

# Tacoma Power Rates *2023/2024 Biennium*

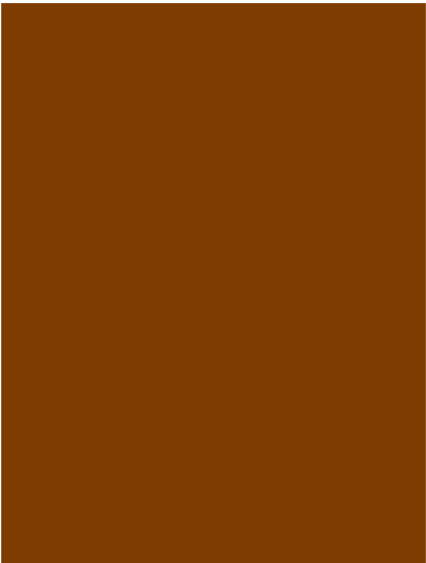
Christina Leinneweber| Senior Utilities Economist

27 July 2022

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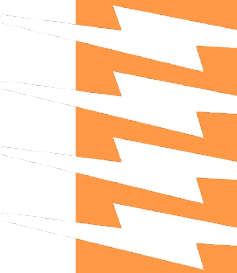
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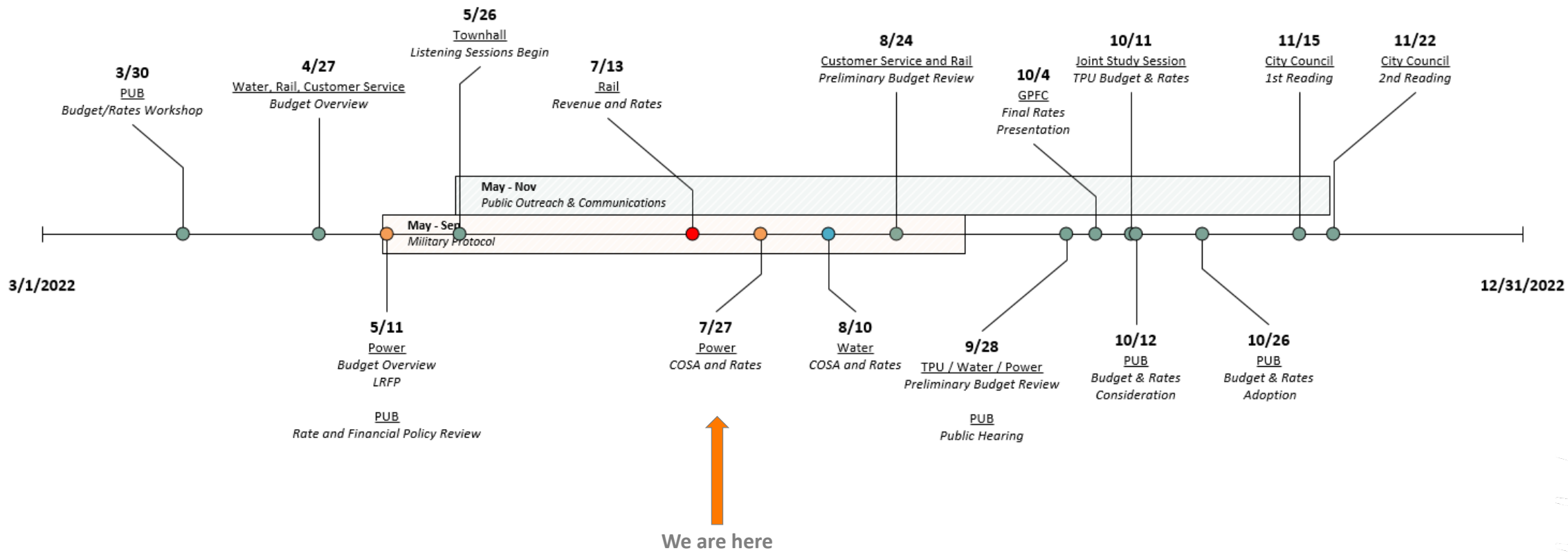


01

# Introduction

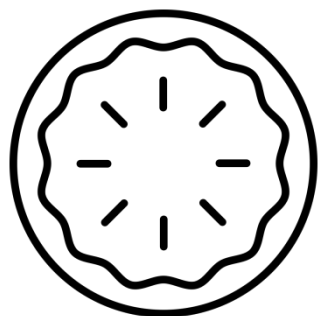
- + *Timeline*
- + *Ratemaking Process*
- + *Retail Class Summary*

# Budget and Rate Timeline



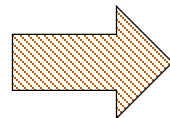
# Ratemaking Process

How Big is  
the Pie?

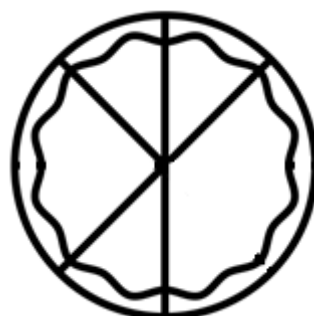


## Revenue Requirement

Identifies revenue  
needed to sustain  
operations, **according to  
financial plan**

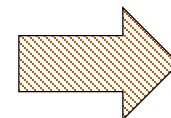


How to Slice  
the Pie?

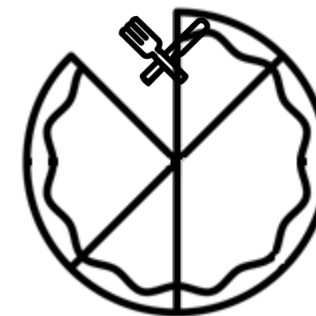


## Cost-of-Service Analysis (COSA)

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. customer **charge per  
month**, energy **charge per  
kWh**, etc.)

# Retail Customer Class Overview

- single-family and multifamily residences
- 164,000 accounts
- \$190.0 million annual revenue

## Residential



- small businesses, such as flower shops, nail salons, small offices
- 17,000 accounts
- \$29.9 million annual revenue

## Small General Service



- large businesses such as schools, restaurants, hospitals
- 2,500 accounts
- \$110.0 million annual revenue

## General Service



- 8 large customers directly on the transmission system
- \$26.7 million annual revenue

## High Voltage General



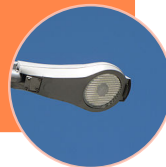
- 2 large manufacturers directly on the transmission system
- \$24.0 million annual revenue

## Contract Power



- Streetlights and traffic signals
- 900 accounts
- \$500,000 annual revenue

## Streetlights & Signals



- Rental street and area lighting
- 3,100 accounts
- \$1.5 million annual revenue

## Private Off-Street Lighting



02

# Cost-of-Service Results

*+ 2023/2024 Cost-of-Service Recommendation*

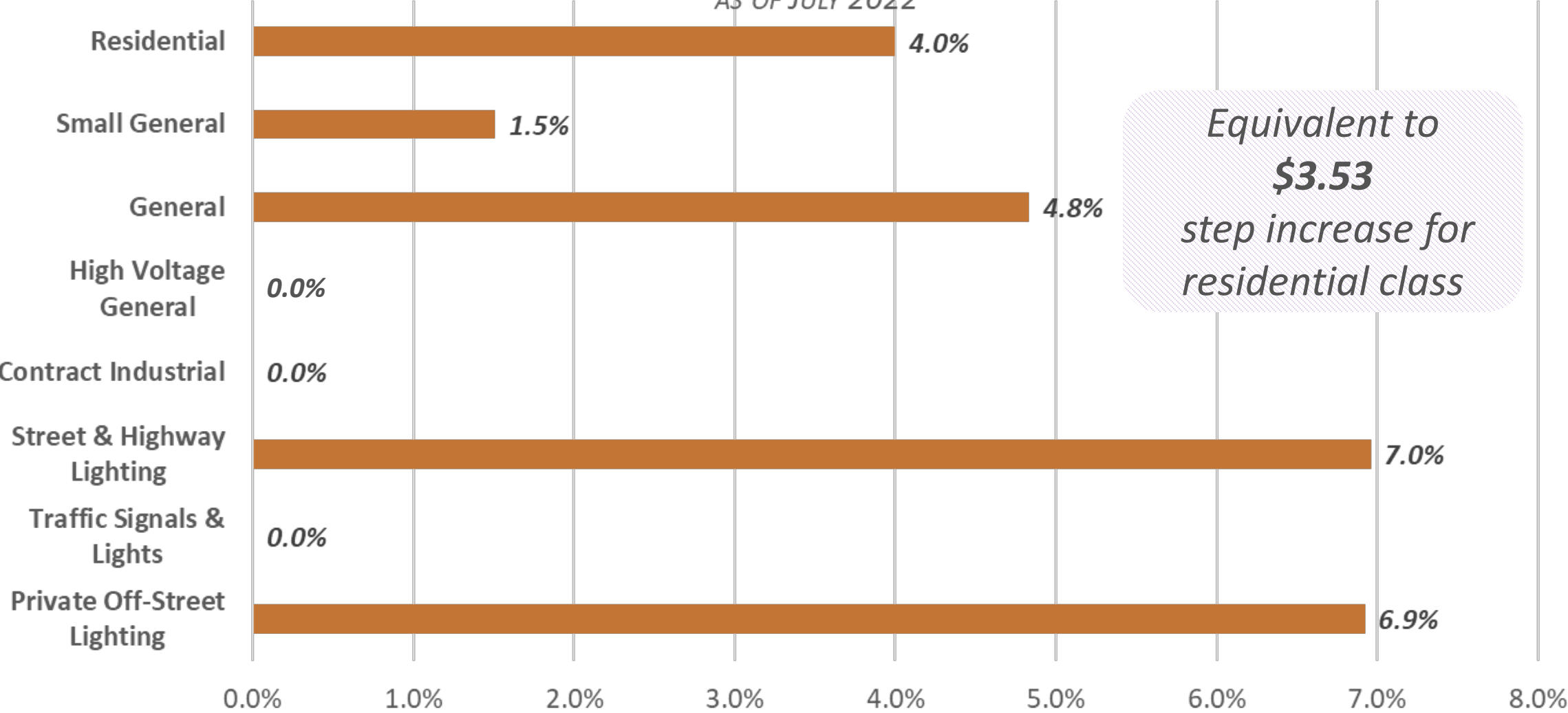
# Tacoma is a Cost-of-Service Utility.

- Rates set based on **cost to serve customers**.
- Customer classes are groups of customers with similar **usage characteristics** that influence cost, such as **infrastructure** requirements and **consumption** patterns.
- A **cost-of-service analysis (COSA)** determines the cost of serving each Customer Class:
  - Standard utility practice
  - Conducted every budget cycle
  - Reviewed by third-party consultant
- The last COSA was conducted in **2018** due to the pandemic.

# Proposed Rate Adjustments

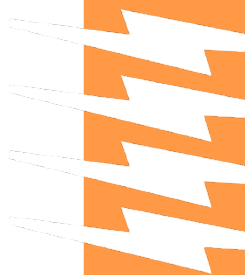
## 2023/2024 Proposed Annual Increases

AS OF JULY 2022



Equivalent to  
**\$3.53**  
step increase for  
residential class

Preliminary, subject to change.



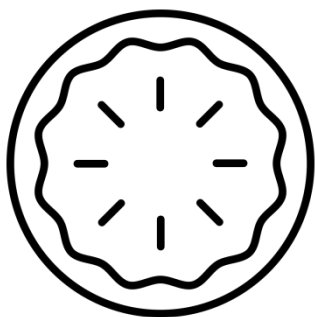
03

# Rate Design

- + *Residential Rate Design*
- + *Bill Credit Assistance Program Interactions*
- + *Commercial & Industrial Rate Design*
- + *Electric Vehicle Charging*
- + *Miscellaneous Rate Items*

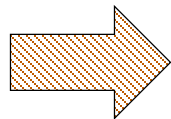
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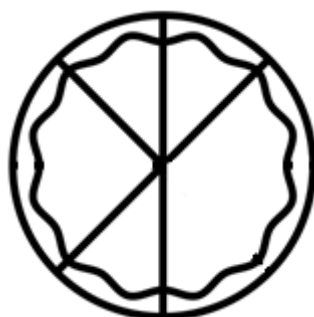


## Revenue Requirement

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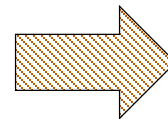


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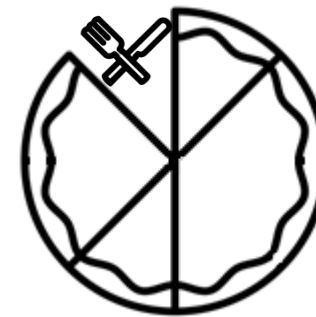


## Cost-of-Service Analysis (COSA)

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How to Eat  
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## Rate Design

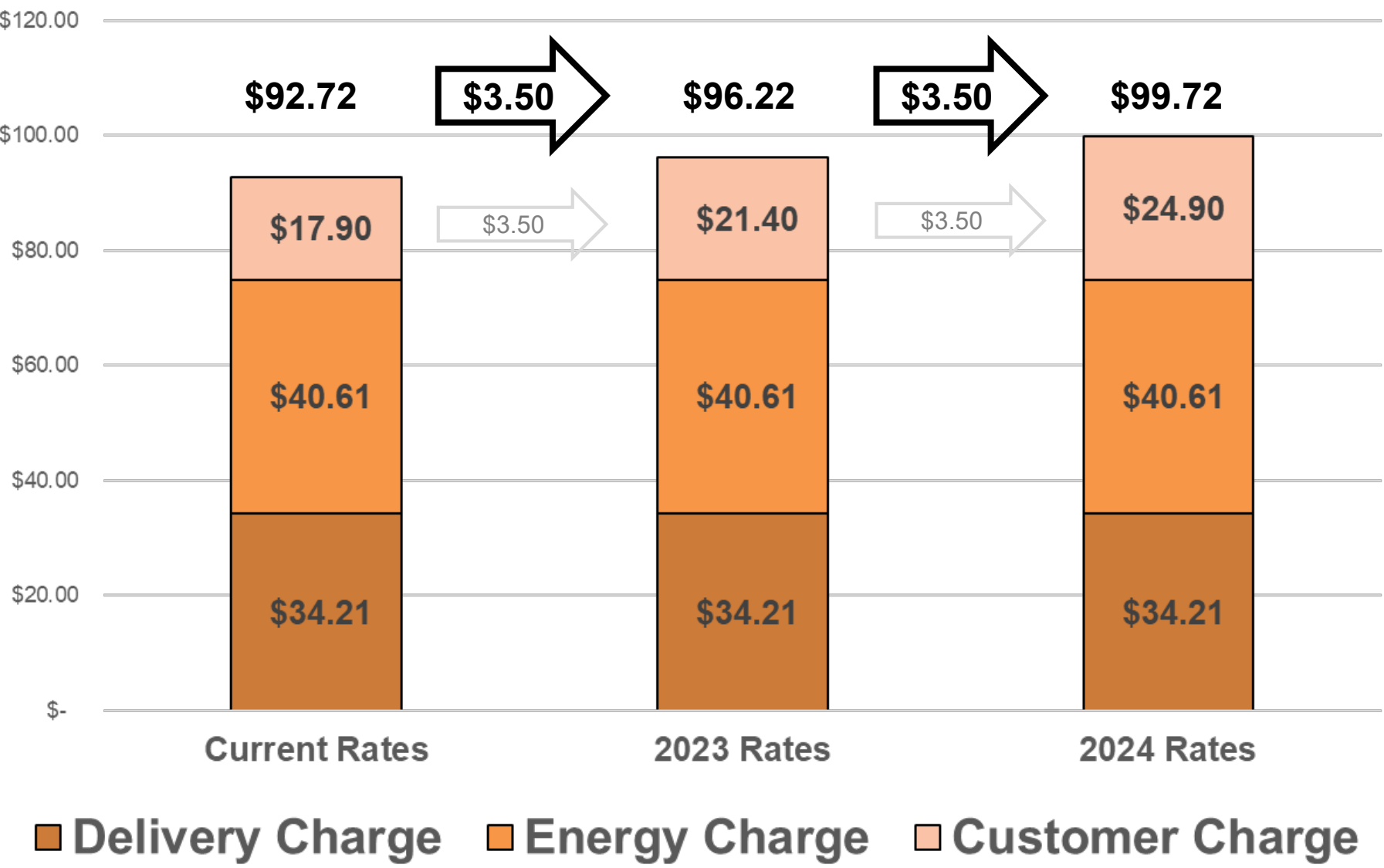
Sets rate structure to bill  
each customer  
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kWh**, etc.)

# Proposed Residential Rate Design



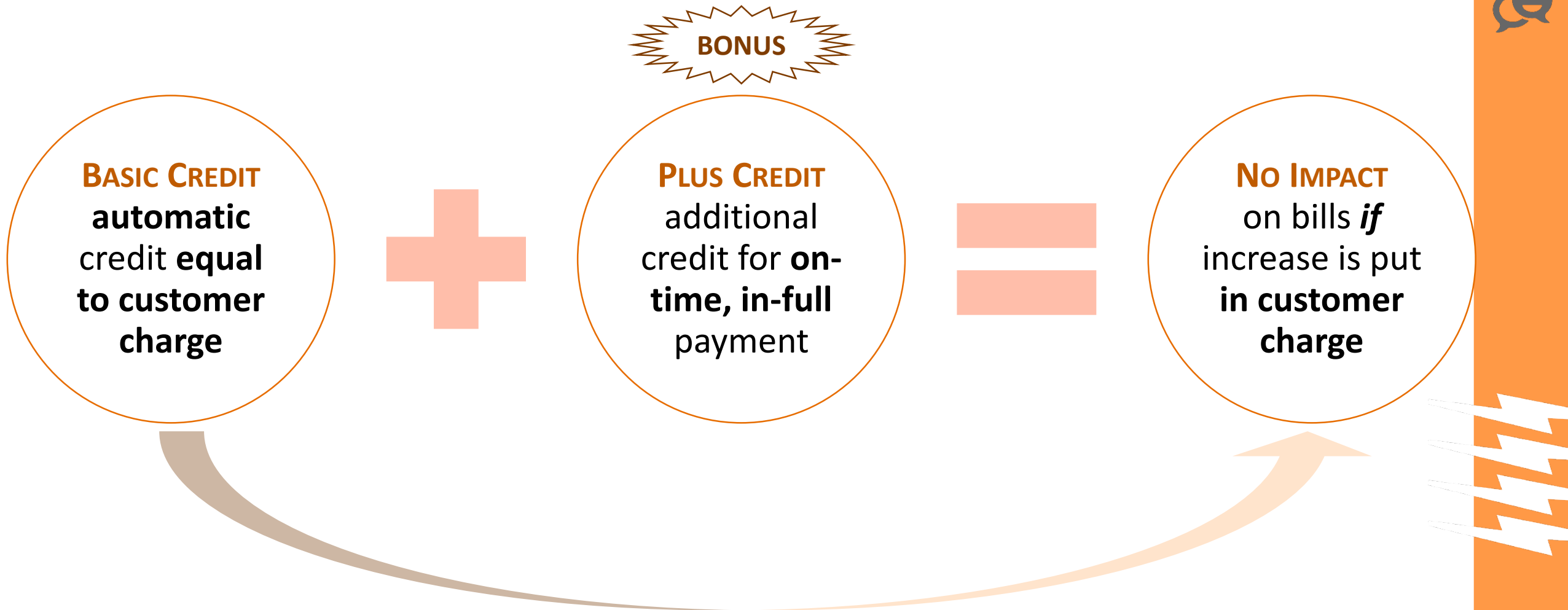
	Current	2023	2024	
 <div><b>Customer Charge</b> (\$ per Month)</div>	\$17.90 <i>current</i>	\$21.40 +\$3.50	\$24.90 +\$3.50	} Customer charge indicated by <b>cost-of-service</b> is <b>\$26.19</b>  } Zero-percent variable increase protects <b>heating</b> and <b>electric-vehicle-charging</b> customers
 <div><b>Energy Charge</b> (\$/kWh)</div>	4.5351¢ <i>current</i>	4.5351¢ <i>no change</i>	4.5351¢ <i>no change</i>	
 <div><b>Delivery Charge</b> (\$/kWh)</div>	3.8207¢ <i>current</i>	3.8207¢ <i>no change</i>	3.8207¢ <i>no change</i>	

# Average Residential Bill Impact



- 2023/2024 bill projected based on forecasted **average usage of 895 kWh** per month
- Actual bills **vary based on usage**

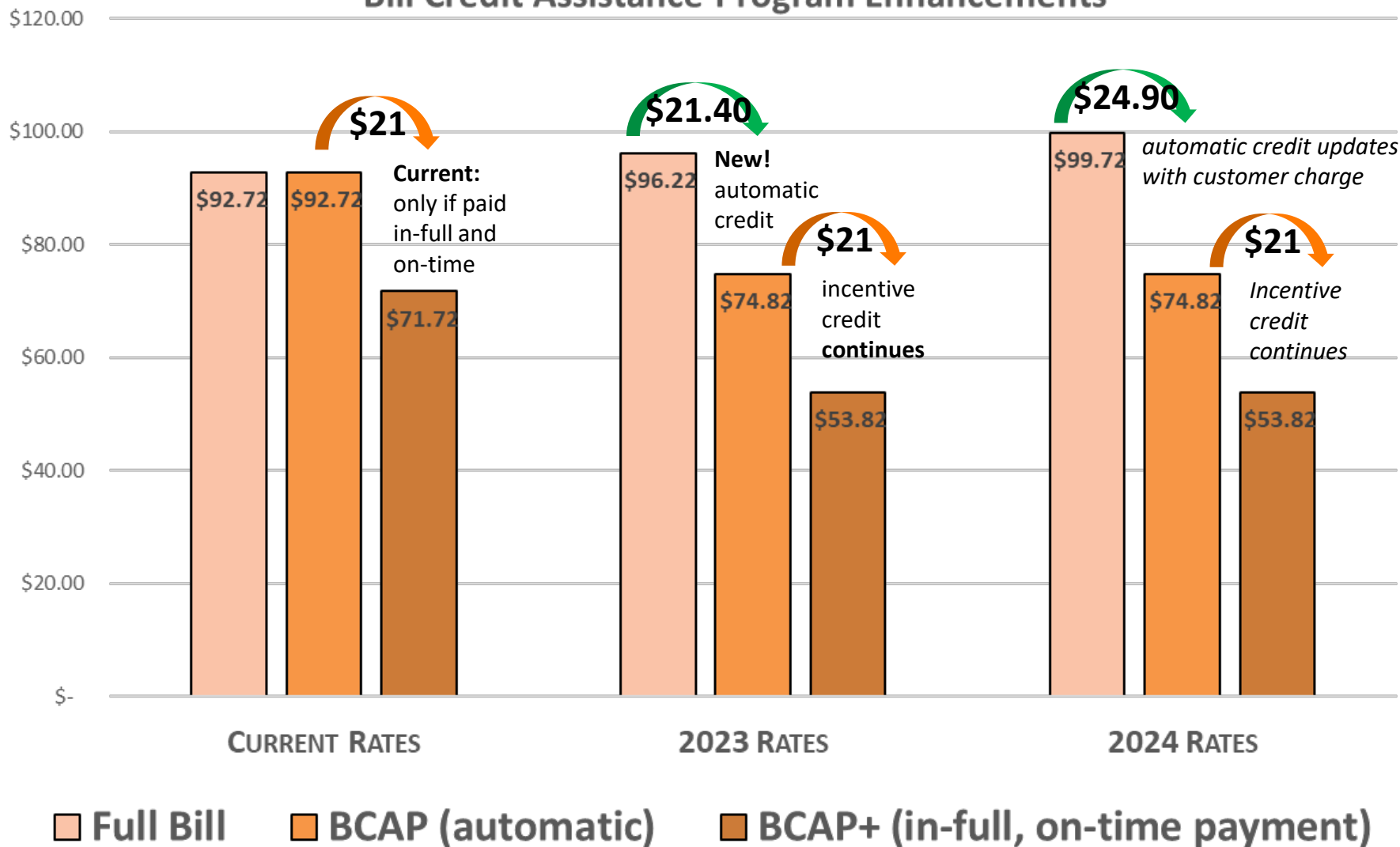
# Increase Mitigated by BCAP Changes (Bill Credit Assistance Program)



# Expanded BCAP Wipes Out Increase






Bill Credit Assistance Program Enhancements



- Rate increase: \$3.50 per month per step
- New automatic credit is equal to customer charge
  - \$17.90 now
  - \$21.40 proposed for 2023
  - \$24.90 proposed for 2024

# Effective Rates for BCAP+ Customers

	Current	2023	2024
 <b>Customer Charge</b> (\$ per Month)	\$17.90 <i>current</i>	\$0 <i>due to \$21.40 automatic credit</i>	\$0 <i>due to \$24.90 automatic credit</i>
 <b>Energy Charge</b> (\$/kWh)	4.5351¢ <i>current</i>	4.5351¢ <i>no change</i>	4.5351¢ <i>no change</i>
 <b>Delivery Charge</b> (\$/kWh)	3.8207¢ <i>current</i>	3.8207¢ <i>no change</i>	3.8207¢ <i>no change</i>

Customer charge *totally negated* by automatic BCAP credit

**No rate change proposed** for energy & delivery charges to BCAP customers.

*\$21 credit based on payment behavior available to cover these charges.*



# Commercial & Industrial Rate Design



Schedule B	Small General		
	Current	2023	2024
<b>Customer Charge</b>	<b>\$ 24.35</b>	<b>\$ 26.40</b>	<b>\$ 28.45</b>
Energy Charge	4.4616¢	4.4616¢	4.4616¢
Delivery Charge	3.8014¢	3.8014¢	3.8014¢
<b>Total per-kWh Charges</b>	<b>8.2630¢</b>	<b>8.2630¢</b>	<b>8.2630¢</b>

**Industrial classes  
(HVG and CP)  
maintain current rates**

Schedule G	General		
	Current	2021	2022
<b>Customer Charge</b>	<b>\$82.80</b>	<b>\$82.80</b>	<b>\$82.80</b>
<b>Energy Charge</b>	<b>5.1726¢</b>	<b>5.4634¢</b>	<b>5.7707¢</b>
<b>Delivery Charge</b>	<b>\$8.81</b>	<b>\$9.12</b>	<b>\$9.44</b>

# SPECIAL ITEM: EV Charging Rate



**Current fee is outdated:** The current charging fee was set in 2014 when Tacoma Power operated 20 charging ports. Tacoma Power will have 93 charging ports in service by end of 2023.



**State law has changed:** SB5192 requires public charging to use a dollar-per-kWh fee structure. The current \$2-per-5-hour fee does not comply.



**Stakeholders are requesting a new rate:** The City of Tacoma and others look to Tacoma Power for rate-setting guidance.

# EV Rate: Basic Principles

## 1. Affordable rate that aligns with **cost-of-service**

- Public charging costs vary widely
- Need to recover the cost of energy and network fees

## 2. Encourage charger use

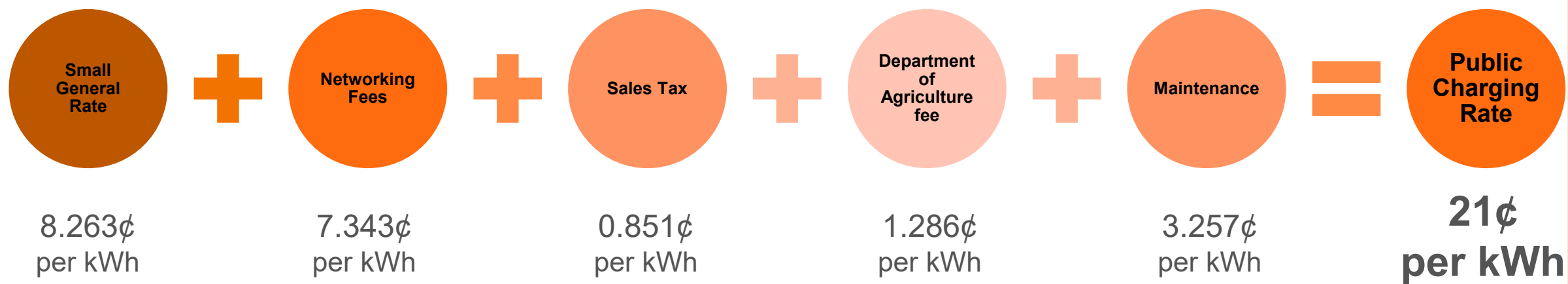
- A core group of regular users is key to making chargers financially viable
- A high rate that limits use will never recover costs and inhibit EV adoption

## 3. Provide **equitable** access

- Serve multifamily households and garage orphans without home charging
- Affordable charging options in neighborhoods without access to public charging



# EV Rate: Cost-Based & Affordable



Local Comparisons	
Tacoma Power Proposed (Level 2 and DCFC)	\$0.21
Level 2 sites in Tacoma (various; 2019 data)	\$0.25 - \$0.33
Seattle City Light (Level 2)	\$0.20 - \$0.21
Seattle City Light (Level 3)	\$0.20 - \$0.36
Electrify America (DCFC)	\$0.31 - \$0.43

Proposed rate is competitive with other local charging options.

Maintenance based on ~20% estimated maintenance cost.

# Other Special Items

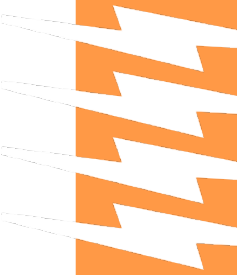
## Small Commercial Prepay

- Response to **customer requests**
- Illustrates value of **conservation** steps
- **Inform** business customers of the cost of performing specific activities
- Ability to **pay anytime** allows business owners to conduct business on their schedule

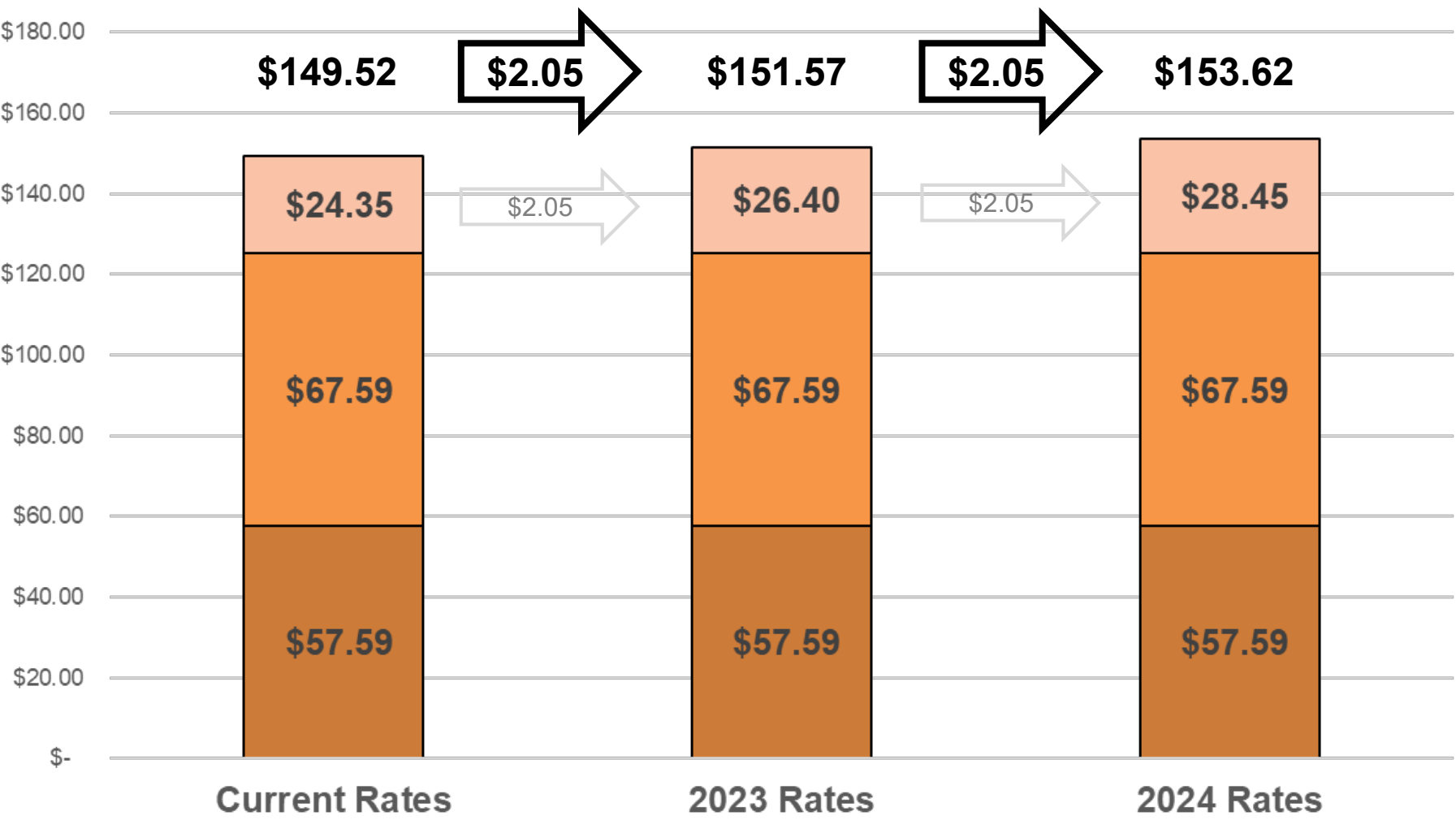
## HVG Rate Language Cleanup



# 04 Appendix



# Average Small Commercial Bill



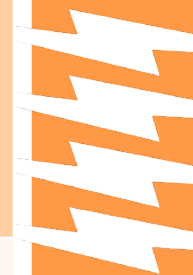
■ Delivery Charge   ■ Energy Charge   ■ Customer Charge

- 2023/2024 bill projected based on forecasted **average usage of 1,515 kWh** per month
- Actual bills **vary based on usage**

Preliminary, subject to change.

# Tension In Strategic Directives

	HIGHER FIXED	HIGHER VARIABLE
<b>Equity &amp; Inclusion</b>	<ul style="list-style-type: none"> <li>+ low-income, high users benefit</li> <li>+ caps dollar impact of rate increase</li> <li>+ reduces subsidy to customers that can afford to invest in DER and conservation</li> </ul>	<ul style="list-style-type: none"> <li>+ low-income, low users benefit</li> </ul>
<b>Financial Sustainability</b>	<ul style="list-style-type: none"> <li>+ better aligns prices with cost-to-serve</li> <li>+ reduces financial risk of declining loads causing rate increases</li> <li>+ increases bill predictability</li> </ul>	
<b>Rates</b>	<ul style="list-style-type: none"> <li>- difficult for some customers to understand/accept</li> </ul>	<ul style="list-style-type: none"> <li>+ easier to understand</li> <li>- low elasticity of demand for electricity requires very high price signals to significantly impact consumption</li> </ul>
<b>Environmental Leadership</b>	<ul style="list-style-type: none"> <li>+ encourages electrification</li> </ul>	<ul style="list-style-type: none"> <li>+ encourages solar and other DER</li> <li>+ encourages conservation</li> </ul>



# COSA Data-Flow Diagram

