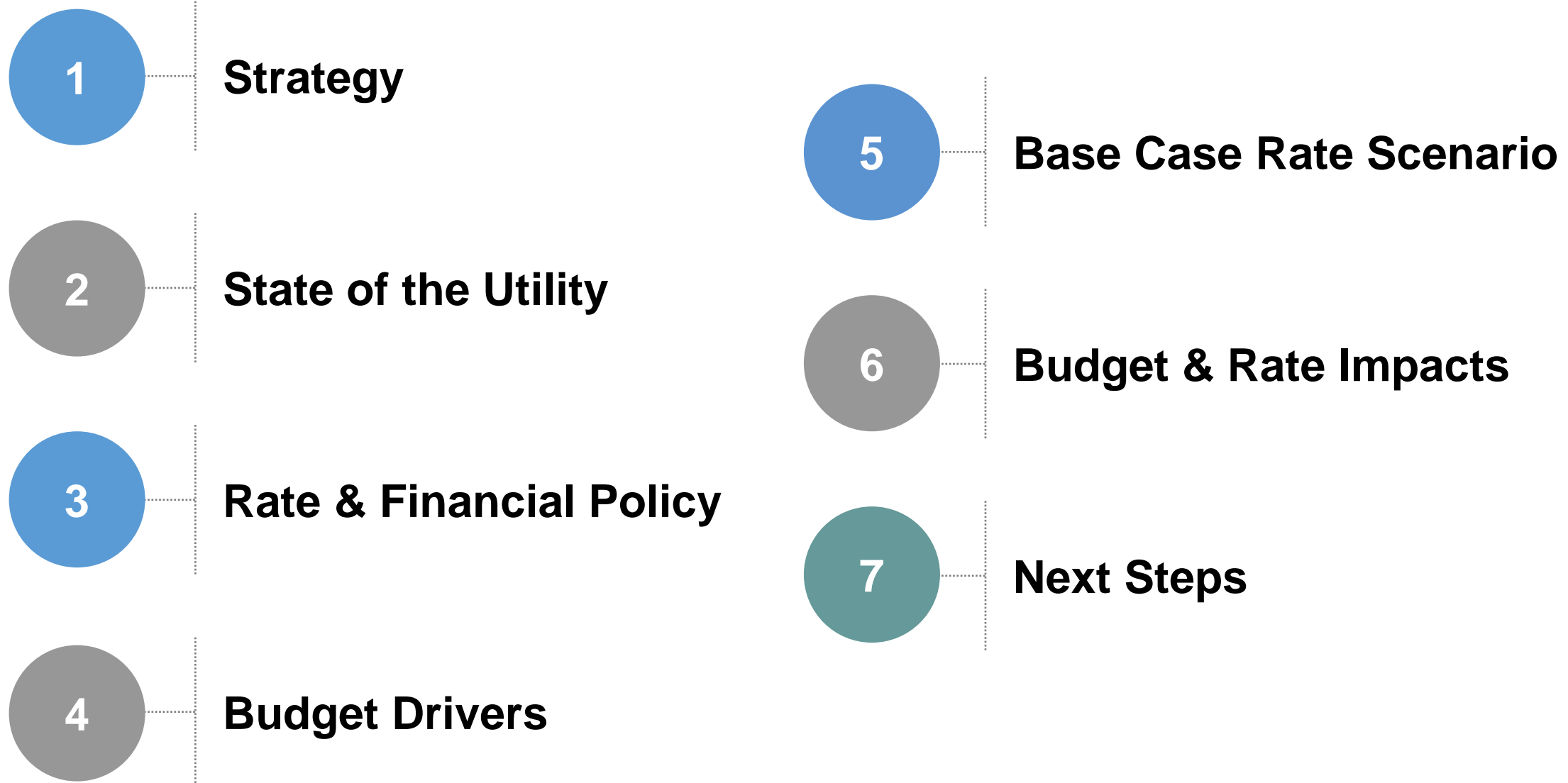
4. The Board shall have the authority to set the rates of return on the capital of the Corporation, and to set the rates of return on the debt of the Corporation, and to set the rates of return on the equity of the Corporation.

# Tacoma Water Rate & Financial Policy and Financial Outlook Update

December 1, 2023  
[Tacoma Water Rate & Financial Policy and Financial Outlook Update](#)  
December 1, 2023

Meeting

# Today's Discussion



# Strategy

- *Implementation is Underway*
- *Guiding Light in Uncertain Times*
- *Customer and Internal Focus*
- *Reinforced by Recent Events*



**SD-1**  
Equity & Inclusion

**SD-2**  
Financial Sustainability

**SD-3**  
Rates

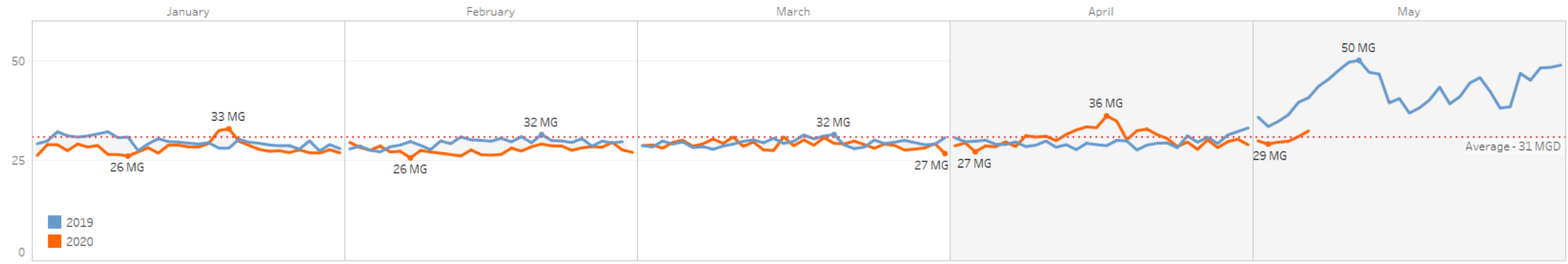
**SD-4**  
Stakeholder Engagement

**SD-5**  
Environmental Leadership

**SD-6**  
Innovation

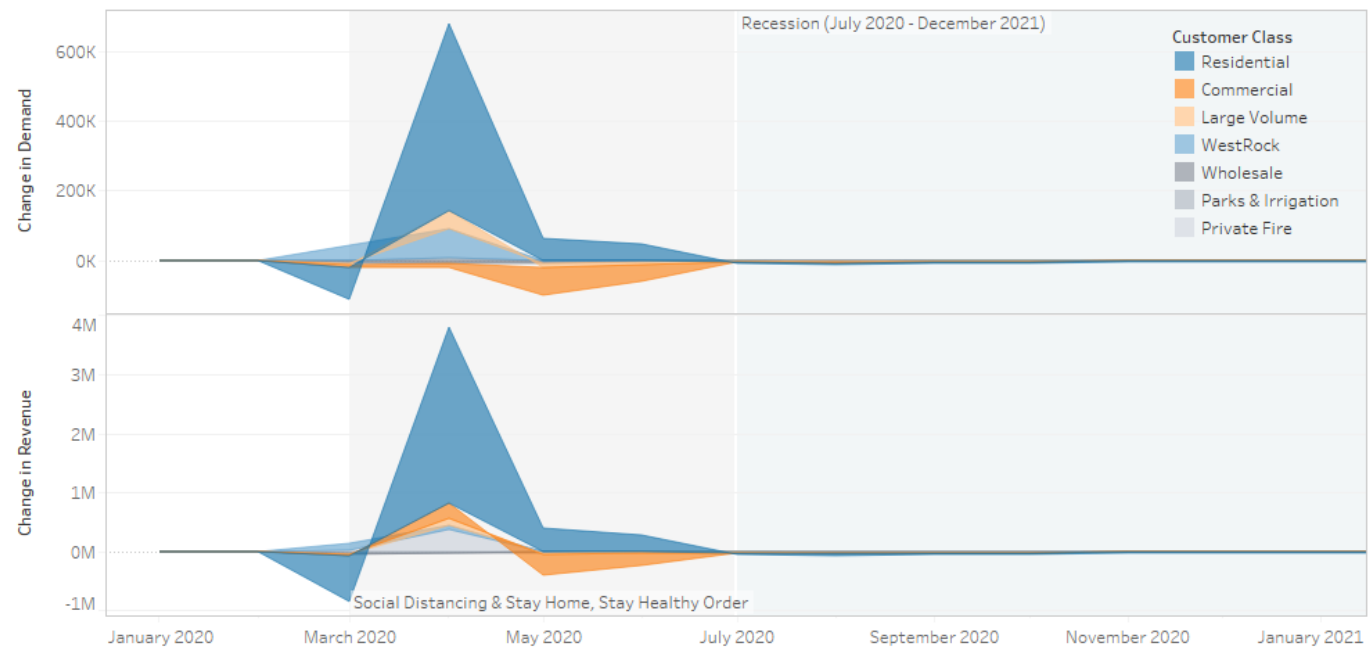
# State of the Utility: COVID-19 Impacts

Daily Delivery to System (MG) *excludes WestRock and RWSS Partners*



- **Delivery of Water:** Delivery of total water to the system continues to track with 2019
- **Projections:** We are continuing to project increased residential demand and decreased commercial demand during the Stay Home, Stay Healthy mandate followed by a recession
- **Monitoring:** Total billed demand and revenue for March and April above budget and we continue to monitor billed demand and revenue

Demand & Revenue Projections *using data from industry reporting and Great Recession analogue*



*These projections model the impact of COVID-19 (March 2020 - June 2020) followed by an 18-month recession (July 2020 - December 2021).*

**SD-2**  
Financial  
Sustainability

**SD-3**  
Rates

# State of the Utility: COVID-19 Impacts



## Increased Expenses

- Increased expenses for maintenance and repair
- Increased expenses for operations and maintenance
- Increased expenses for capital projects
- Increased expenses for personnel and training
- Increased expenses for information technology



## Balancing Efforts

- Increased expenses for maintenance and repair
- Increased expenses for operations and maintenance
- Increased expenses for capital projects
- Increased expenses for personnel and training
- Increased expenses for information technology



## Decreased Expenses

- Decreased expenses for maintenance and repair
- Decreased expenses for operations and maintenance
- Decreased expenses for capital projects
- Decreased expenses for personnel and training
- Decreased expenses for information technology

SD-1  
Equity & Inclusion

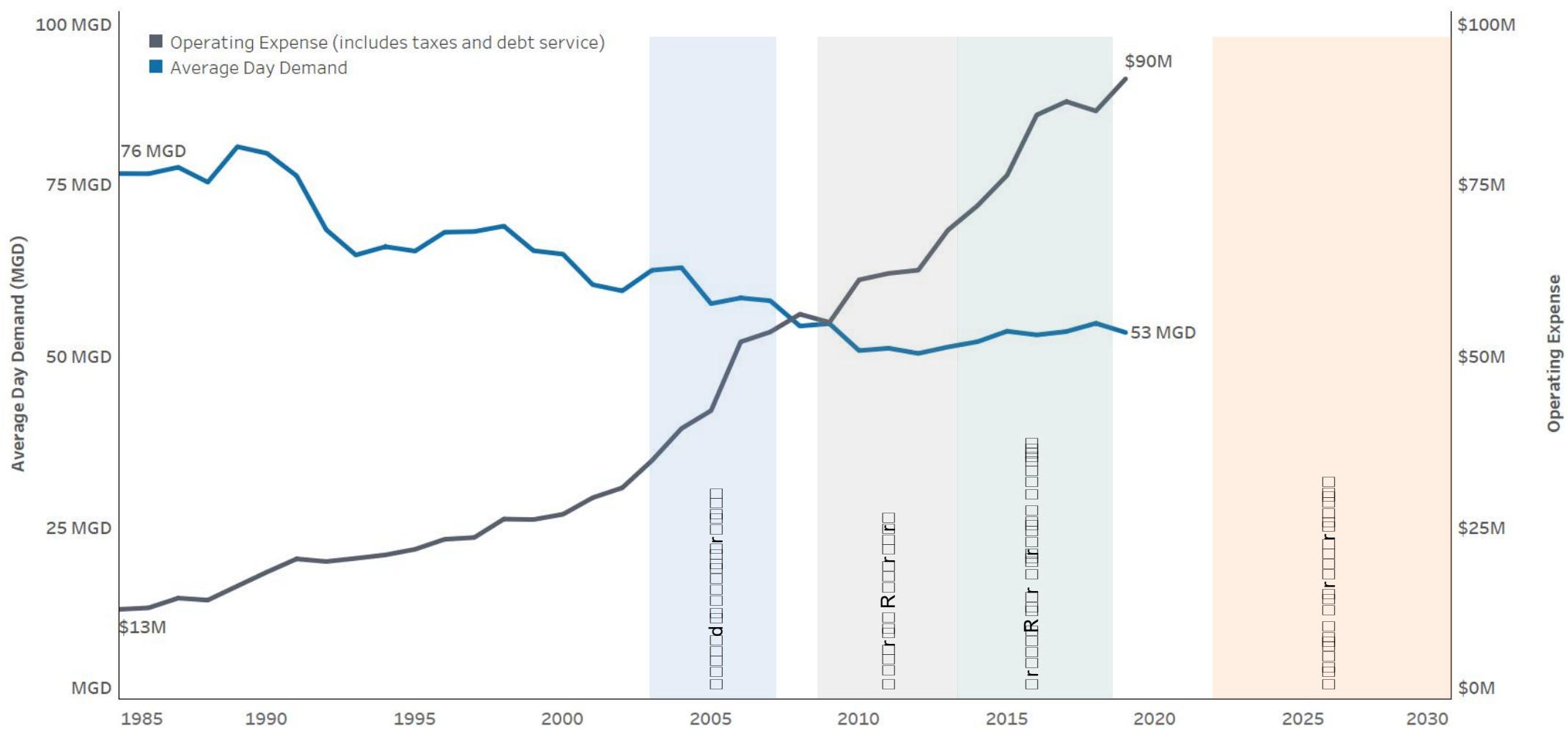
SD-2  
Financial Sustainability

SD-3  
Rates

SD-6  
Innovation

# State of the Utility: Demand & Costs

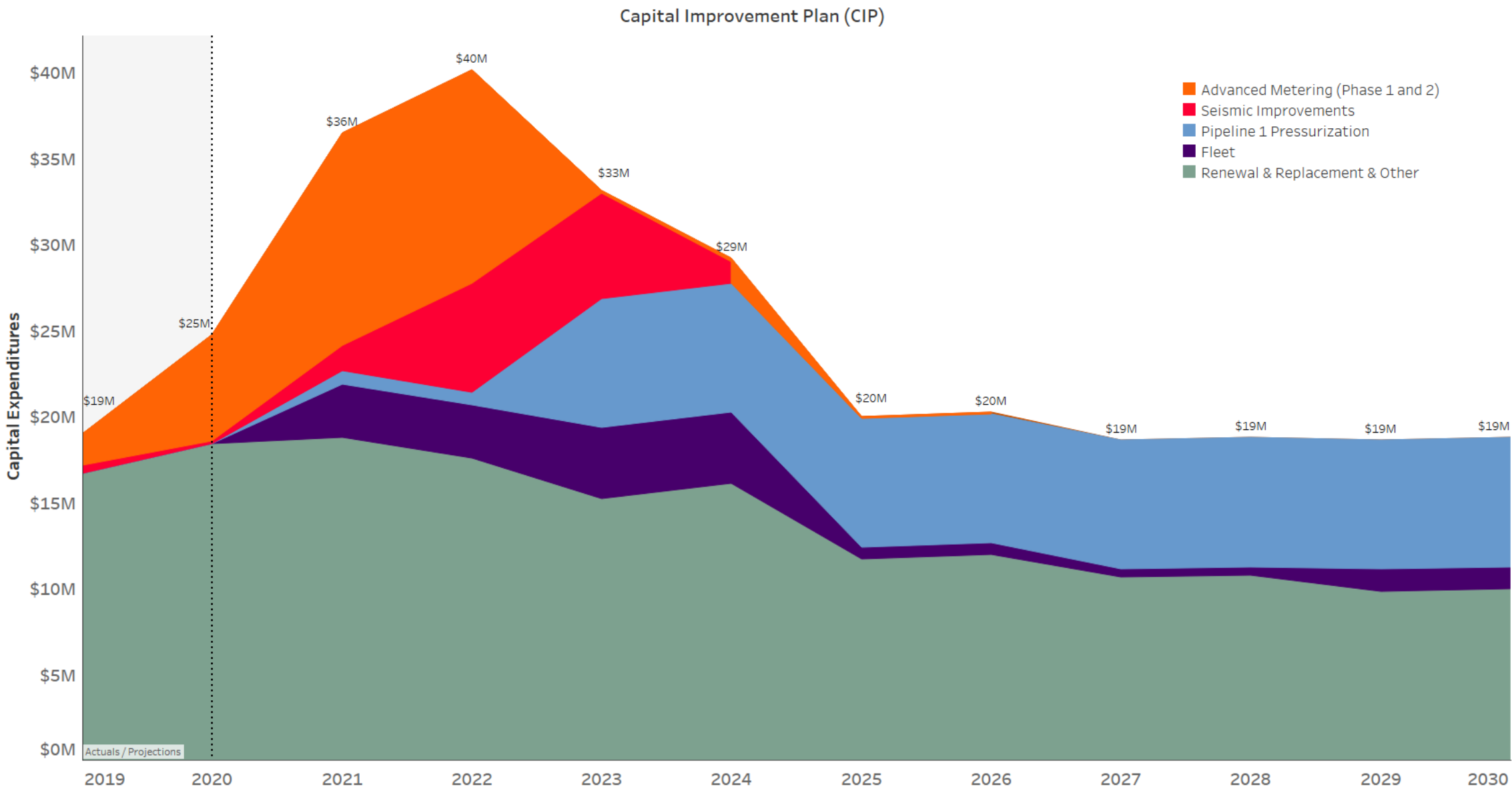
- Water Demand



The blue line represents average day demand for water in million gallons per day from 1985 - 2019. The grey line represents annual operating expense in millions from 1985 - 2019.  
Source: Tacoma Water Annual Financial Reports



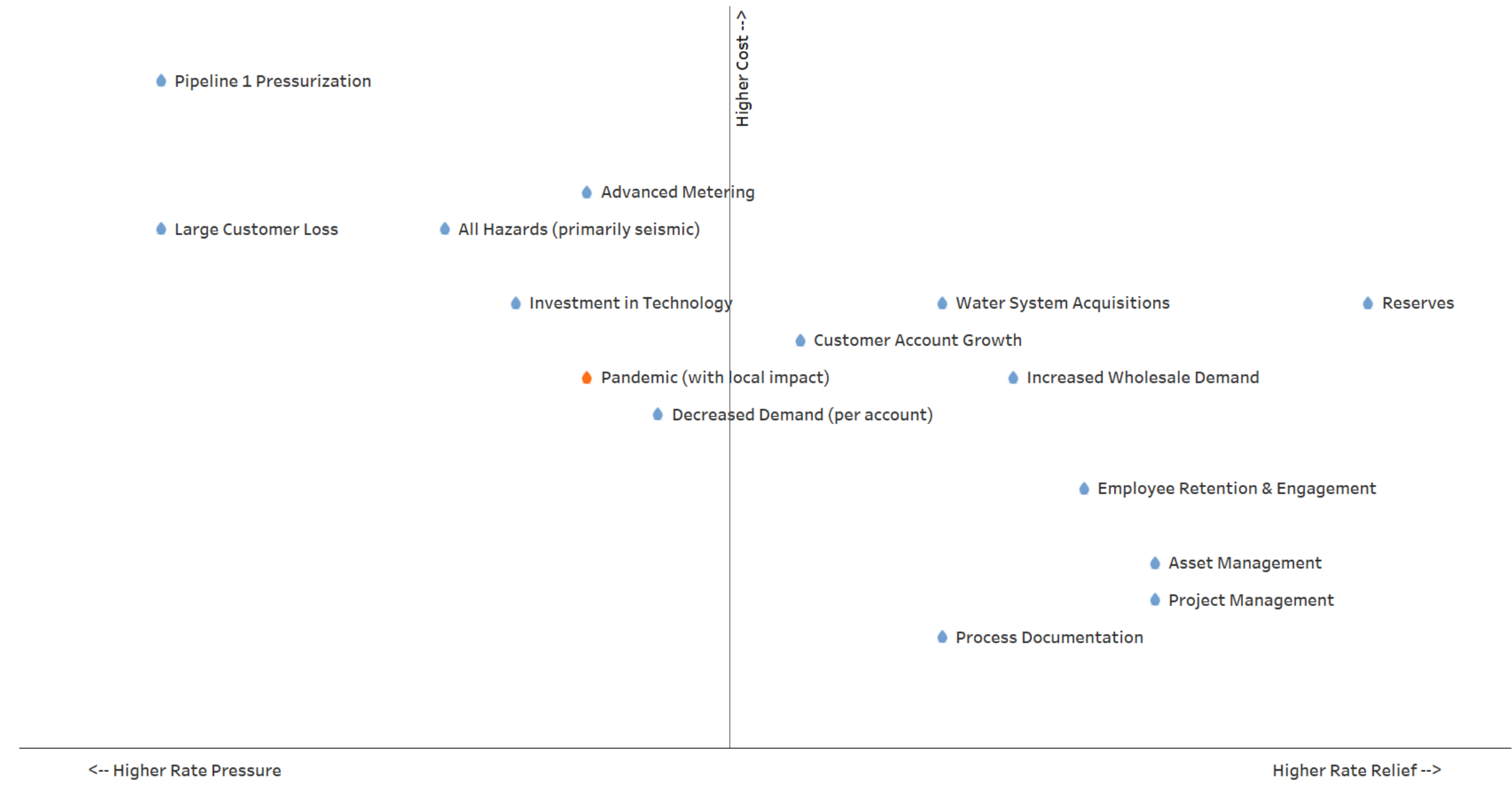
# State of the Utility: Capital Spending



**SD-2**  
Financial  
Sustainability

**SD-3**  
Rates

# State of the Utility: Rate Pressure & Relief



SD-1  
Equity & Inclusion

SD-2  
Financial Sustainability

SD-3  
Rates

SD-4  
Stakeholder Engagement

SD-5  
Environmental Leadership

SD-6  
Innovation

# Rate & Financial Policy

## Revenue Requirement

- Regular reviews with full study every two years
- Study includes projected revenue, expenses and capital improvements

## Cost-Based Rates

- An embedded cost-of-service study will determine the cost of serving each customer class and allocation to recover projected expenses

## Stable Rates

- Water rates should be as low as is responsible
- Water rates should be stable and understandable
- To the extent possible, apply gradualism in rate adjustments

## Financial Metrics

- 60 days of current budgeted expenditures
- Capital: \$2M minimum in SDC Fund and 1% of original plant in Capital Reserve
- Debt Service Coverage: Senior above 1.5x and All In above 1.25x

## Rate Adjustments

- Sufficient to meet Tacoma Water budgets and maintain financial sufficiency
- Minimize long-run costs to rate-payer
- Short and long-run rate impacts presented

## Low-Income

- Special consideration for low-income senior and/or disabled customers

## Environmental Stewardship

- Maintain the quality of the environment and preserve sensitive ecosystems at the source of supply

**SD-1**  
Equity &  
Inclusion

**SD-2**  
Financial  
Sustainability

**SD-3**  
Rates

**SD-4**  
Stakeholder  
Engagement

**SD-5**  
Environmental  
Leadership

**SD-6**  
Innovation

# Rate & Financial Policy

Revenue Requirement	<ul style="list-style-type: none"><li>• In development and based on budget</li></ul>
Cost-Based Rates	<ul style="list-style-type: none"><li>• Based on the previous Cost of Service Analysis</li></ul>
Stable Rates	<ul style="list-style-type: none"><li>• Preserve gradualism and long-term rate stability</li></ul>
Financial Metrics	<ul style="list-style-type: none"><li>• Apply risk model analysis to support recommendation for reserve level requirements</li><li>• Rating agency response for water utility: essential business with rate-setting ability and relatively inelastic demand</li></ul>
Rate Adjustments	<ul style="list-style-type: none"><li>• Preserve long-term financial sustainability</li></ul>
Low-Income	<ul style="list-style-type: none"><li>• Increase support for low-income senior and/or disabled customers</li></ul>
Environmental Stewardship	<ul style="list-style-type: none"><li>• Continue commitment to the health of our environment</li></ul>

**SD-1**  
Equity & Inclusion

**SD-2**  
Financial Sustainability

**SD-3**  
Rates

**SD-4**  
Stakeholder Engagement

**SD-5**  
Environmental Leadership





**SD-6**  
Innovation



# Budget Drivers



## Least Control

- 
- 
- 
- 



## Limited Control

- [illegible]



## Most Control

- 
- 
- 

**SD-1**  
Equity & Inclusion

## SD-2

### Financial sustainability










### SD-3 Rates

## SD-4

## SD-5

SD-6  
Innovation

# Base Case Rate Scenario

Scenario	Description	Positive or Negative Impact on Rates
2021/22 Base Case	Expected customer growth, base CIP (with low-case Pipeline 1 Project), base O&M	
2021/22 Alternate Base Case	Assumes no rate adjustment in 2021	
New Large Volume Customer	Assumes additional 2 million gallons per day beginning in 2022, doubling Large Volume revenue assumptions	
High Customer Growth	Assumes account growth with historical modeling	
Increased Wholesale Revenue	Expanded wholesale sales through market-based and traditional wholesale agreements, assumes additional \$1.2 million per year additional revenue	
Pulp Mill Shutdown with High Case CIP	Assumes 5-extension is executed in 2020 and Mill shuts down in July 2021 and high case Pipeline 1 project	
Pulp Mill Shutdown	Assumes 5-extension is executed in 2020 and Mill shuts down in July 2021	
High Case CIP	Assumes Pipeline 1 project at high end of projection with \$150 million over 20 years	
Prolonged Recession after Pandemic	We are continuing to monitor the environment and will be model additional scenarios as needed	

SD-1  
Equity &  
Inclusion

SD-2  
Financial  
Sustainability

SD-3  
Rates

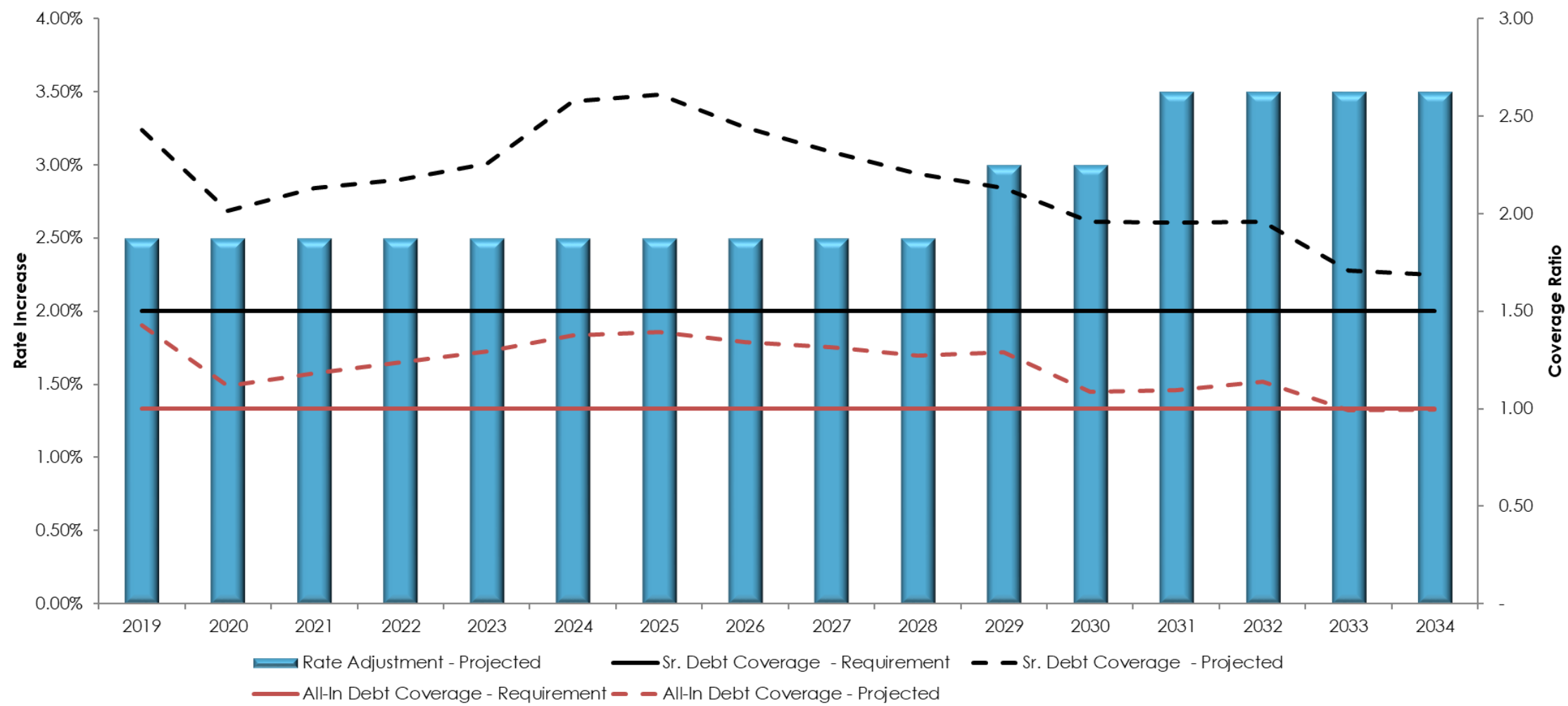
SD-4  
Stakeholder  
Engagement

SD-5  
Environmental  
Leadership

SD-6  
Innovation

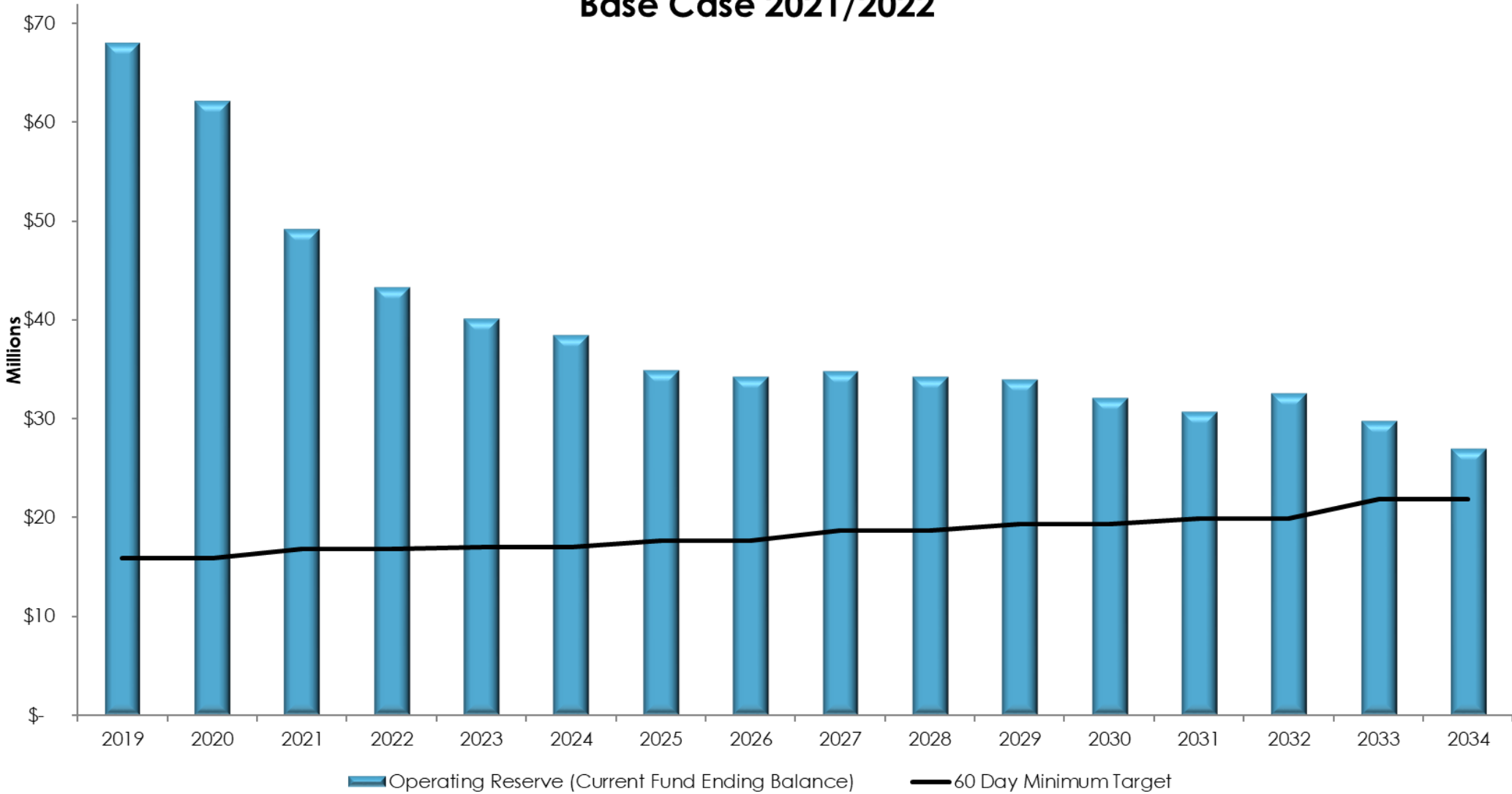
# Base Case Rate Scenario (Recommended)

## Rate Increases & Coverage Tests Base Case 2021/2022



# Base Case Rate Scenario (Recommended)

Tacoma Water Operating Fund  
Base Case 2021/2022



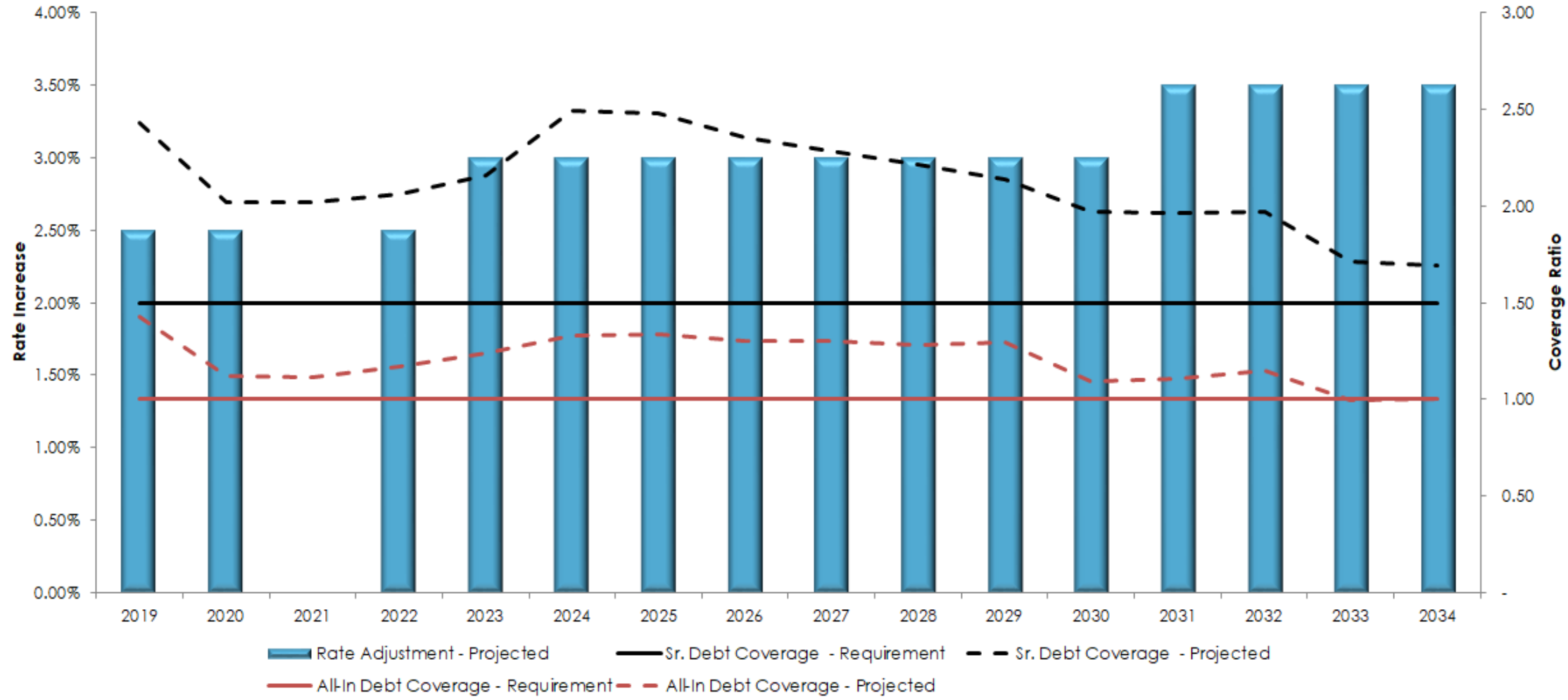
SD-2  
Financial  
Sustainability

SD-3  
Rates



# Alternate Rate Scenario

Rate Increases & Coverage Tests  
Alternate Base Case 2021/2022

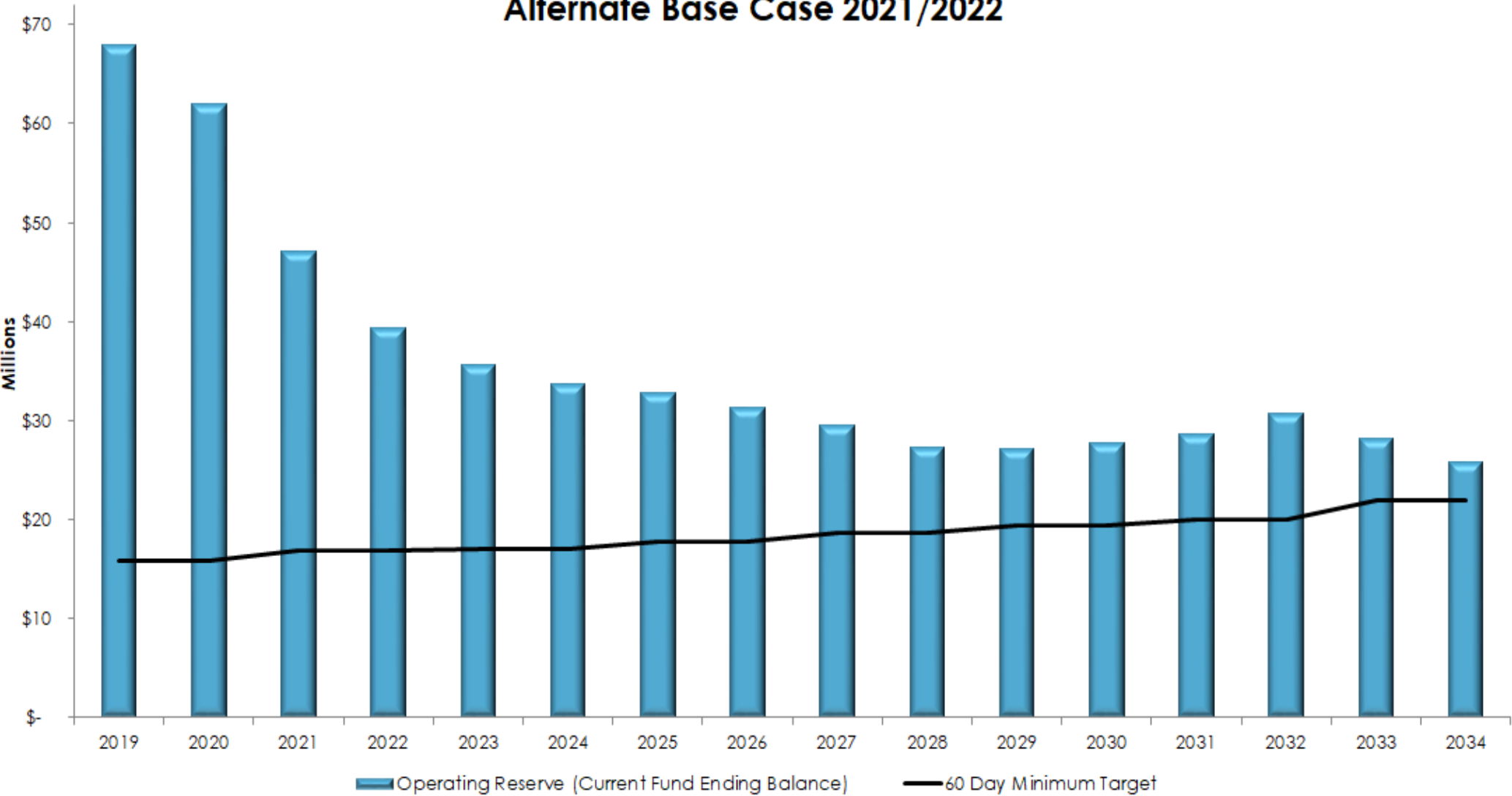


SD-2  
Financial  
Sustainability

SD-3  
Rates

# Alternate Rate Scenario

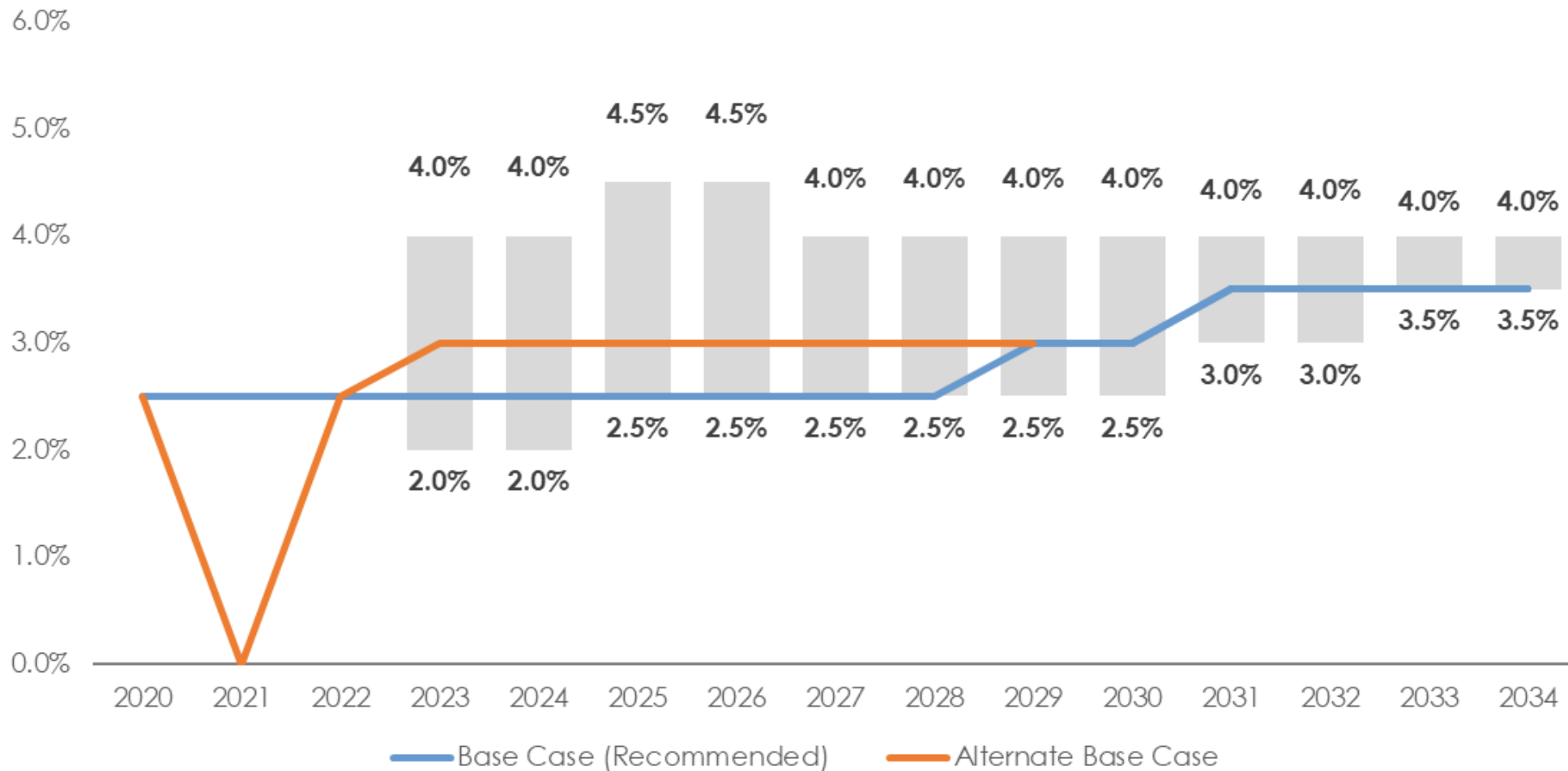
Tacoma Water Operating Fund  
Alternate Base Case 2021/2022



SD-2  
Financial  
Sustainability

SD-3  
Rates

## Range of System Average Rate Adjustments

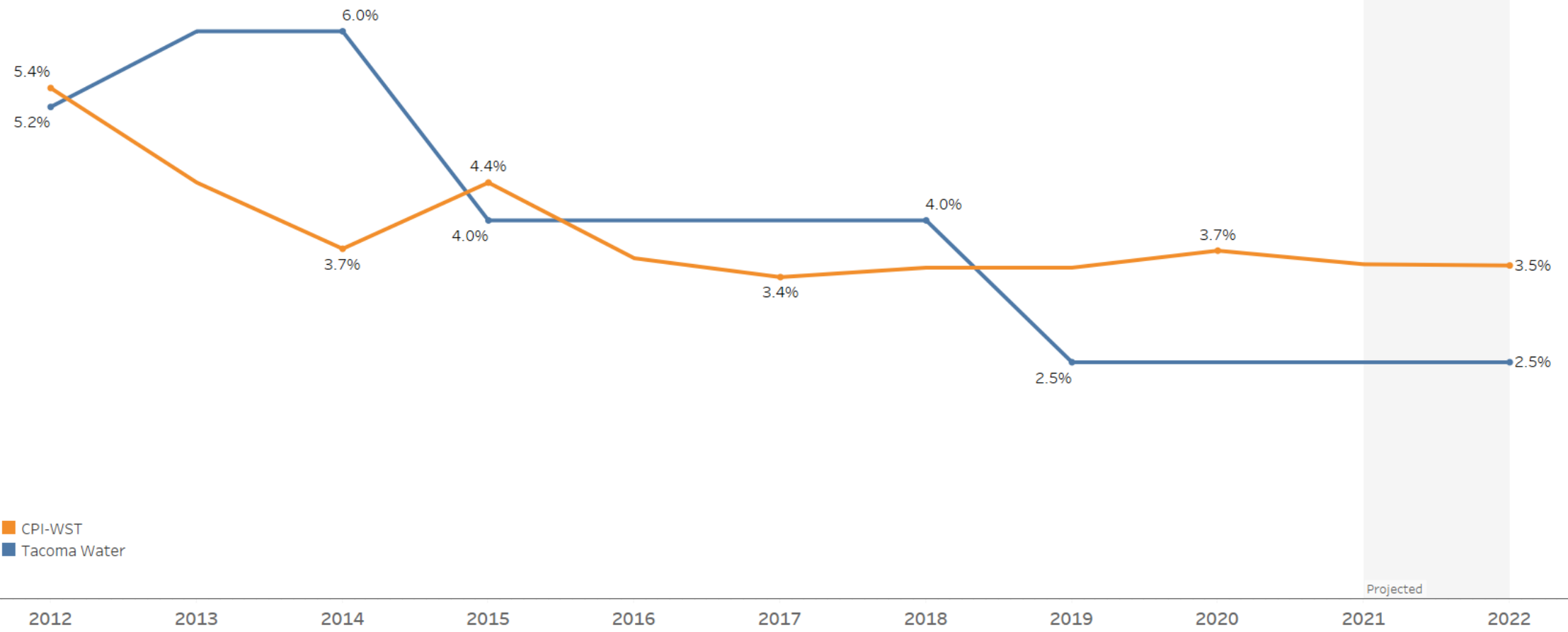


SD-2  
Financial  
Sustainability

SD-3  
Rates

# Budget & Rate Impact: Affordability

Comparing Tacoma Water's Annual Rate Adjustments with the CPI for Water, Sewer, and Trash (CPI-WST)



2012 - 2019 CPI-WST Source: US Bureau of Labor Statistics. The 2020 - 2022 CPI-WST are projected using a 5 year rolling average.

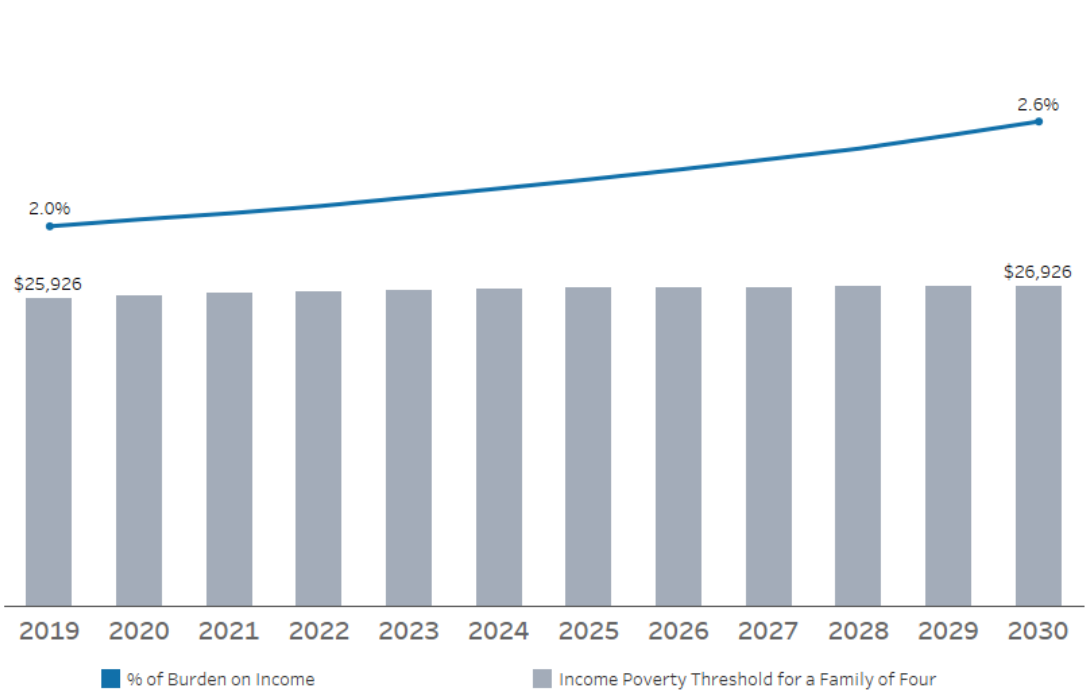
- SD-1  
Equity & Inclusion
- SD-2  
Financial Sustainability
- SD-3  
Rates

# Budget & Rate Impact: Affordability

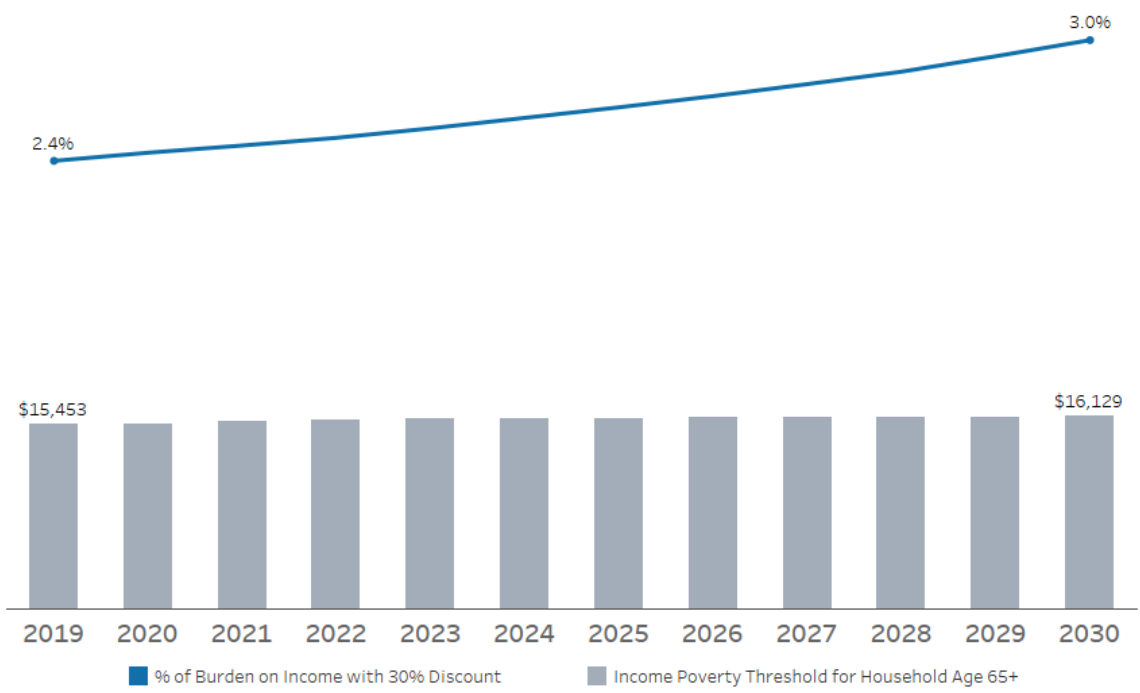
A Plan for Equity and Inclusion: Monitoring the Income Burden of an Average Water Bill



Family of Four: Rate Adjustments Remain Affordable



Two Person Household Age 65 and Older: Rate Adjustments are Becoming a Burden

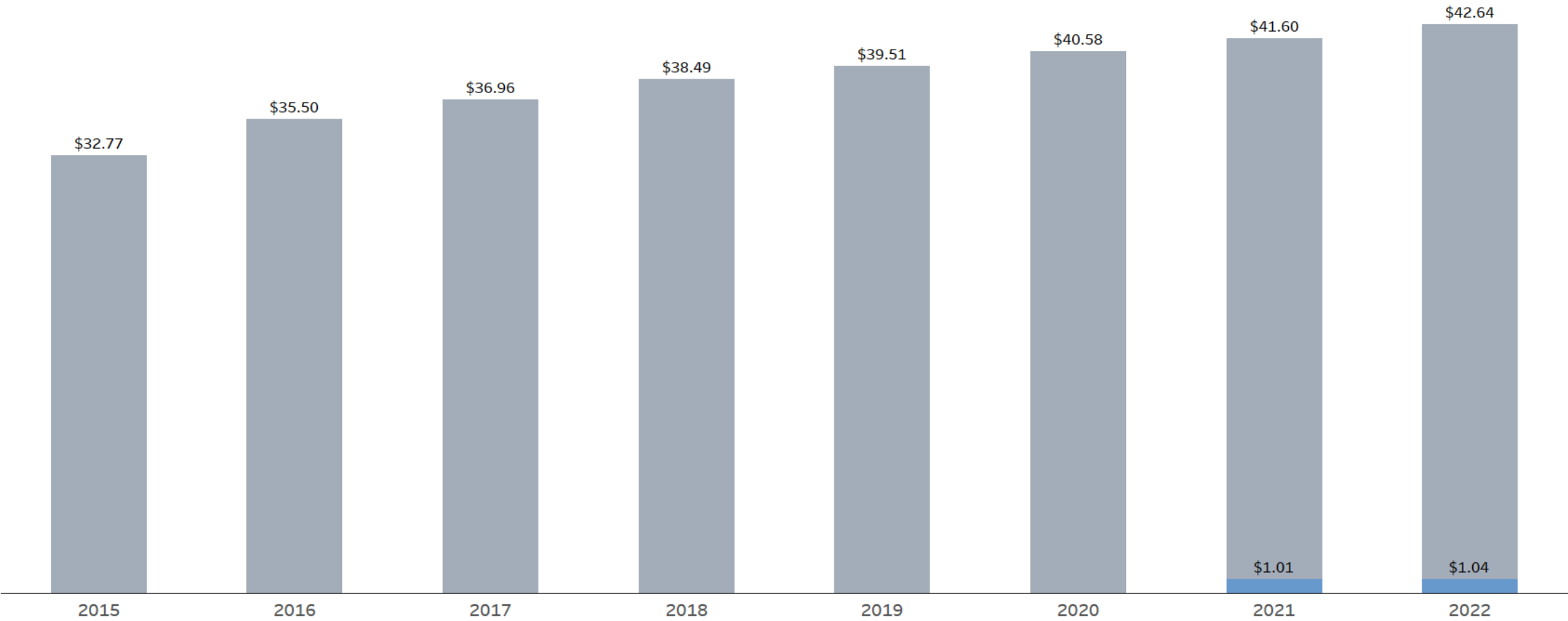


In 2018, the median household income (MHI) for the Tacoma Water service area was \$71,543 and the average water bill was 0.7% of MHI.  
% of Burden on Income: Annual Water Bill / Annual Poverty Threshold. 2019 Poverty Threshold Source: US Census Bureau. The 2020-2030 poverty thresholds are projected using a 5 year rolling median increase.

- SD-1  
Equity & Inclusion
- SD-2  
Financial Sustainability
- SD-3  
Rates

# Budget & Rate Impact: Monthly Bill

Average Monthly Bill for a Residential Single Family Customer Inside the City of Tacoma



An average monthly bill for a residential single family customer inside the City of Tacoma is calculated using an assumption of 6 CCF in winter months and 9 CCF in summer months.



# Next Steps

**APR  
22**

*~~Water Budget Preview~~*  
*~~PUB Meeting~~*

**SEP  
23**

**TPU Budget Presentation**  
*PUB Study Session*

**MAY  
13**

**Water Rate & Financial Policy**  
*PUB Meeting*

**OCT  
13**

**Review of Preliminary  
Biennial Budget & Rates**  
*PUB/City Council Joint Study Session*

**JUL  
22**

**Water LRFP & Rate  
Recommendation**  
*PUB Study Session*

**OCT  
28**

**Consideration of Preliminary  
Biennial Budget & Rates**  
*PUB Meeting*

## Rating Agency Responses to COVID-19: Public Utilities

Moody's	<ul style="list-style-type: none"><li>▪ <b>No action taken on the sector associated with COVID-19</b></li><li>▪ Public power, and water and sewer sectors: less affected, at least in the short run</li><li>▪ The essentiality of their service and rate-setting ability help to mitigate coronavirus-related risks, although parent governments could expose them to credit deterioration</li><li>▪ The regulated utility sector is well positioned to withstand the crisis due to supportive cost recovery tools, stable residential customer demand and resilient financial profile. The only financial risk is associated with financial volatility due to dependence on external capital for liquidity</li></ul>
S&P	<ul style="list-style-type: none"><li>▪ <b>No action taken on the sector associated with COVID-19</b></li><li>▪ Public power and electric co-ops require persistent operations. The greatest risk is that virus contagion interrupts operations due to sick or furloughed employees. Increased residential electricity usage could potentially mitigate declines in industrial customer demand</li><li>▪ Water and wastewater are essential services with fairly inelastic demand. Operational risks due to sick employees is offset by increased automation.</li><li>▪ Wastewater treatment technology and methods are effective against all known pathogens</li></ul>
Fitch	<ul style="list-style-type: none"><li>▪ On March 27<sup>th</sup> <b>Fitch affirmed its stable outlook on the sector</b></li><li>▪ Enterprises are protected given their quasi-monopolistic characteristics, long useful lives, both restricted and unrestricted reserves, balance sheet flexibility and discretion over capital expenditures</li><li>▪ Contracted assets especially in the energy space have counterparty risk. Historically there has been stability of utility counterparties</li></ul>



# Tacoma Power COVID-19-Response Scenario Planning

Identify and assess potential risks and impacts of COVID-19 on the utility's operations and services.

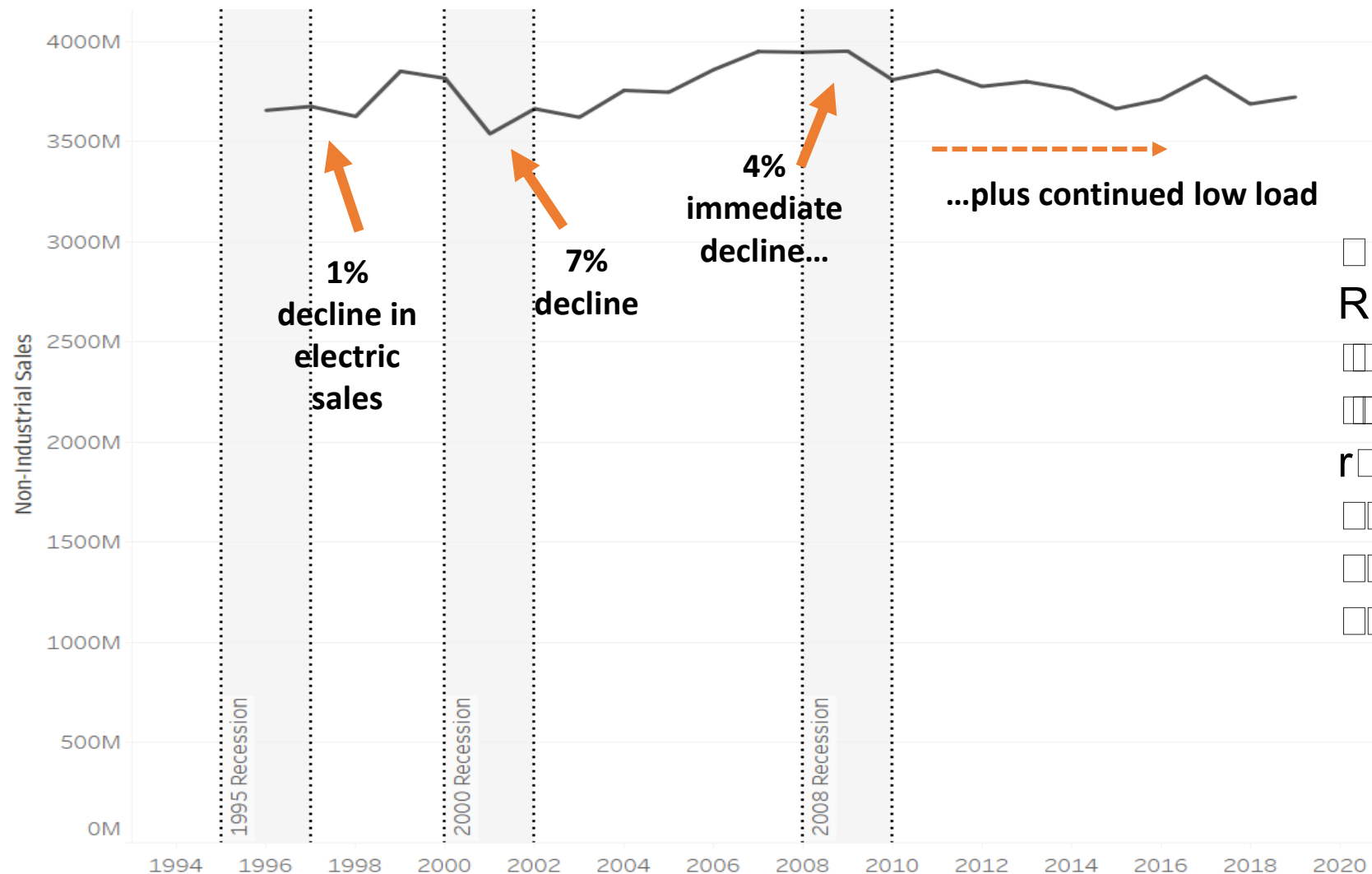
Develop and implement a comprehensive response plan.

Monitor and report on the progress of the response plan.

# The Problem Statement

- **Decline in retail loads 5-7%.**
- **MWh of retail load decline loses \$29-\$47**
- **critical water year**
- **power market purchases.**
- **recession is undoubtedly underway.**
- **rate spike without mitigation.**

**TACOMA POWER**  
TACOMA PUBLIC UTILITIES



**...plus continued low load**

$\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square$

R  $\square\square\square\square\square\square\square\square\square\square\square\square$  d  $\square\square\square$  r  $\square\square\square\square\square\square\square\square$

$\square\square\square\square\square\square\square\square\square\square\square\square$  d.  $\square\square\square$  r  $\square\square\square$

$\square\square\square\square\square\square\square\square\square\square$  r  $\square\square\square$  R  $\square\square\square\square\square\square\square\square\square\square$

r  $\square\square\square\square\square$  d  $\square\square\square\square\square\square\square\square\square\square$  d  $\square\square\square$  d  $\square$

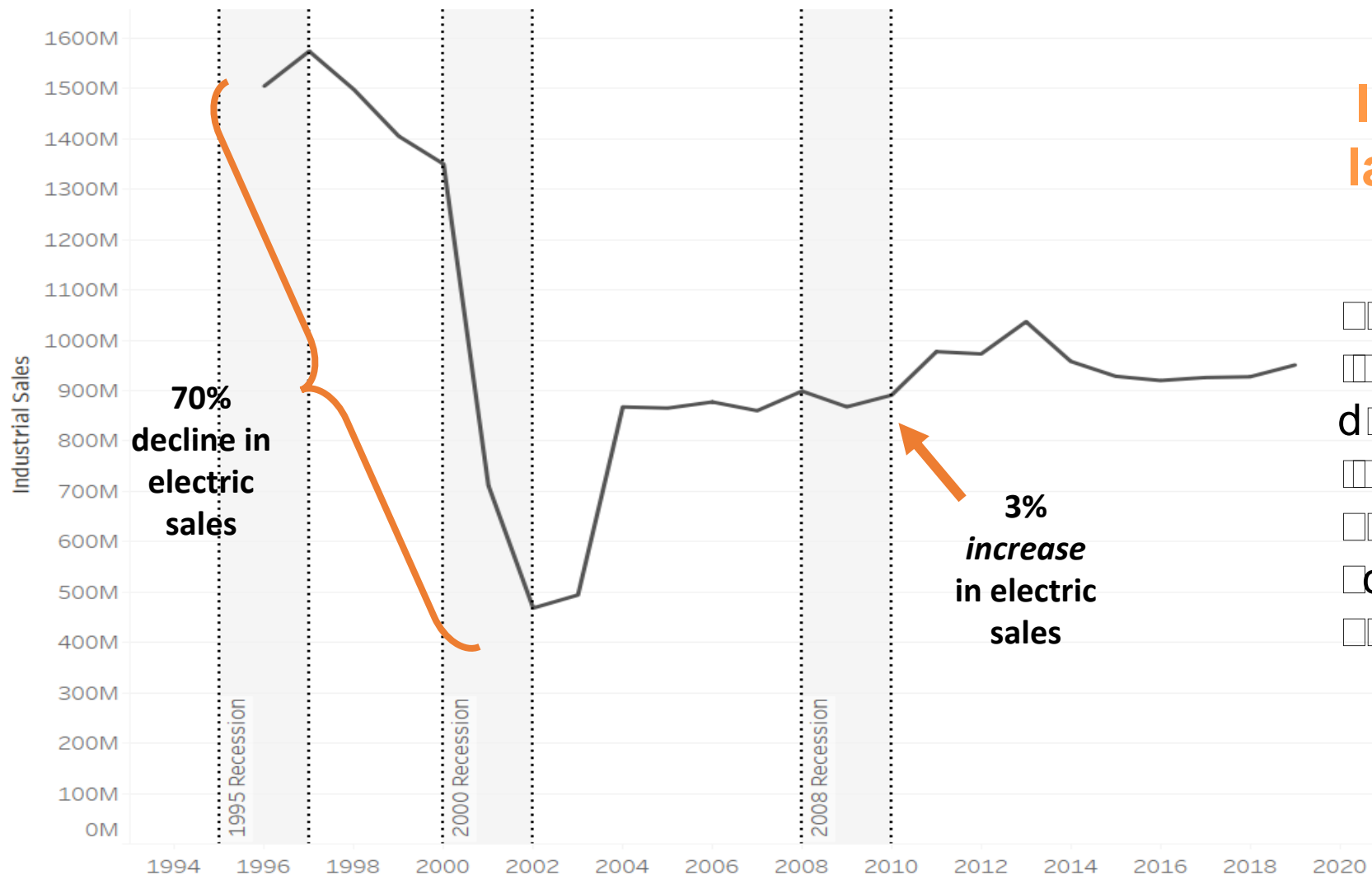
$\square\square\square\square$  r  $\square\square\square\square\square\square\square\square\square\square$  r  $\square\square\square\square\square$

$\square\square\square\square\square\square$   $\square\square$  d  $\square\square$  r  $\square\square\square\square\square\square\square\square$

$\square\square$  d  $\square$  d.

3

**TACOMA POWER**  
TACOMA PUBLIC UTILITIES



□ □ □ □ □ □ □ □ r □ □ □ □ d □ □ □ r □ □ □ □

□ □ □ d □

d □ □ □ □ □ □ □ □ □ □ r □ d □ □ □ □ □ □ □ □

□ □ □ □ □ □ □ □ □ □ d □ □ □ □ □ r □ □ □ □ □ □ □ □

□ □ r □ □ □ □ □ r □ □ d □ □ r □ □ □ □ □ □

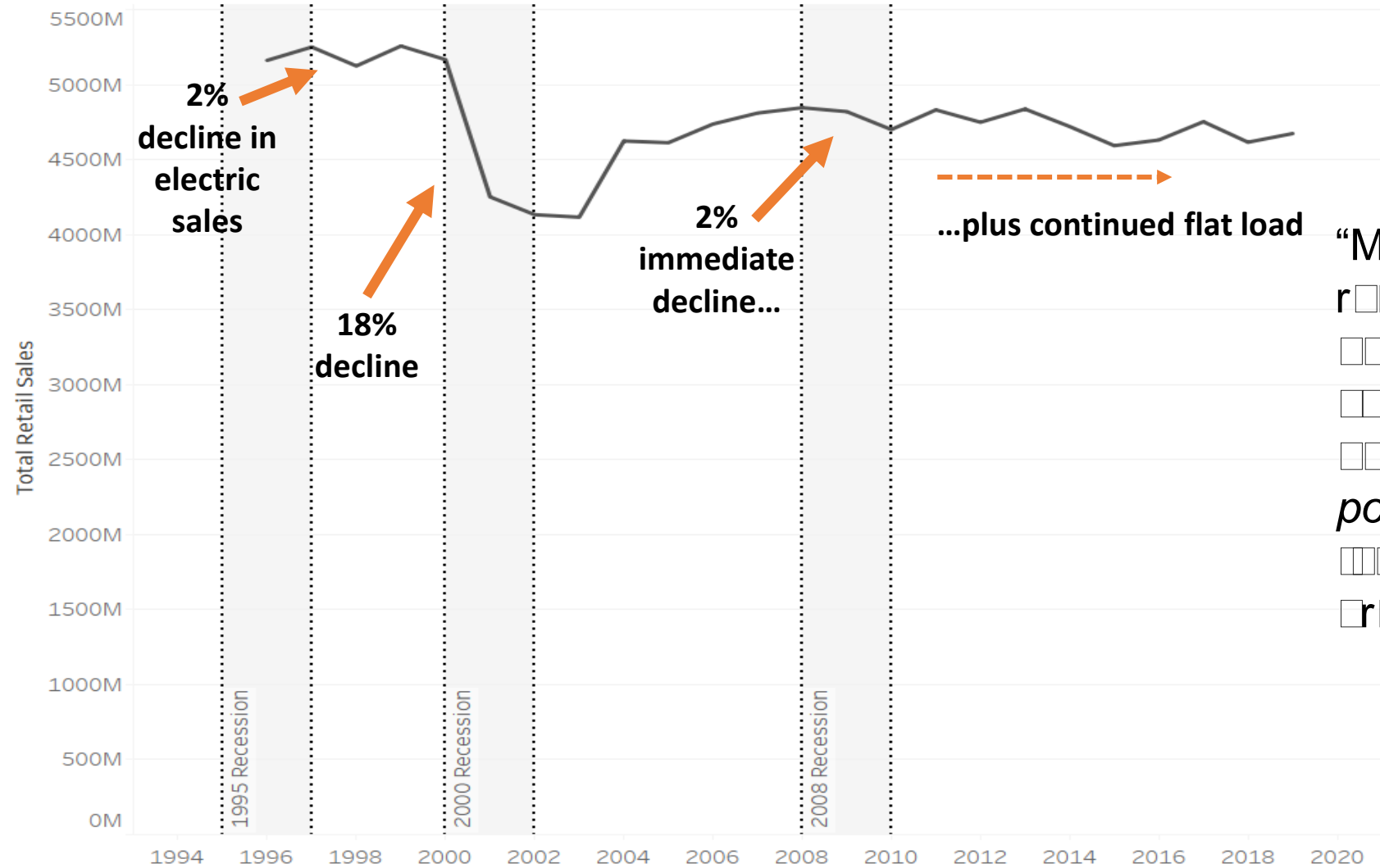
□ d □ □ □ □ . □ □ □ □ □ □ □ □ d □ □ □ r □ □ □ □

□ □ □ □ □ r □ □ □ □ □ □ □ □ r □ □ □ □ □ □ □ □ □ □ .

Official American recession beginning and end dates as defined by the National Bureau of Economic Research (NBER).

# Total Recession Impacts

Annual Total Retail Sales and Recessions



**Planning, not Prediction.**

...plus continued flat load

“Moderate” and “Severe”  
r  
d  
r  
predict  
r  
range of  
potential futures  
r  
d  
r.

Official American recession beginning and end dates as defined by the National Bureau of Economic Research (NBER).



## Public Utility Board Strategic Directives

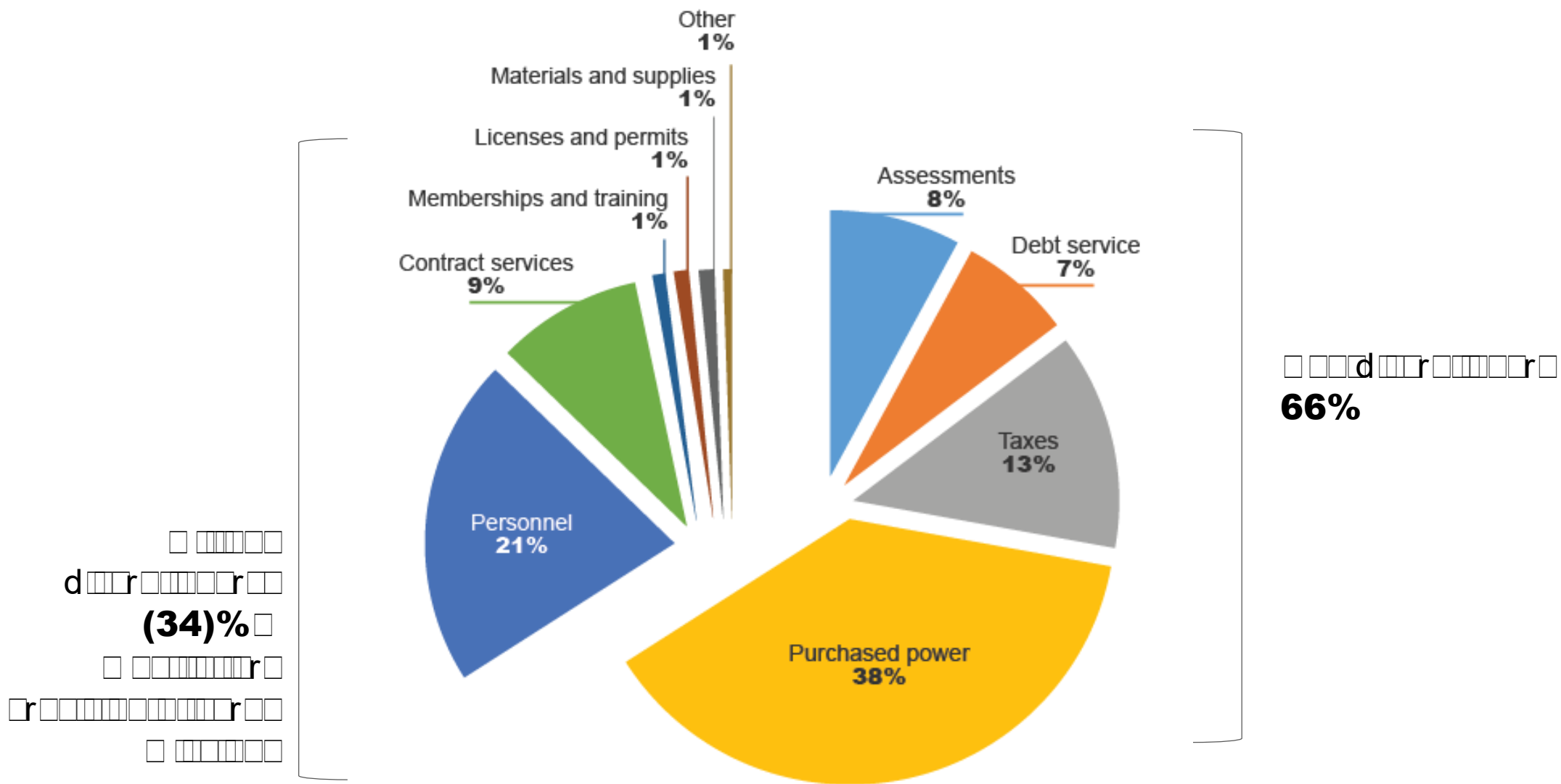
- **Return on investment at lowest levels reasonably sufficient** to ensure long term **DR** Outcome 1.
- **AA-level bond rating** to ensure **D** Outcome 4.
- **Gradual and consistent rate changes** to avoid sudden or large changes **DR** Value 4.

and ensure that the rate of return is consistent with the rate of return on the investment.

- **Minimize rate impacts** on the rate of return on the investment.
- **Maintain healthy financials**
- **Reduce expenses** to ensure the rate of return on the investment is consistent with the rate of return on the investment.



# O&M Expense Breakdown



What opportunities we actually have are limited

# Mitigation Plan

## 2019 / 2020 Biennium

### Expense Reductions

- Reduce maintenance and repair costs by implementing preventive maintenance programs
- Optimize energy usage by implementing energy conservation measures
- Reduce labor costs by implementing labor-saving technologies and equipment

### Capital Reductions & Rebalancing

- Defer non-emergency capital projects to later in the biennium
- Rebalance the capital program to prioritize high-priority projects
- Explore alternative financing options for capital projects

### Liquidity

- Maintain adequate liquidity levels to meet operational needs

### Rate Increases

- Implement rate increases to cover the cost of capital projects
- Review rate structure to ensure it is fair and equitable

## 2021 / 2022 Biennium

### Expense Reductions

- Implement energy conservation measures to reduce energy costs
- Optimize labor costs by implementing labor-saving technologies and equipment

### Capital Reductions & Rebalancing

- Defer non-emergency capital projects to later in the biennium
- Rebalance the capital program to prioritize high-priority projects

### Liquidity

- Maintain adequate liquidity levels to meet operational needs

### Rate Increases

- Implement rate increases to cover the cost of capital projects
- Review rate structure to ensure it is fair and equitable



# 2020 Expense Reductions

## Reductions from Projected Spending

Our 2020 budget includes a number of reductions in projected spending. We have identified a total of \$8 million in potential expense reductions.

### Preliminary Expense Reductions

Category	Savings
Deferred maintenance	\$1,000,000
Consolidation of services	\$500,000
Reduction in personnel	\$500,000
Reduction in materials	\$500,000
Reduction in travel	\$500,000
Reduction in rent	\$500,000
Reduction in utilities	\$500,000
Reduction in insurance	\$500,000
Reduction in legal fees	\$500,000
Reduction in consulting fees	\$500,000
Reduction in other expenses	\$500,000
<b>Total</b>	<b>\$8,000,000</b>

*\*Subject to Change\**

...to put together all pieces of the puzzle.

[illegible]

10

## Reasons to Proceed

- 1. Customer Benefits**AMI provides customers with a number of benefits, including:• Improved service reliability• Reduced energy costs• Increased energy efficiency• Improved safety• Reduced environmental impact
- 2. Utility Benefits**AMI provides utilities with a number of benefits, including:• Improved service reliability• Reduced energy costs• Increased energy efficiency• Improved safety• Reduced environmental impact
- 3. Investments**AMI is a significant investment for Tacoma Power. The estimated cost of the project is **\$11 million** and **46,000 hours**. The project will be funded through a combination of ratepayer contributions and state and federal grants. The project is expected to be completed by 2022.
- The project will be funded through a combination of ratepayer contributions and state and federal grants.
- The project is expected to be completed by 2022.

### Projected Expenses (Power Only)

	2020	2021	2022
AMI System			
Hardware			
Software			
Installation			

# Energy Imbalance Market (EIM)

## Reasons to Proceed

- Improves revenue with a budget that reflects Tacoma Power’s current financial situation.
- The EIM budget is based on the current market conditions and the current market conditions. The EIM budget is based on the current market conditions and the current market conditions.
- The EIM budget is based on the current market conditions and the current market conditions. The EIM budget is based on the current market conditions and the current market conditions.
- The EIM budget is based on the current market conditions and the current market conditions. The EIM budget is based on the current market conditions and the current market conditions.
- The EIM budget is based on the current market conditions and the current market conditions. The EIM budget is based on the current market conditions and the current market conditions.
- The EIM budget is based on the current market conditions and the current market conditions. The EIM budget is based on the current market conditions and the current market conditions.
- The EIM budget is based on the current market conditions and the current market conditions. The EIM budget is based on the current market conditions and the current market conditions.

## Projected Expenses

	Business Case Budget	Implementation Projection
Implementation Budget	\$18,000,000	\$13,252,500
Contingency	\$18,000,000	\$13,252,500
EIM Budget*	\$18,000,000	\$13,252,500

Does not include  
contingency  
Does include  
contingency  
contingency





# Advanced Metering Infrastructure (AMI) Program Policies Overview

Public Utility Board  
Reports of the Director  
May 13<sup>th</sup>, 2020

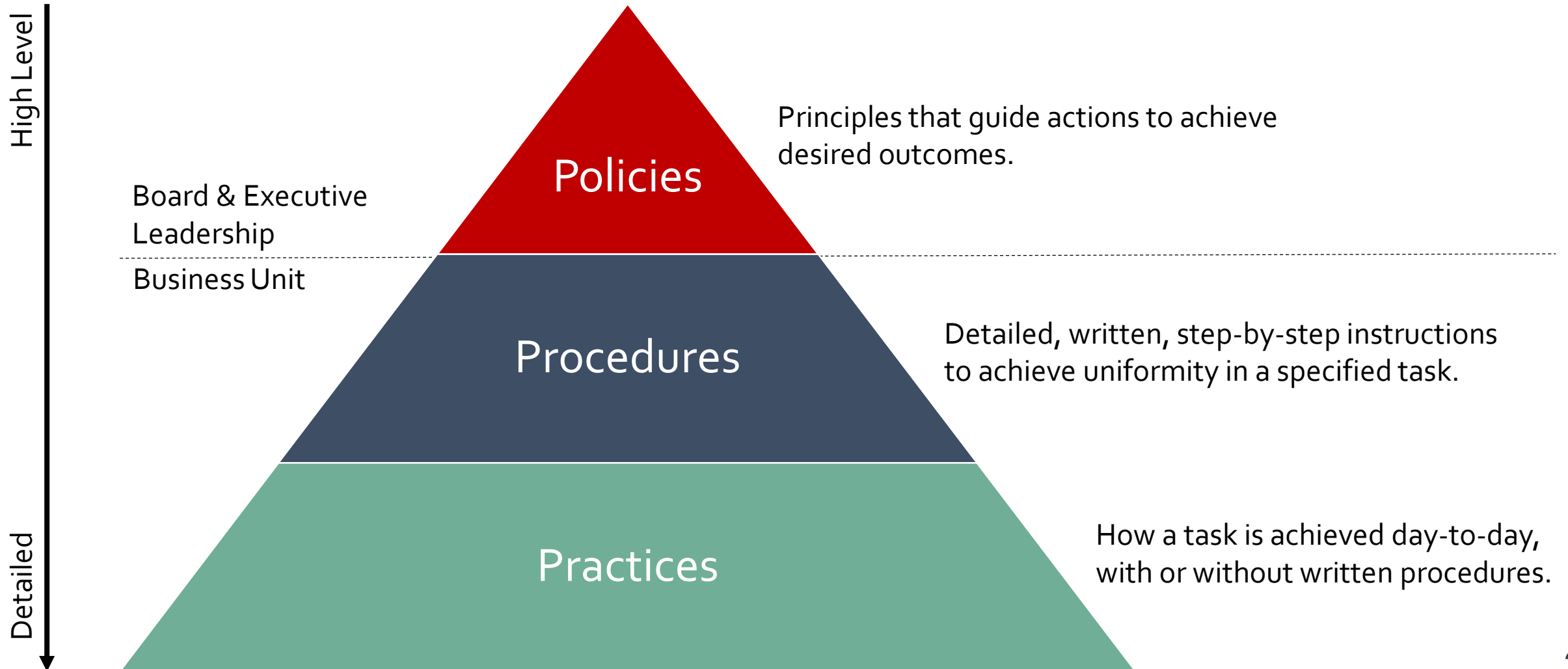


# Agenda

1. Policies, Procedures, & Practices
2. Framework of Policy Packages
  - Package 1 – Spring 2020
  - Package 2 – Fall 2020
  - Package 3 – Fall 2022
3. Timeline
4. Policy Impacts & Process Review
5. Proposed Policies

# ●●● Policies, Procedures, & Practices

*Draft Policy Discussion*

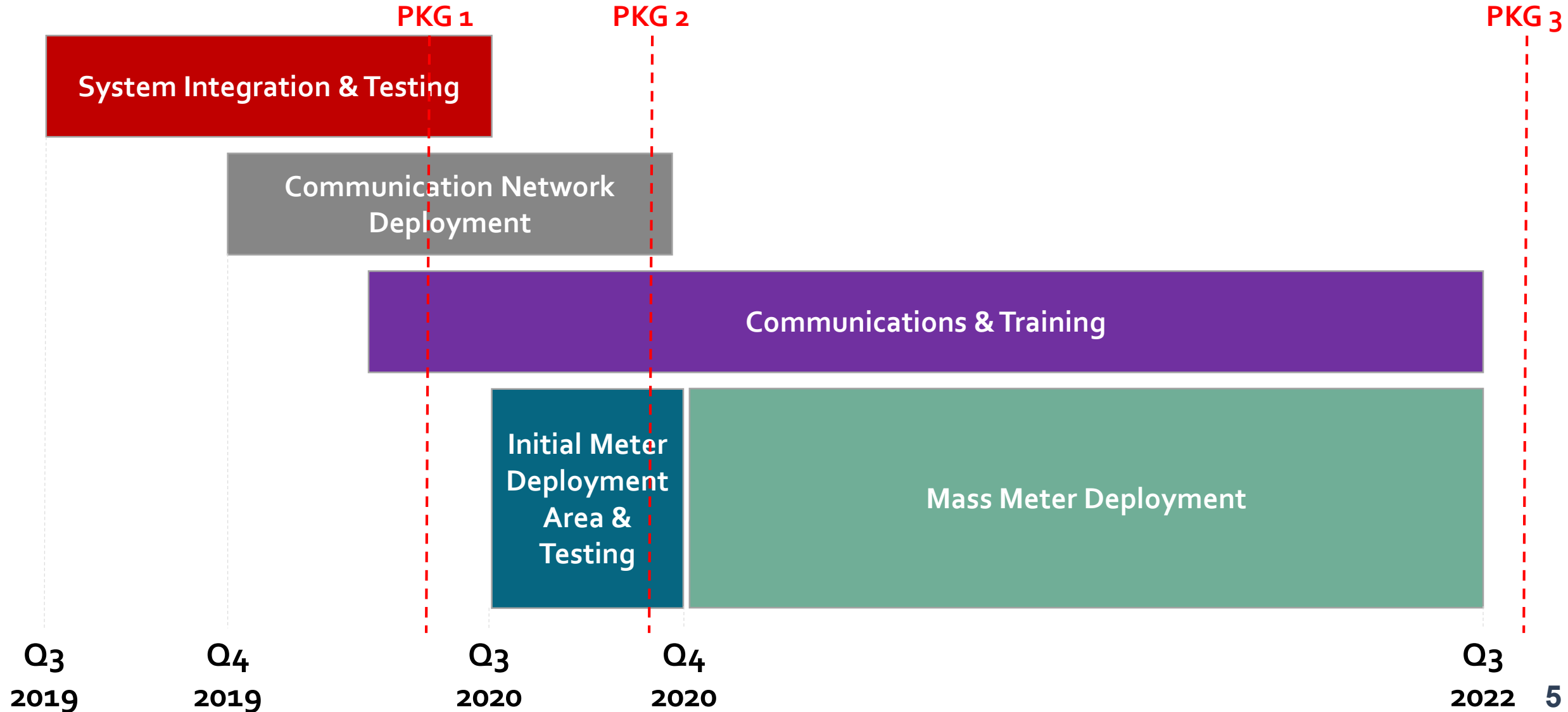




# Framework of Policy Packages

Package 1	Package 2	Package 3
<b>Spring 2020</b> <b>→ Prior to Initial Meter Deployment Area &amp; Testing</b>	<b>Fall 2020</b> <b>→ Prior to Mass Meter Deployment</b>	<b>Fall 2022</b> <b>→ Following Mass Meter Deployment</b>
AMI Essential Policy Changes – Initial Deployment Area Required TMC changes anticipated to be effective 9/1/2020	AMI Essential Policy Changes – Mass Deployment Required TMC changes anticipated to be effective 1/1/2021	AMI Policy Refinements & Potential Fee/Rate Changes TMC changes anticipated to be effective 1/1/2023
Non-AMI, Essential Policy Changes	Non-AMI, Non-Essential Policy Changes (where applicable)	TPU Policy Standardization & Formatting
Non-AMI, Non-Essential Policy Changes (where applicable)		

# Timeline



# Upcoming Target Dates

**May 13<sup>th</sup> PUB Meeting**

Policies Overview

**May 27<sup>th</sup> PUB Meeting**

Detailed Policies Discussion

- Opt-Out Review and Fee Recommendation
- Advanced Meter Customer Side Repairs

**June 10<sup>th</sup> PUB Meeting**

Detailed Policies Discussion

- PrePay Overview

**June 24<sup>th</sup> PUB Meeting**

Adoption of Package 1 Policies

**July 21<sup>st</sup> & July 28<sup>th</sup> City Council**

City Council Adoption

- Adoption of Package 1 TMC Changes
- First and Second Council Readings

# Policy Impacts & Process Review

*Draft Policy Discussion*

Dec. 2019

Mar. 2020



AMI Program identifies required policy changes

- AMI Program reviewed AMI Business Process Documents (BPD's) and identified policy impacts
- Reviewed, researched, and made recommendations and comments for:
  - Division Policies
  - Tacoma Municipal Code (TMC)
  - TPU Customer Privacy Policy
  - Customer Side Repair Policy



Operating Divisions review identified policy changes and provide feedback, providing preferred new policy language where able

- Operating Division subject matter experts reviewed AMI Program comments/suggestions
- Provided language changes
- Identified which AMI Policy Package updates should be included in
- Provided non-AMI policy changes



AMI Program coordinates drafting of policy language

- AMI Program compiled all recommendations and language changes for each policy
- Created clean policy documents with all recommended policy updates
- Identified which AMI Policy Package each update will be proposed in and coordinated legal reviews

# Package 1 Policies

1. **Customer Services** Customer Service Policy
2. **Water** Customer Service Policy
3. **Power** Customer Service Policy
4. **Tacoma Municipal Code (TMC)**, Ch. 12 – Utilities
5. **TPU** Customer Privacy Policy
6. **\*Advanced Meter** Customer Side Repairs
7. **Tacoma Power** Staff Procedure A-7

# Package 1 Policies - Summary

1. **Customer Services** Customer Service Policy
  - a. AMI Opt-Out Policy Language
  - b. PrePay Program Policy Language
  - c. Non-AMI Updates
2. **Water** Customer Service Policy
  - a. Virtual Disconnect/Reconnect Definition
  - b. Clarification of Customer Owned Pipe and Utility Owned Asset
  - c. Non-AMI Updates
3. **Power** Customer Service Policy
  - a. Non-AMI Updates
4. **Tacoma Municipal Code (TMC), Ch. 12 – Utilities**
  - a. Electric Daily Demand Reset (changed from monthly)
  - b. Unauthorized Usage Clarification for Water Virtual Disconnect/Reconnect
  - c. Non-AMI, National Electric Code (NEC) 2020 Updates
5. **TPU** Customer Privacy Policy
6. **Advanced Meter** Customer Side Repairs
7. **Tacoma Power** Staff Procedure A-7
  - a. Allow for separately metered residential, domestic use, garages to be eligible for the Residential Service electric rate.

# Package 2 Policies - Summary

1. **Tacoma Municipal Code (TMC), Ch. 12 – Utilities**
  - a. AMI Opt-Out Fee
  - b. PrePay Rate
  - c. AMI Electric Meter Disconnect/Reconnect Fees (pending review)
2. **Customer Services Customer Service Policy**
  - a. Non-AMI Updates
3. **Water Customer Service Policy**
  - a. Non-AMI Updates
4. **Power Customer Service Policy**
  - a. Non-AMI Updates

# Package 3 Policies - Summary

1. **Tacoma Municipal Code (TMC), Ch. 12 – Utilities**
  - a. Comprehensive Review of Fees and Charges Related to New AMI Services
2. **Water Customer Service Policy**
  - a. Leak Adjustment Policy Changes (pending review)
3. **General Customer Service Policy** Standardization & Formatting



# Example Changes: Customer Service Policies



*Draft Policy Discussion*

## Non-AMI Example Policy Updates, include:

### **Customer Services**

- a. Adding language that billing schedules are available to all, in addition to meter reading schedules.
- b. Clarifying that a “written” request is needed to transfer a credit balance to other non-utility City accounts.
- c. Clarification of the billing dispute informal conference process and specifying timelines of ten (10) calendar days each for customers to request and complete a “Statement of Disputed Bill Form”.

### **Power**

- a. Adding examples of an underground point of service for varying electrical configurations.
- b. Clarifying responsibilities for notification of load additions.

### **Water**

- a. Adding a definition for Critical Medical Condition and revising Kidney Dialysis Treatment sections to state Critical Medical Condition.
- b. Clarifying that the standard for residential domestic service is a 3/4” service with a 5/8” meter.