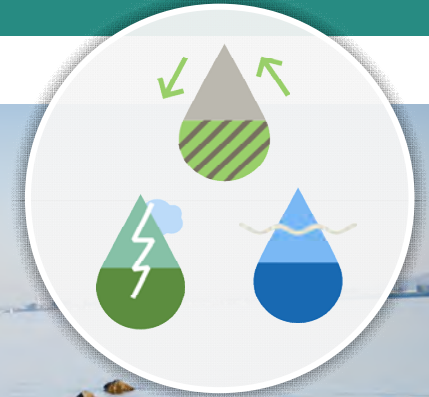


Water Resiliency Strategy



City of Vancouver Water Resiliency Strategy Capital Program and Financial Alternatives

Chris Malone, Finance and Asset Manager
October 18, 2022

Presentation Agenda



- Vancouver's Integrated Water System
- Future capital needs
- Financial Levers/recommendations
- Impacts to customers
- Next steps



Using an integrated water approach, we protect our community, environment and infrastructure better.

Wastewater:

We collect and treat wastewater from residential, commercial, and industrial users so that clean water can be reintroduced to the environment.

- 6.9** billion gallons of treated wastewater
- 2** treatment facilities
- 785** miles of wastewater pipe
- 41** pump stations



Integrated Water Management



Stormwater:

We manage systems that control stormwater including flood control as well as provides solutions to restore area streams and the environment.

- 300+** miles of stormwater pipe
- 24,000+** catch basins
- 5,752** infiltration wells
- 2,800** treatment facilities
- 19%** tree canopy



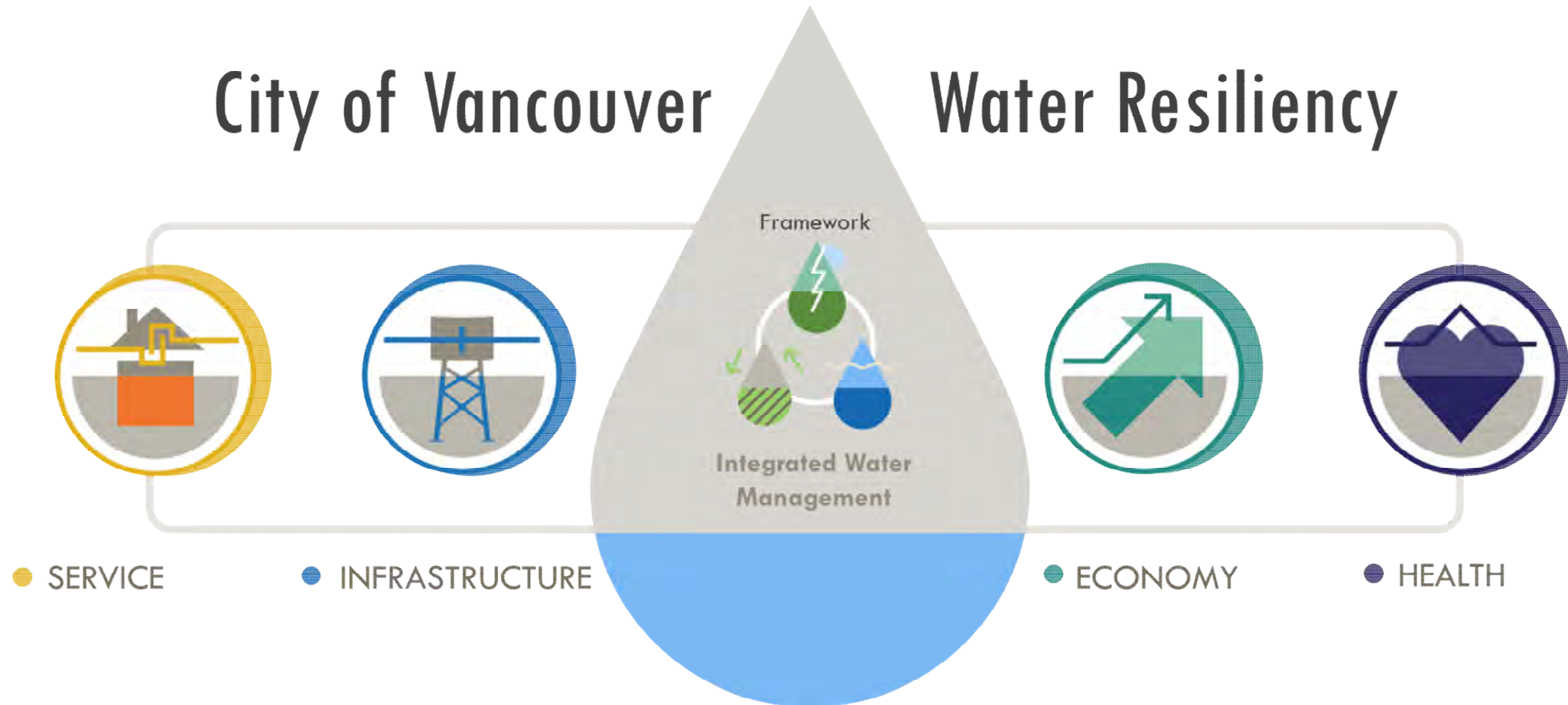
Drinking Water:

We provide high-quality and reliable drinking water and protect groundwater / aquifer water quality.

- 10.3** billion gallons of drinking water
- 11** water stations
- 1,090** miles of water pipe

Water Resiliency Framework

The Water Resiliency Framework establishes an integrated water management approach that helps us prioritize critical investments to achieve our resiliency and livability goals



Reliable and Resilient Service

We must continue to **proactively address pressures** on our system:

- Population growth
- Aging infrastructure
- Climate change
- Public health
- Livability
- Regulatory changes



Previous vs. Current 15-Year CIP Forecast



The new Operations Center is not included in the amounts shown.

Most Expensive Projects from 15-Year CIP

Project	Description	Benefits	Approx. Cost
New Operations Center Construction	<ul style="list-style-type: none"> Replace existing seismically deficient and undersized operations center. 	<ul style="list-style-type: none"> Improve system resiliency and operational efficiency 	\$125 million
PFAS Treatment (Drinking Water)	<ul style="list-style-type: none"> Add treatment capacity for PFAS removal 	<ul style="list-style-type: none"> Safe drinking water Comply with EPA regulations 	\$100 million
Solids Renewal (Westside WWTF)	<ul style="list-style-type: none"> Construct solids processing tanks, digesters, and equipment Recover biogas for beneficial fuel use Dewater solids for beneficial use (e.g., fertilizer) 	<ul style="list-style-type: none"> Replace aging infrastructure Save energy costs Comply with regulations Recover resources Improve air quality 	\$90 million
Marine Park WWTF Capacity Upgrade	<ul style="list-style-type: none"> Add primary solids removal basins Add secondary treatment aeration basins and tanks 	<ul style="list-style-type: none"> Build future growth capacity 	\$56.5 million

Key Projects from the 15-Year CIP

LEGEND

\$\$\$ \$50-100 million


\$\$ \$25-50 million

\$ \$1-25 million

 Comply with regulations

 Replace aging infrastructure

 Lower costs

 Recover resources and improve environment

 Increase resiliency

 Support future growth

PFAS Treatment

 \$\$\$

Water Station 5 Reservoir

 \$\$

Marine Park Facility Upgrades

  \$\$\$

Water System Well Replacements

 \$

Water Station 3 Reservoir

 \$

Wastewater Solids Conveyance Optimization

  \$

Westside WWTP Solids Renewal

    \$\$\$

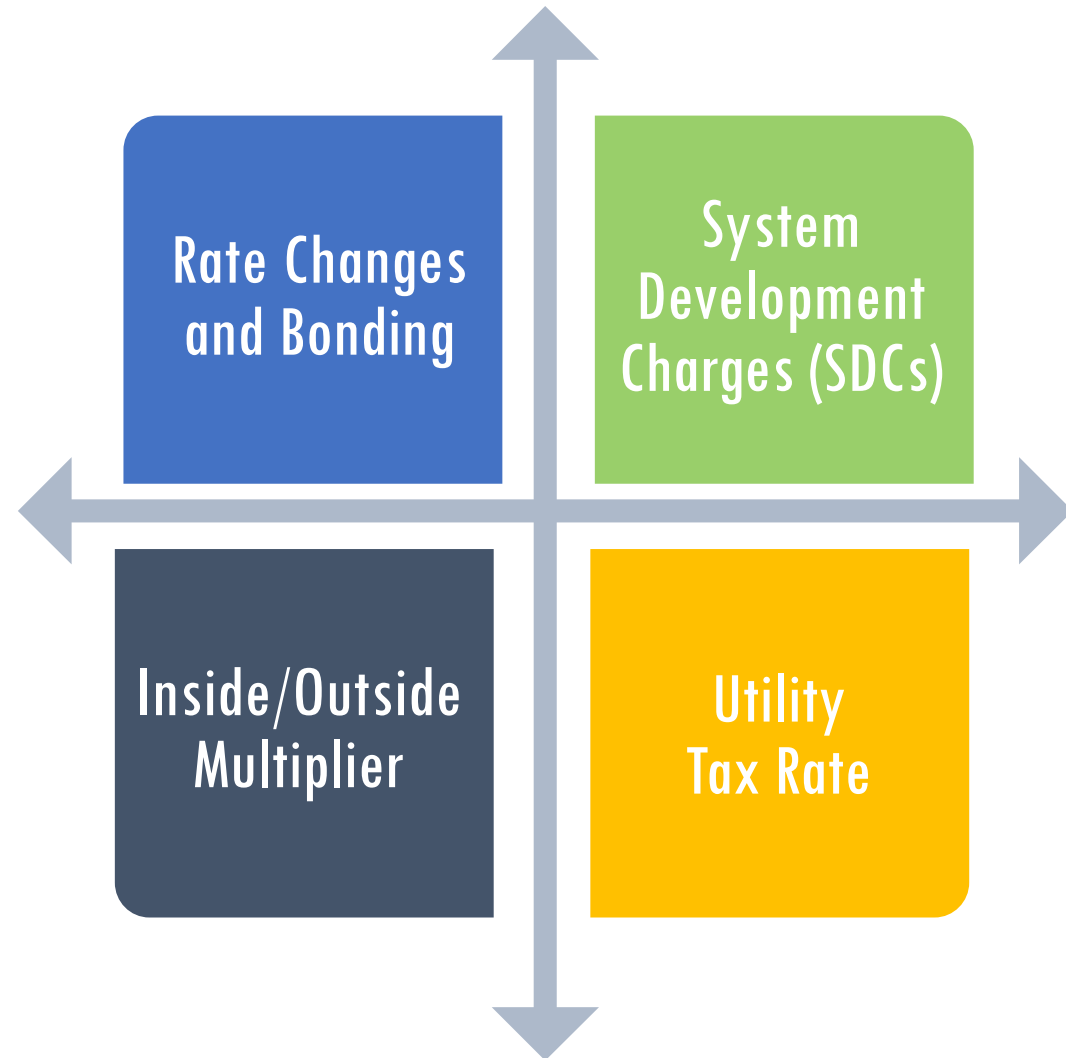
Capital Improvement Program Policies and Principles

- Take care of what we have
- Pay-as-we-go to extent practical
- Consistently manage public assets following Council-approved financial policies and **infrastructure management best practices**
- Do not defer **maintenance**
- Apply a **long-term perspective**
- **Adjust utility rates** annually with **periodic comprehensive reviews**



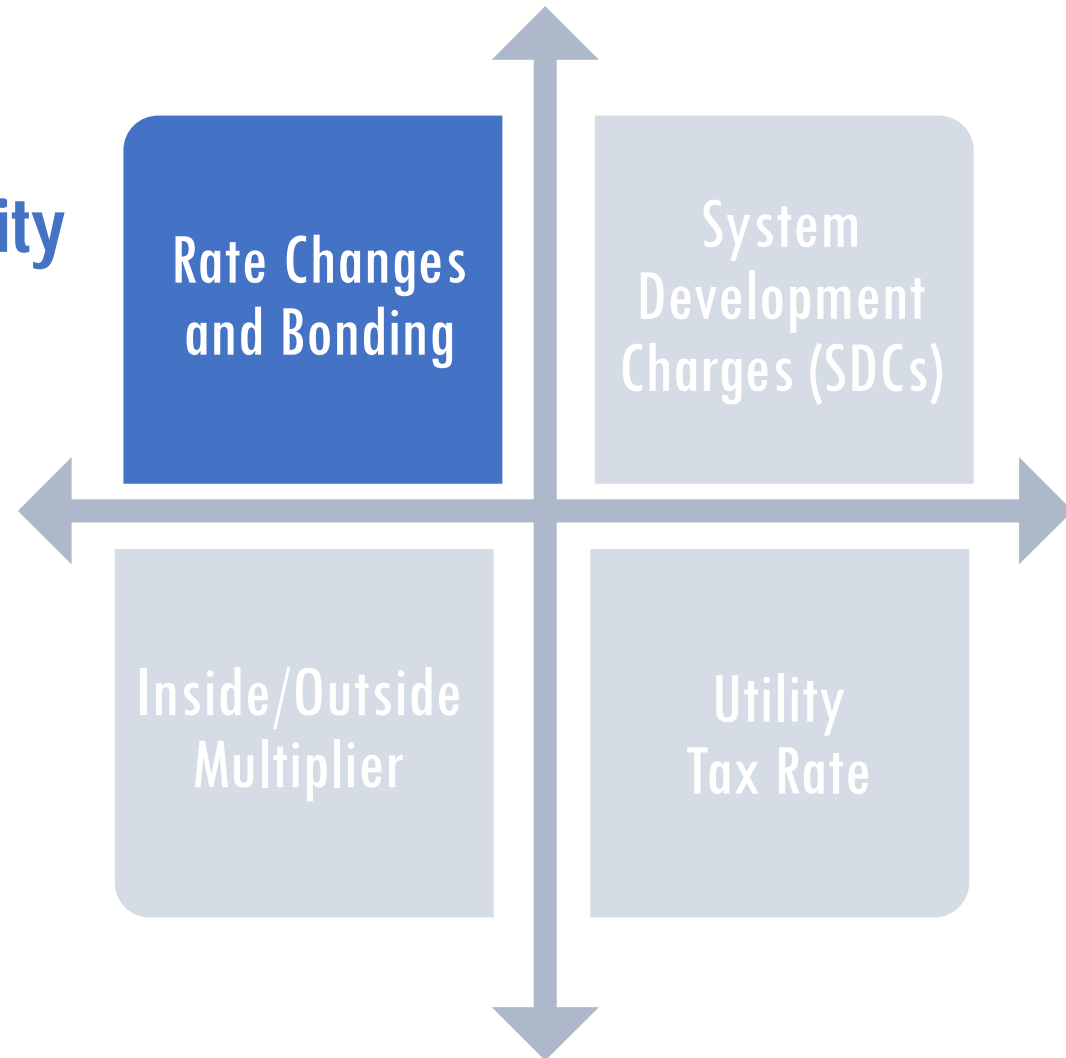
Financial Levers

Levers can be adjusted to meet investment needs and address changing conditions



Opportunities with Rate Changes and Bonding

- ✓ **Focus on affordability and equity**
- ✓ **Stabilize rate changes**
- ✓ **Reduce risk**
- ✓ **Improve capital investment timing**
- ✓ **Meet regulatory requirements**



Bonding and Rates

Paying upfront
for large projects
costs existing
ratepayers more



- Smaller annual rate increases
- Rate stabilization

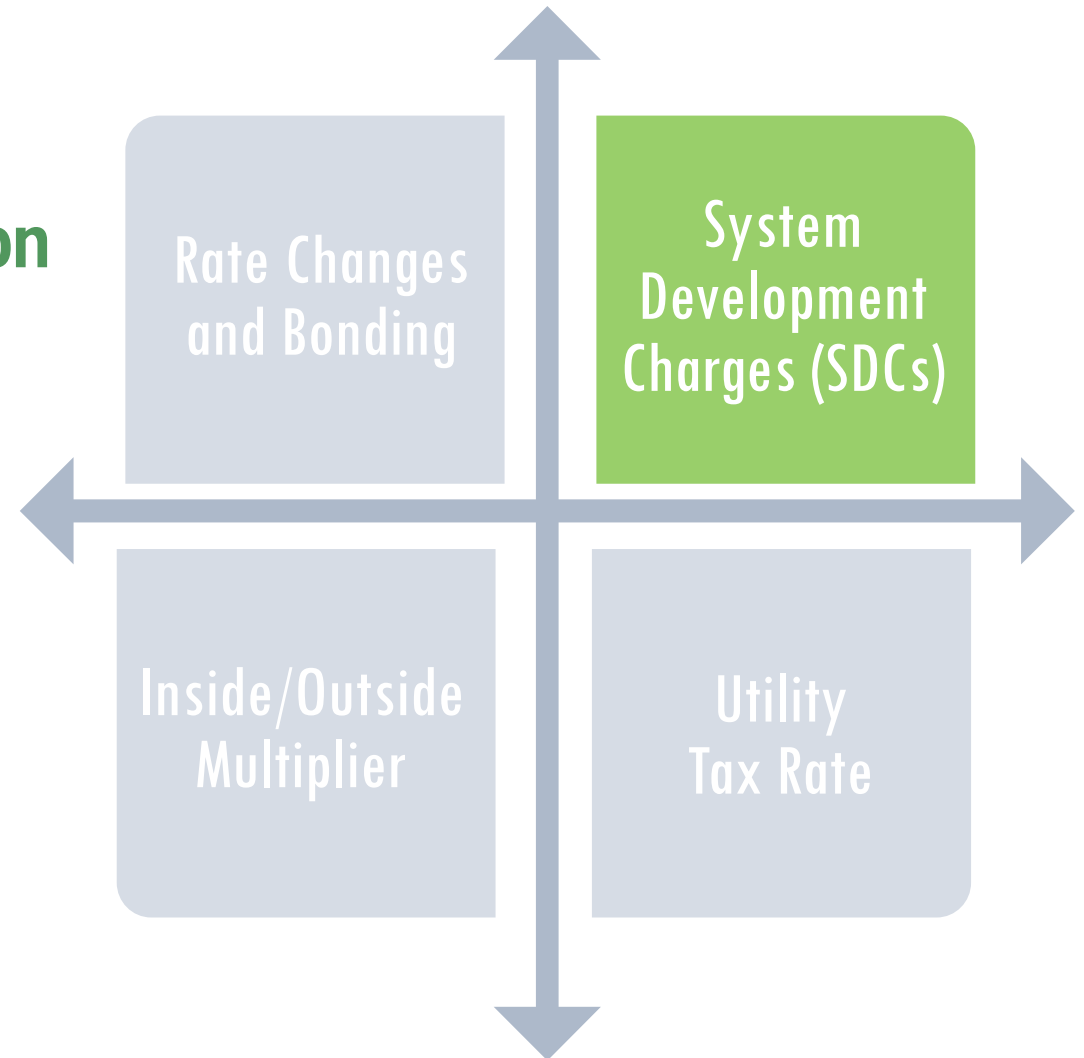


Bonding allows costs to be
spread over time, reducing
impact to ratepayers

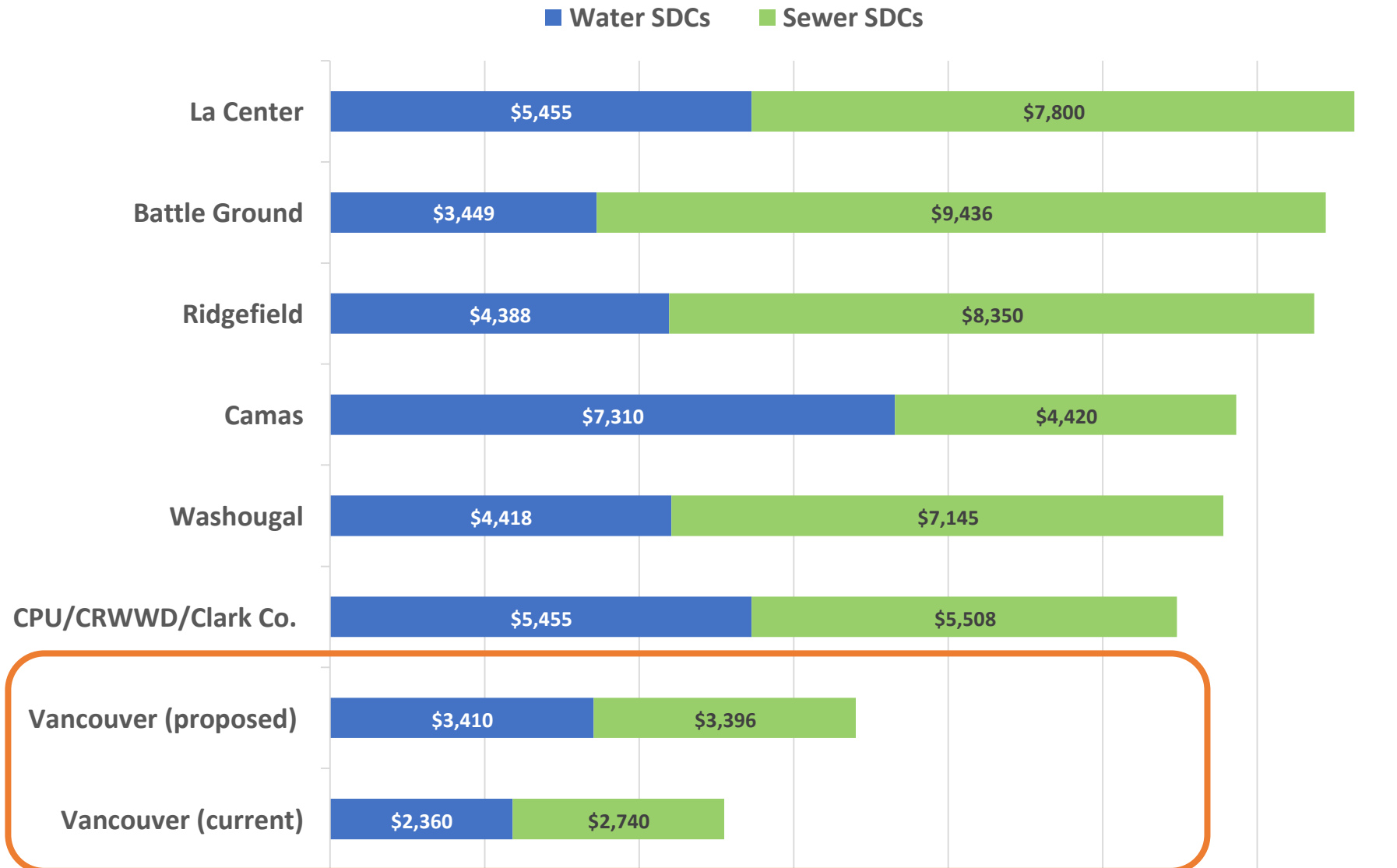


Opportunities with System Development Charges (SDC's)

- ✓ **Maintain competitiveness in region**
- ✓ **Effectively invest in our system to meet growth demands**
- ✓ **10-years since prior update**
- ✓ **Improve equity of funding**
- ✓ **Stabilize rate changes**

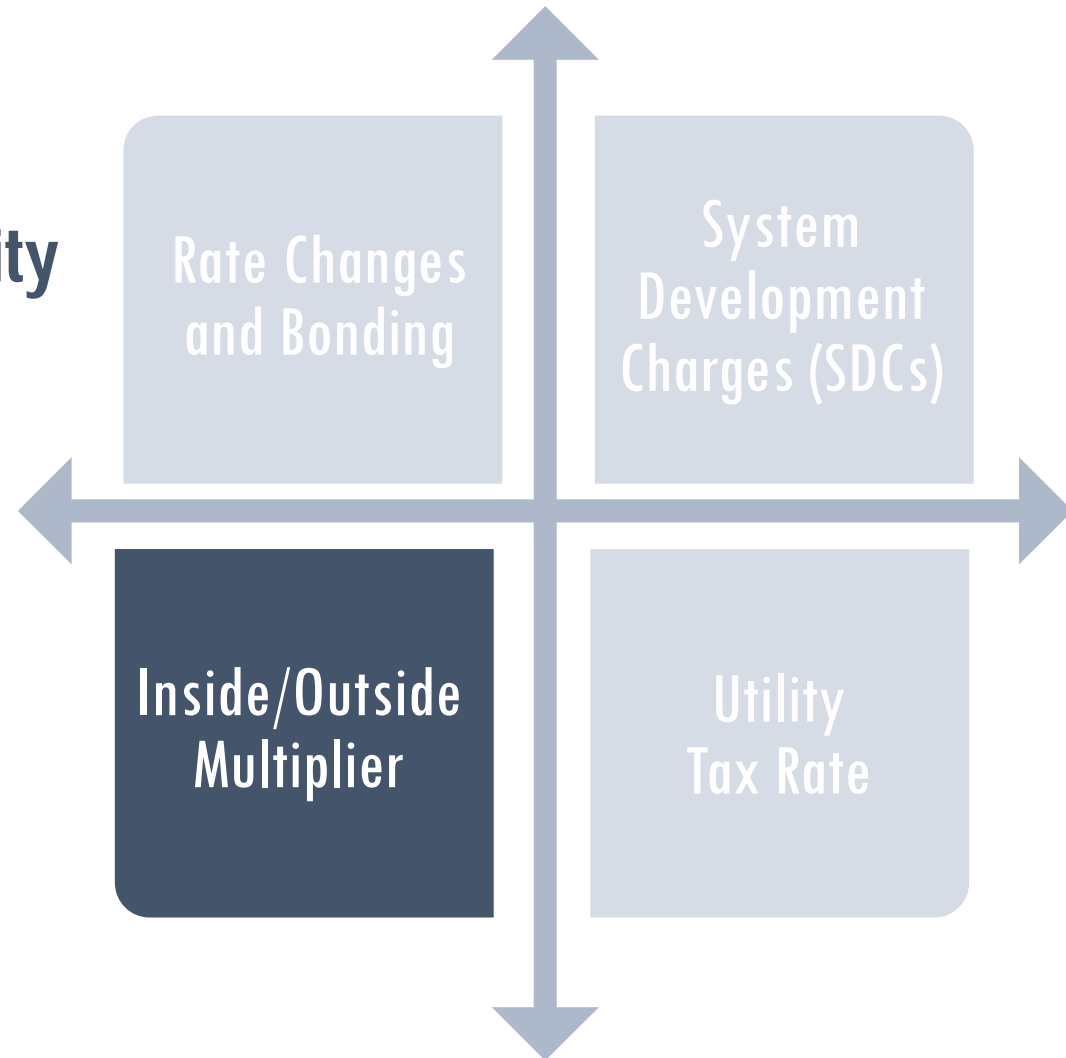


System Development Charges (SDCs)



Opportunities with Inside/Outside Multiplier

- ✓ **Focus on affordability and equity**
- ✓ **Balance and manage annexation impacts**
- ✓ **Stabilize rate changes**



Inside/Outside Multiplier - Background

Why is there a multiplier?

- Higher costs to serve customers outside city limits
- Annexation incentive for unincorporated areas
- Financial return for customers within city limits

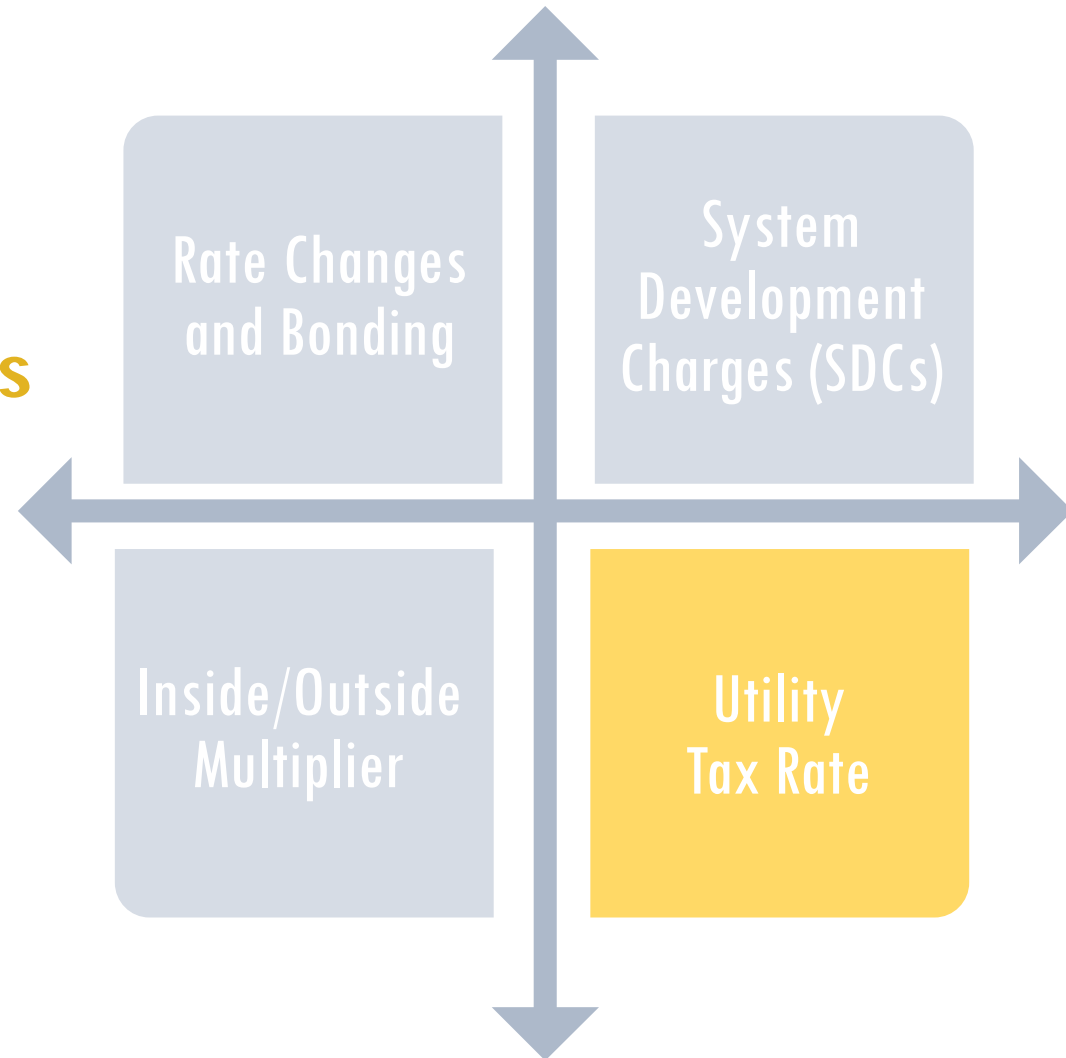
Risks/drawbacks of multipliers:

- Revenue loss with annexation
- Higher costs for utility customers outside city limits

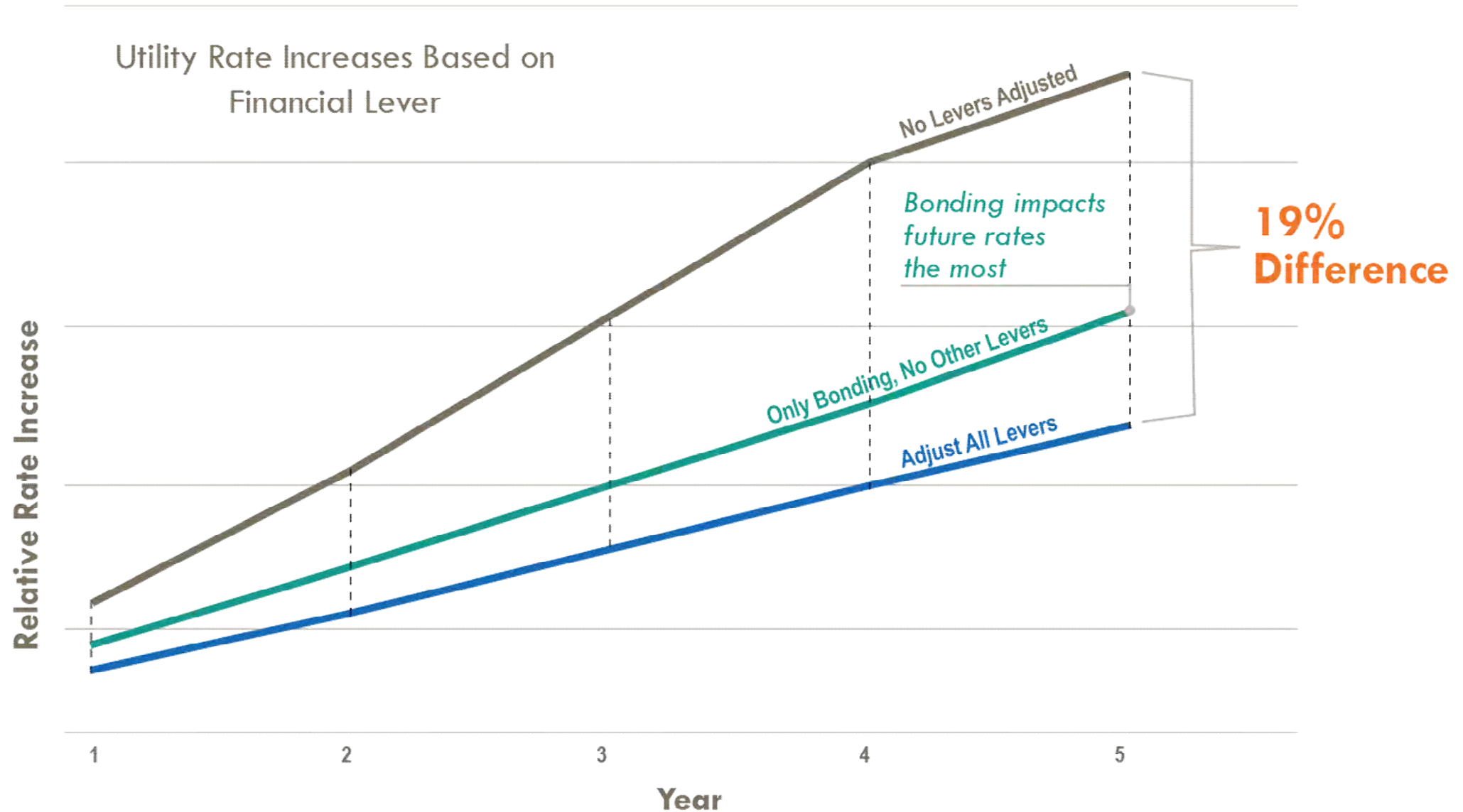


Opportunities with Utility Tax Rate

- ✓ **Focus on affordability and equity**
- ✓ **De-couple tax from capital needs**
- ✓ **Stabilize rate changes**
- ✓ **Reduce financial risk**
- ✓ **Provide stable funding to General Fund**



Financial Levers: Overview and Impacts



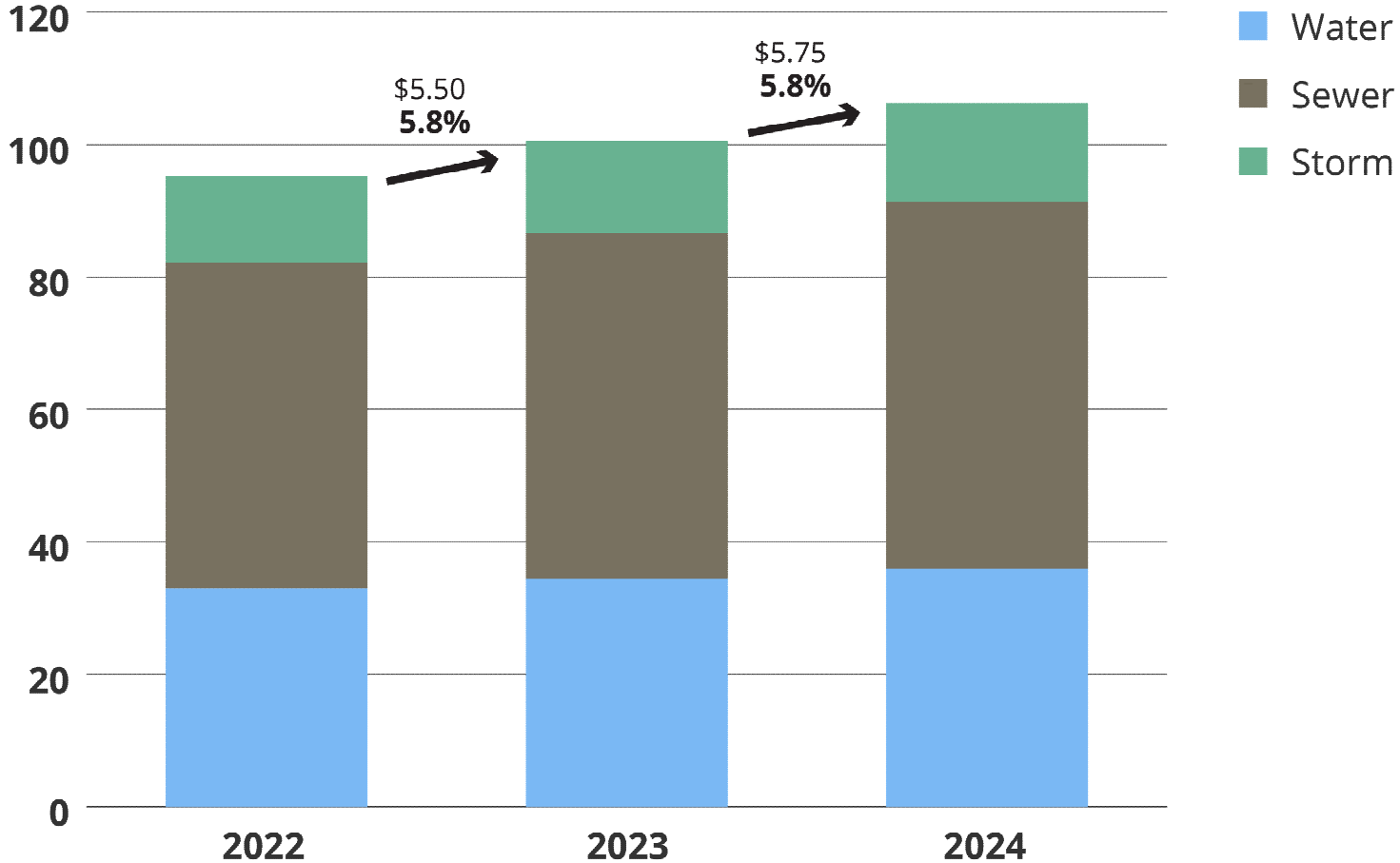
Proposed Monthly Utility Rate Increases

Utility Rate Increase	2022 Rate*	2023 Rate*	2022 vs 2023 Difference
Total – 5.8%	\$95.18	\$100.68	\$5.50

*Monthly rate for a typical single-family residence within the City limits.



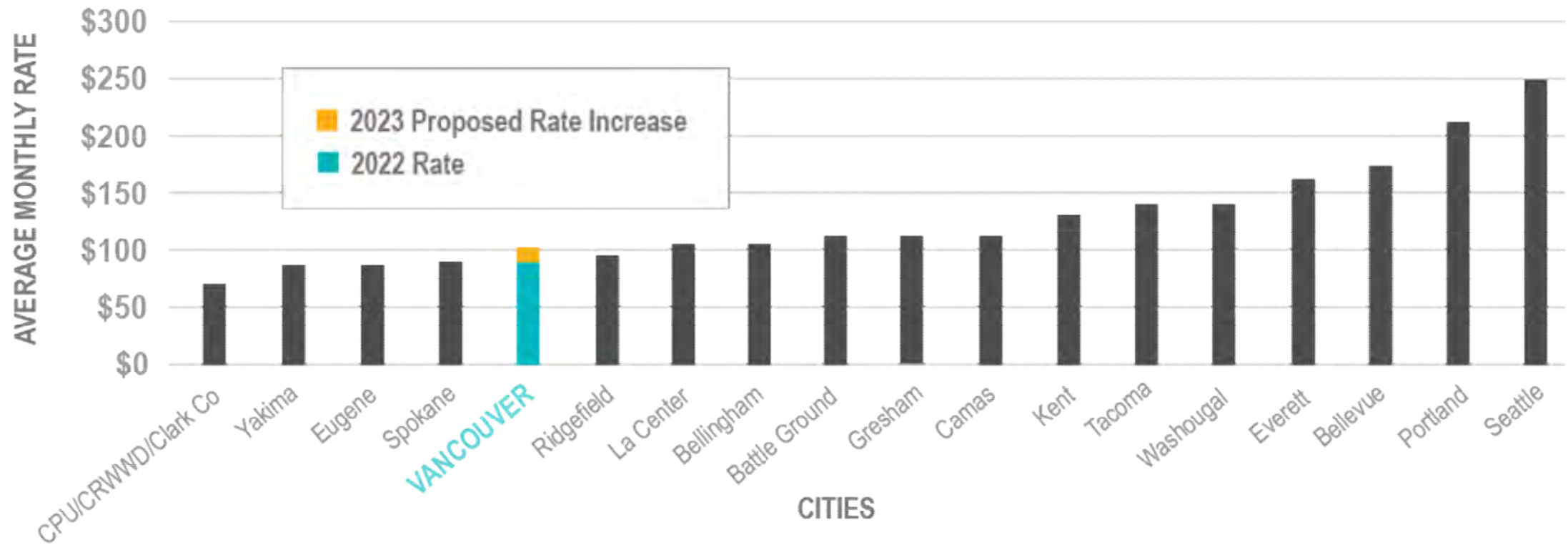
Proposed Monthly Utility Rates*



*Monthly rates for a typical single-family residence within the City limits.

Regional Rate Comparison


Single Family Average Monthly 2022 Utility Rates



2022 Biennial Budget Timeline

10/17 
COUNCIL WORKSHOP
Operating Budget

10/24 
COUNCIL WORKSHOP
Capital Budget

11/7 
BIENNIAL BUDGET
First Reading

11/21 
BIENNIAL BUDGET
Public Hearing and
Adoption

OCTOBER

NOVEMBER

ORDINANCES TO BE CONSIDERED

- System Development Charges
- Utility Rates and Inside/Outside Multiplier Ordinances
- Utility Tax Ordinances

Policy Direction from Council

Ordinance	Description	Ord. Number
System Development Charges	<ul style="list-style-type: none">• Increase System Development Charges	VMC 14.04.235
Water Rate Ordinance and Adjust Inside/Outside Multiplier	<ul style="list-style-type: none">• Approve 4.5% Water Rate Increase• Reduce Inside/Outside Multiplier from 1.5 to 1.25	VMC 14.04.210
Sewer Rate Ordinance and Adjust Inside/Outside Multiplier	<ul style="list-style-type: none">• Approve 6% Sewer Rate Increase• Reduce Inside/Outside Multiplier from 1.5 to 1.25	VMC 14.04.230
Stormwater Rate Ordinance	<ul style="list-style-type: none">• Approve 8% Stormwater Rate Increase	VMC 14.09.060
Water/Sewer Utility Tax Ordinance	<ul style="list-style-type: none">• Align Utility Tax revenue increases with six-year financial forecast	VMC 5.92.010
Storm Utility Tax Ordinance	<ul style="list-style-type: none">• Align Utility Tax revenue increases with six-year financial forecast	VMC 5.93.010

Next Steps

Near-Term Next Steps:

- November ordinance approvals
- Monitor EPA PFAS regulations
- Look for grant opportunities
- Operations Center design and construction
- Tiered rates study and future discussion
- Initial planning for incinerator replacement
- Reevaluate assumptions in next biennium

