



PROJECT BRIEFING

Prepared for the Environmental Services Commission

June 21, 2018

Brian Pugliese

Smart Water Infrastructure & Technology Project Manager

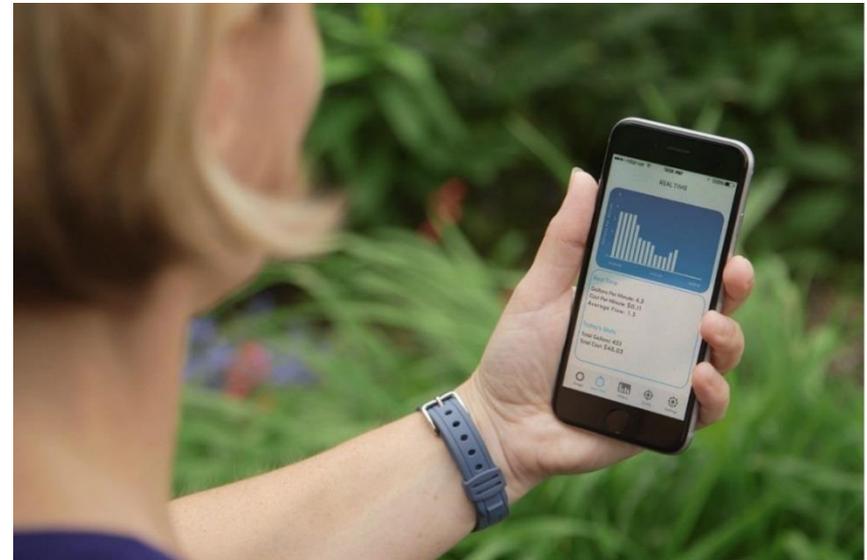
Agenda

- Project Review
- Procurement Progress
- Upgrade Preparation



CUSTOMERS EXPECT BETTER INFORMATION ON WATER USE

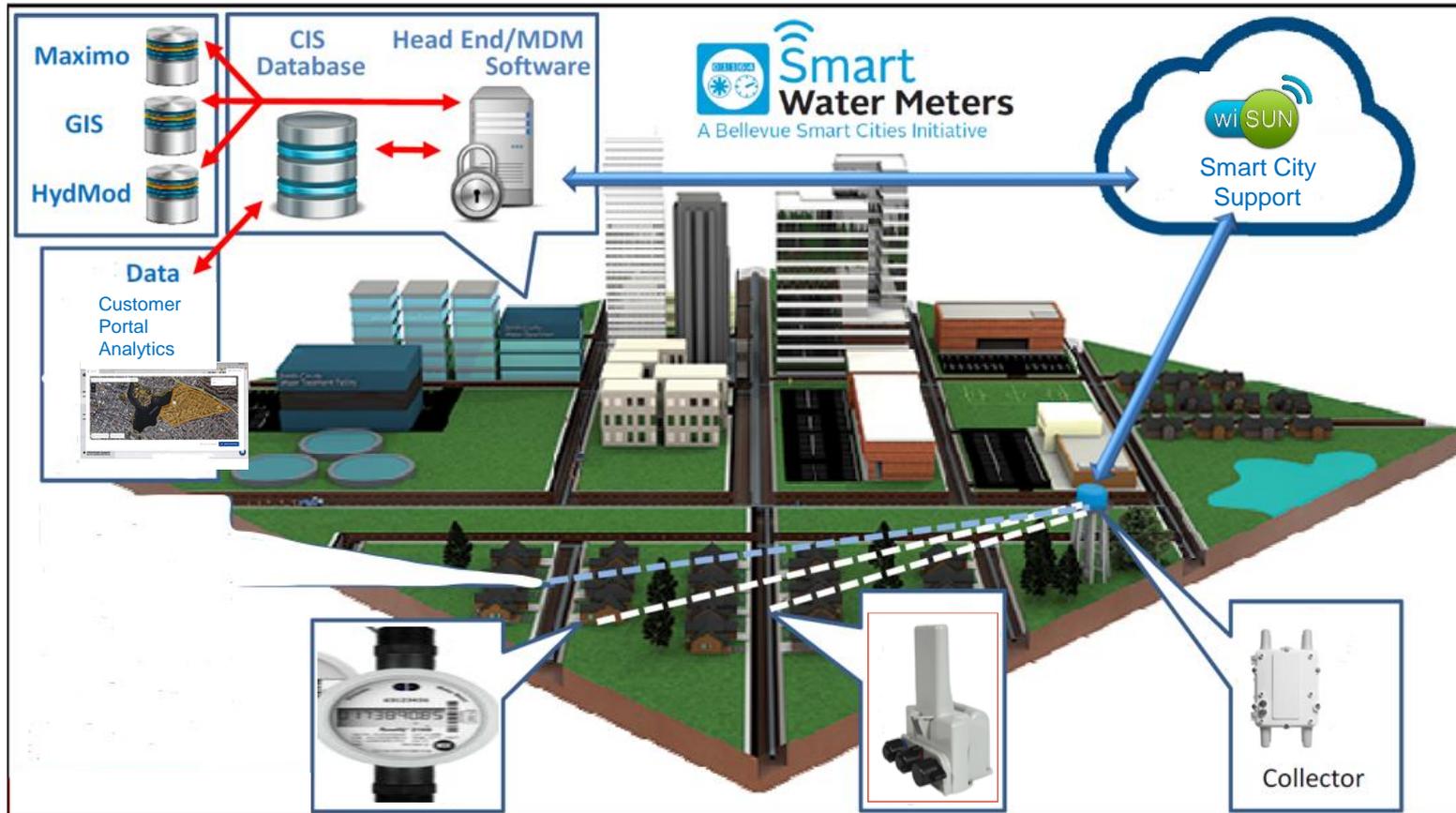
- Customers can control water usage
- Proactive leak detection



AMI evaluated in 1996, 2004, 2008, 2014, 2016

City Council approved funding of \$23.1 million from Smart Water Meters in November 2016

SMART WATER SYSTEM



CITY REQUIREMENTS

Identified Requirement	Vendor Compliance
Two-way communication	✓
Accurate meter reading	✓
Leak detection	✓
Customer portal	✓
<i>Bellevue Smart</i> support	✓
20-year system life	✓

PROCUREMENT

PROCUREMENT STATUS

- 63 firms downloaded RFP
- 9 submitted RFPs
 - 6 - Both Parts A & B
 - 1 – A only
 - 2 – B only
- 4 Presented Demos
 - 3 - Both Parts A & B
 - 1 – B only
- 2 best and final offers (BAFO)
 - 1st firm – No agreement on contract terms
 - 2nd firm – Detailed negotiation in progress

May 2017



Sept. 2017
1st BAFO

June 2018
2nd BAFO



CONTRACT STRUCTURE

SERVICE AGREEMENT/Ts & Cs

Hardware





Meters &
Radio
Transmitters




Field
Communications
Network

City Owned/
Warranty

Itron's Services

KUS
Keystone Utility Systems



Meters,
Radios and
Meter Box
Installs

1.5+ Years



Head End/
Meter Data
System

20 Years

WaterSmart
SOFTWARE



Customer
Portal/
Data Analytics

Software License

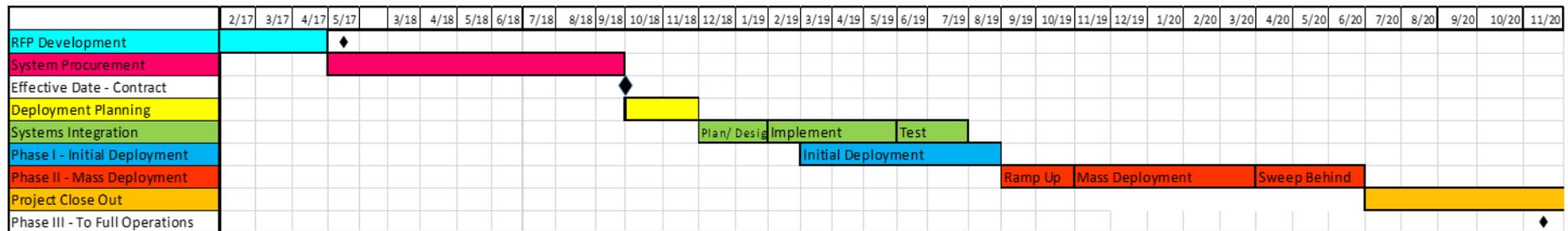
Service Warranty

Software License

Service Level Agreement/ Performance Credits

Pricing

PROJECT TIMELINE



Next steps

- Complete contract negotiations – July/August
- ESC, Council briefings – August (before break)
- Submit for Council approval – September/ October

PREPARING FOR TECHNOLOGY UPGRADE

SCHEDULE FOR ESC INPUT

ITEM	Timing
 New metering standard	Q2 18
Privacy	Q 4 18
Meter sites for initial deployment (pilot)	Q1 19
Update to leak adjustment policy	Q2 19
Billing frequency	2021 – 2022 Budget



RECOMMENDATION

Utilities provide one standard meter to customers

- Meets our customers' demand for timely leak detection
- Greater customer access to consumption information for budgeting and conservation
- Best use of time and resources
- Maximizes the impact of the investment made
- Supports *Bellevue Smart* plan



NEW METER STANDARD

- Non-communicating meters will be the old standard of collecting consumption
 - Manual reads
 - Bi-monthly
 - No early leak detection
 - Consumption detail limited to every sixty days
- Two-way communicating is the new standard
 - Automated reads retrieved daily and with hourly increments
 - No need to roll trucks to obtain reads
 - Early leak detection
 - Details available to customers about daily use



ISSUE

- A small number of individuals don't like technologies that employ wireless communications citing potential adverse health effects, risks to privacy, and safety concerns



RESEARCH

Item	Research	Conclusion
Adverse Health Effects	Numerous studies find no credible link between electromagnetic frequencies (EMF)/ radio frequencies (RF) and adverse health effects	RF risk to health not proven; some individuals report a sensitivity
Privacy	High profile hacks of sensitive financial, health and personally identifiable information (PII) raise valid concerns among many	<p>Meter consumption data is a “low-value” target.</p> <p>Nonetheless, Utilities requirements are for secured network communications and encrypted data</p> <p>The City complies with stringent state laws and is updating its privacy protection standards</p>
Safety	Safety issues are tied to electric meter devices and installation practices	Safety is not a high-level concern for water service

ALTERNATIVE TO STANDARD METERS

- Primarily regulated electric utilities across the country and <1% of customers *subscribe* to the service.
- If same percentage applied to Bellevue Utilities, the potential impact would be 200 customer accounts

“Several states have implemented policies that allow customers to opt-out of smart meters. These customers typically pay an initial fee and a monthly opt-out fee. The number of customers who have requested to opt-out of smart meter installation is extremely low (far less than 1%).¹”

¹ - p 19, *The Edison Foundation, Institute for Electric Innovation, Electric Company Smart Meter Deployments, December 2017*

Water Agencies

- Smart water meters are the standard
 - Olympia
 - Sammamish
 - Walla Walla
 - Woodinville



DISCUSSION

- City Code §24.02.100 - “The utility owns all water facilities in public rights-of-way and in easements dedicated to the public and accepted by the utility, up to and including the meter...”
- As owner and operator, Utilities has responsibility to select and maintain its equipment



DISCUSSION (2)

Four residents have contacted Utilities citing personal reasons for not wanting a two-way communicating meter.

Options

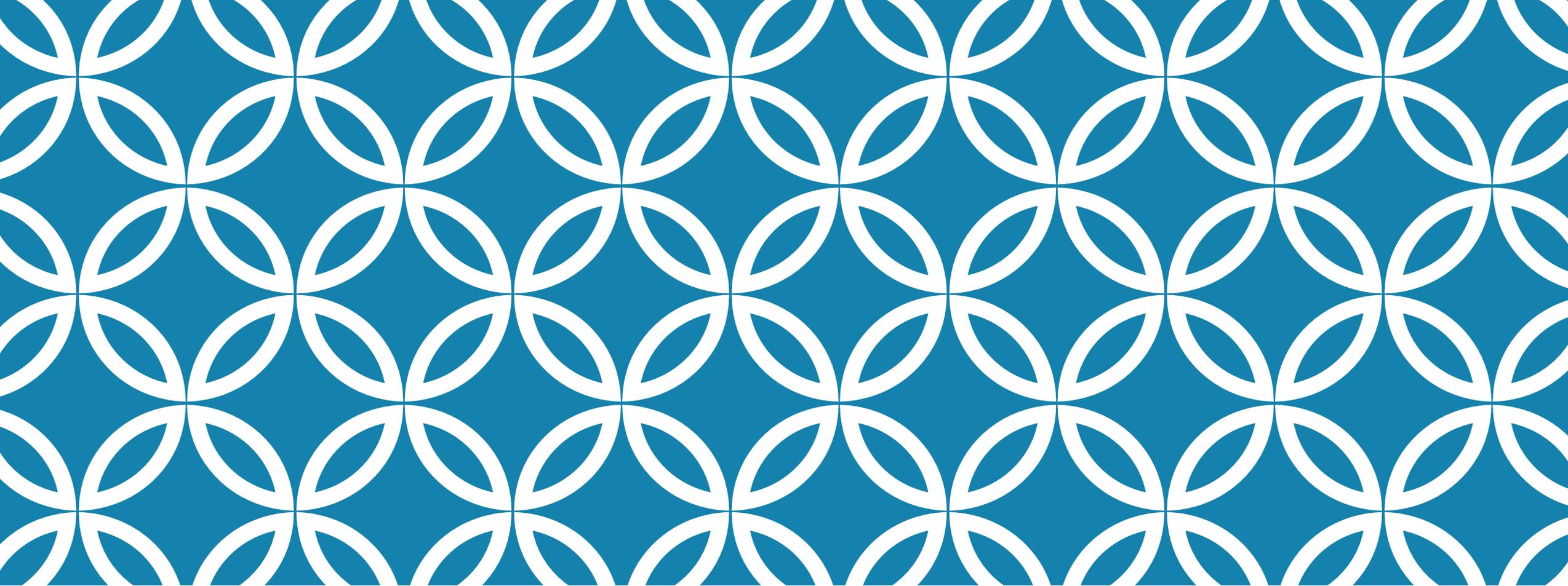
- All customers receive the same standard meter
- Customers seeking an alternative, get a new digital meter without a communications module
 - Incur TBD fees
 - Administrative charge to cover costs of setting up a non-standard service
 - Manual meter reading fee for Utility expense each billing cycle



POTENTIAL IMPACT

Choice	Pros	Cons
Standard meter for all	<ul style="list-style-type: none"> • Reductions in leak adjustment requests and credits • Minimize “lost” water • Equal benefits access • No special record keeping/billing • No add-on fees • Maintains environmental goals • Aligns with Utilities Asset Management Strategy • Supports <i>Bellevue Smart</i> plan 	<ul style="list-style-type: none"> • Complaints/ dissatisfaction from those with perceived RF sensitivity or privacy concerns • Diminishes environmental benefit
Individuals apply for non-standard service	<ul style="list-style-type: none"> • Avoid complaints/ dissatisfaction from those with RF sensitivity or privacy concerns 	<ul style="list-style-type: none"> • Higher bills for non-standard service customers • Special recordkeeping/ billing

THANK YOU



UTILITIES RATE RELIEF PROGRAM REVIEW

6/21/18
ESC Presentation

AGENDA

Presentation Purpose:

Share with and seek input from the Environmental Services Commission (ESC) about the Utility Rate Relief program.

1. Programs overview
2. URR Program challenges
3. Evaluation scope
4. ESC input

DID YOU KNOW?

19% of Bellevue households are estimated to be low income

RATE RELIEF PROGRAM PURPOSE

The purpose of the City of Bellevue Rate Relief Programs is to make essential (base level) utility services affordable to low income households that are the most vulnerable and not able to pay for their basic living expenses.

UTILITY LOW INCOME RELIEF PROGRAMS

1. **Utility Rate Relief (URR) Program**

- Utility bill discount
- 62 + years old OR permanently disabled OR home kidney dialysis
- Owned and administered by Utilities
- Funded by Utility rates

2. **Utilities Tax Relief program (UTR)**

- Occupational tax rebate
- No age or disability requirements
- Owned by Parks. Administered by Utilities.
- Funded by general fund

PROGRAMS LEGAL AUTHORITY - WA STATE

RCW 35.92.020(5); RCW 35.67.020(5); RCW 74.38.070
authorizes cities to provide assistance and reduce utilities
rates for low income persons

Article 8, Sec. 7 of the State Constitution permits "gifts" of
public funds in "support of the poor or infirm"

PROGRAMS LEGAL AUTHORITY – CITY CODE

- Established by COB Ordinance No. 2819 and 2880 (1980) – provide relief for water, sewer and drainage services charges to senior citizens.
- Rate Relief Program – Bellevue City Code (BCC), Chapter 24.10
Utility Service Charge Relief
 - Related Ordinances Nos. 5965, 4848, 4458, 4195
- Tax Relief Program – BCC 4.10.055 - .070 Occupational Tax Relief
 - Related Ordinance Nos. 6040, 4923, 4843, 4841, 4195

RATE RELIEF PROGRAM GUIDING PRINCIPLES

- Simplicity and Accessibility
- Equity and Diversity
- Affordability and Sustainability
- Conservation
- Accountability

UTILITY RATE RELIEF PROGRAM

- Benefits:
 - 40% or 75% discount off utility payments
- Eligible population
 - Low income < \$32,120 AND
 - 62 + years old OR permanently disabled OR home kidney dialysis
- Customers Served
 - Single Family Residents (SFR)
 - Multi Family Residents (MFR)
- Application process
 - Feb.1 through the end of Oct
 - Via mail
 - In person – City locations and retirement homes

HOW CUSTOMERS CAN FIND ABOUT US?

- Article in IYC and Park's Connection Booklet;
- Message in annual Utility Bill and newsletter
- City website;
- Program description listed with KC Crisis Clinic;
- Direct mail packet to previously qualified applicants
- Information distributed at four senior apartment locations
- COB staff referrals.

2017 URR PROGRAM

- Customers served:
 - 398 SFR
 - 653 MFR
- Program cost:
 - approximately \$1M
- Program coverage:
 - ~ 20% of eligible URR population (62+ and with disabilities)

URR CHALLENGES

- Dated customer application process
- Cumbersome program administration
- No relief for customers experiencing temporary financial shock

URR PROGRAM EVALUATION SCOPE

1. Program effectiveness

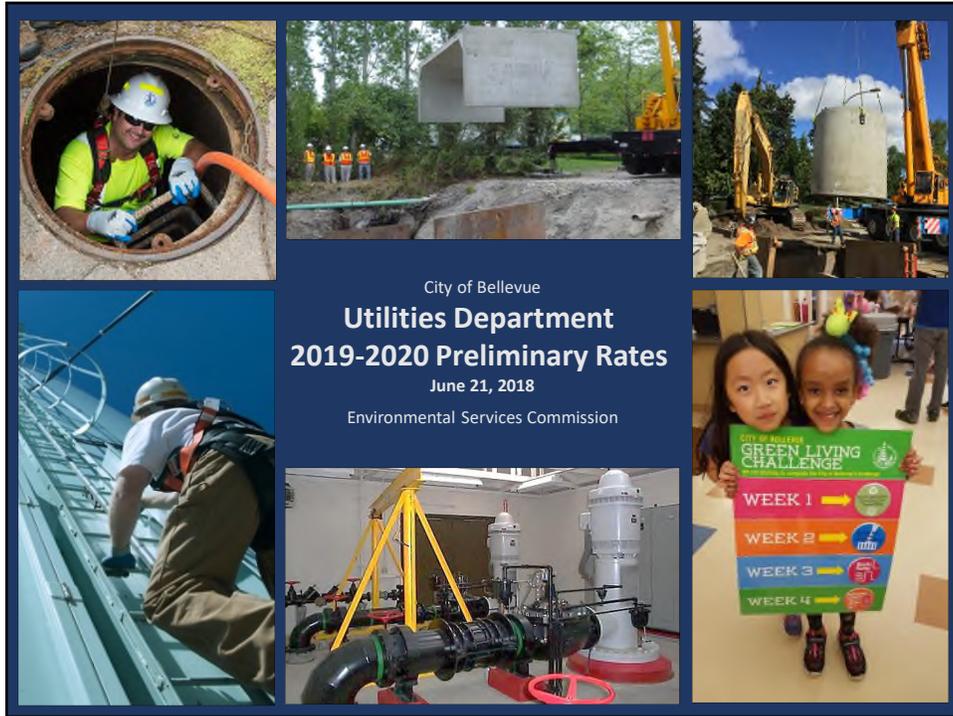
- Benefit levels
- Eligible customer population
- Customer equity
- Customer access to program

2. Administrative efficiency

- Process improvement opportunities
- Potential partnership with social service agencies

NEXT STEPS

- ❖ Complete the evaluation
- ❖ Review recommendations with ESC in September
- ❖ Review recommendations with Council in the Fall



2019-2020 Budget

Agenda

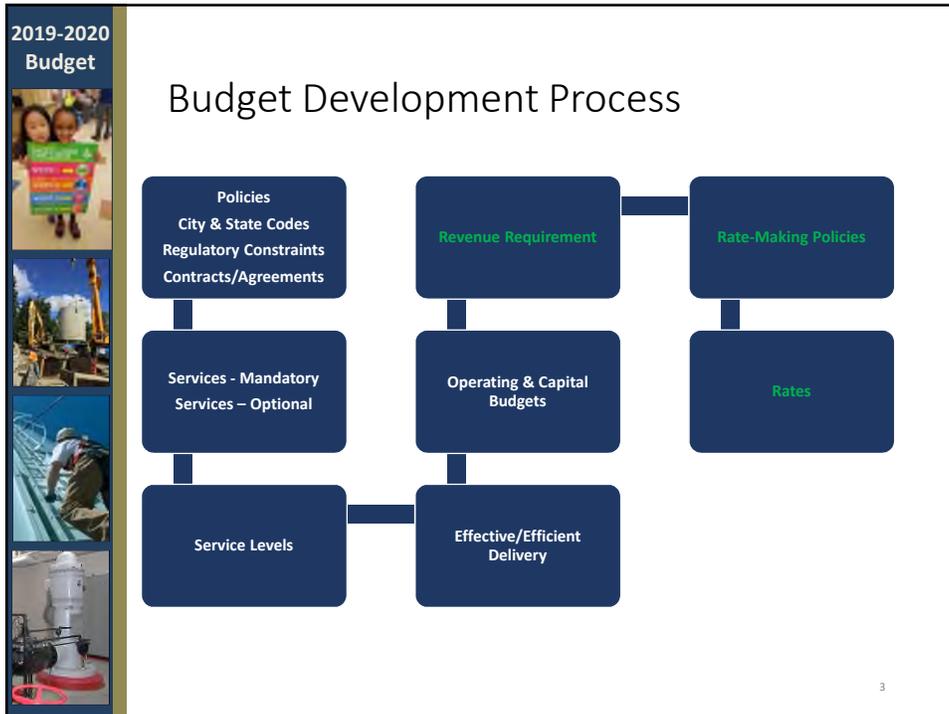
January – May: 2019 – 2025 CIP Budget Review

June 7: 2019-2020 Operating Budget Review

June 21:

- Rate Review
- ESC Budget Proposal Recommendation LT

2



2019-2020 Budget

Rates Guided by Council-Adopted Policies

4

2019-2020
Budget



Capital Investment Policies

- Long-term financial planning for capital investment
- Intergenerational equity
- Debt reserved for changed circumstances
- Saving for future infrastructure needs – Renewal & Replacement account

5

2019-2020
Budget



Rate Management Policies

- Funding levels sufficient to meet current and future expenses
- Gradual and uniform rate changes
- Pass through wholesale cost increases
- Use of savings/one-time revenues
- Frequency of rate increases

6

2019-2020
Budget



Revenue Requirement

7

2019-2020
Budget



Budget Priorities

- Sustainable high quality utility services
 - Responsible management of infrastructure assets
 - Long-term financial sustainability
- Certainty and predictability of rates

➤ **Goal: Maintain services with minimal new requests**

8

2019-2020 Budget



Capital Budget Recap

9

2019-2020 Budget



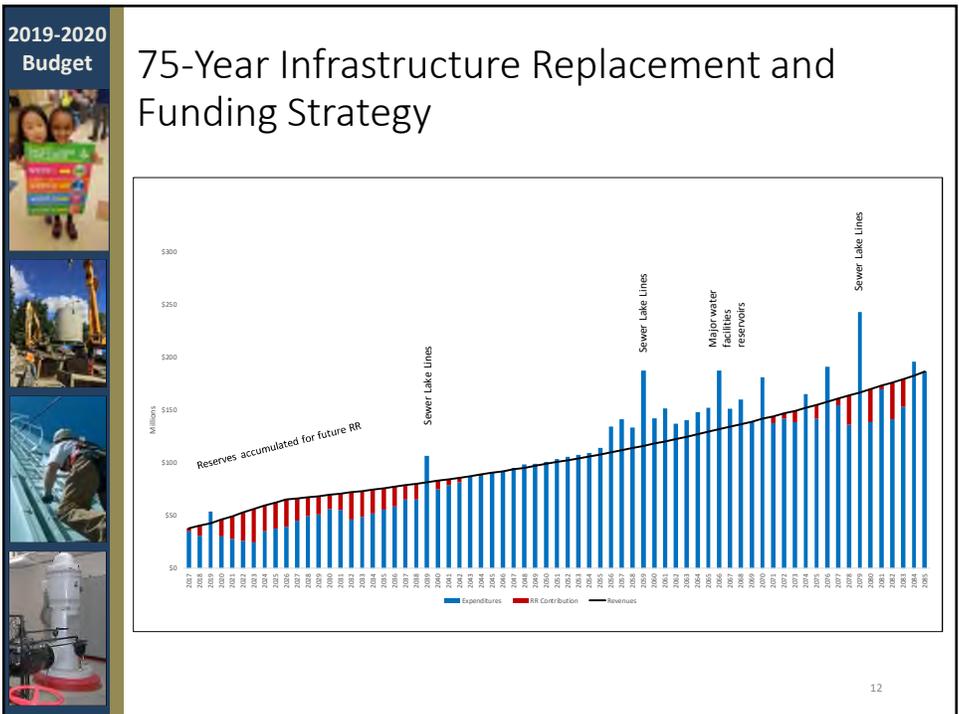
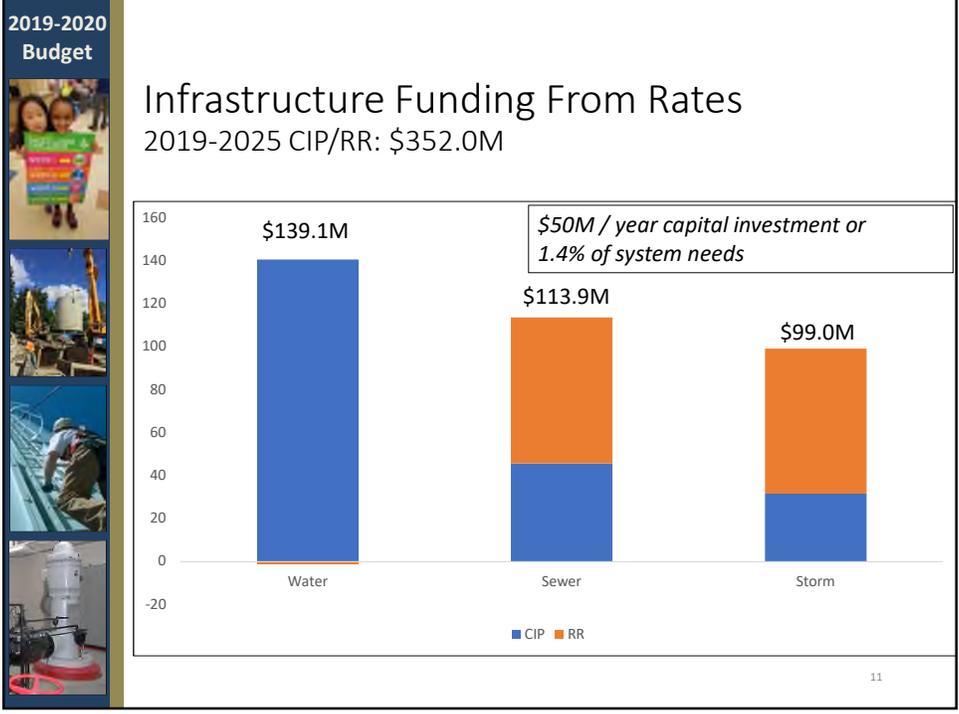
2019-2025 CIP Investments (\$217.9M)

- ✧ Aging infrastructure (76%)
- ✧ Capacity to accommodate growth (5%)
- ✧ Environmental preservation & regulatory (9%)
- ✧ Customer service enhancements (7%)
- ✧ New Projects (3%)

Aging Infrastructure \$166.3M	Capacity for Growth \$10.4M	Environmental Preservation \$18.5M	AMI \$14.7M	New Projects \$8.0M
<ul style="list-style-type: none"> • Small diameter water main replacement W-16 (\$72.9M) • Water PS Rehab W-85 (\$18.5M) • Sewer pipeline major system repairs S-66 (\$14.5M) • Sewer system trunk rehab S-24 (\$11.5M) • Storm infrastructure rehab D-64 (\$10.5M) 	<ul style="list-style-type: none"> • Midlakes Pump Station improvements S-61 (\$3.4M) • Water supply for west Bellevue W-104 (\$2.3M) • Reservoir storage for downtown W-103 (\$1.6M) • NE 40th and Enatai Inlet W-105 (\$1.6M) 	<ul style="list-style-type: none"> • Lower Coal Creek flood hazard reduction D-106 (\$6.1M) • Flood control program D-94 (\$5.8M) • Stream channel modification D-86 (\$3.6M) • Fish passage improvements D-81 (\$2.5M) 	<ul style="list-style-type: none"> • AMI Implementation W-108 and S-108 (\$14.7) 	<ul style="list-style-type: none"> • M&O Yard Land Acquisition W-111 and S-111 (\$8.0M)

Water Sewer Storm Water/Sewer

10



2019-2020 Budget



Operating Budget Recap

13

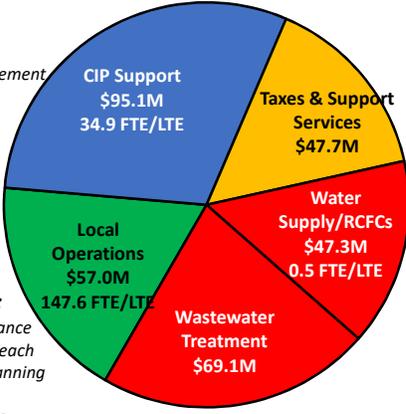
2019-2020 Budget



Proposed 2019-2020 Utilities Operating Budget

\$316.2M, 183.0 FTE/LTE

30%
Capital Related:
*Transfers to CIP / R&R
CIP Design and Management*



Category	Amount	FTE/LTE
CIP Support	\$95.1M	34.9
Taxes & Support Services	\$47.7M	-
Water Supply/RCFCs	\$47.3M	0.5
Wastewater Treatment	\$69.1M	-
Local Operations	\$57.0M	147.6

52%
Financial Obligations:
*Taxes / Support Services
Drinking Water Supply
RCFC Payments
Wastewater Treatment*

18%
Local Operations:
*Operations & Maintenance
Customer Service/Outreach
Engineering System Planning
Development Services
Support Systems/Assets
Management/Regulatory*

Excludes operating reserves

14

2019-2020
Budget



Operating Budget Recap

Local Operations

	AMOUNT
2017-2018 Amended Budget	\$ 54.1 M
Inflationary Increase	\$ 2.0 M
New Costs	
CCUD Reservoir Coating	\$ 0.75 M
New Storm FTE for Video Assessment Pgm	\$ 0.15 M
Billing Account Rep .25 FTE Increase	<u>\$ 0.04 M</u>
2019-2020 Proposed Budget	\$ 57.0 M

15

2019-2020
Budget



Preliminary Rates

16

2019-2020 Budget

2019-2025 Utility Rates Forecast – June 2018

	2019	2020	2021	2022	2023	2024
Water						
Wholesale	2.7%	2.0%	1.9%	1.9%	1.9%	1.8%
Local	<u>2.3%</u>	<u>3.0%</u>	<u>2.4%</u>	<u>2.5%</u>	<u>2.5%</u>	<u>2.6%</u>
Total	5.0%	5.0%	4.3%	4.4%	4.4%	4.4%
Sewer						
Wholesale	1.8%	-	1.2%	1.6%	1.2%	1.0%
Local	<u>2.1%</u>	<u>2.3%</u>	<u>2.4%</u>	<u>2.3%</u>	<u>2.4%</u>	<u>2.4%</u>
Total	3.9%	2.3%	3.6%	3.9%	3.6%	3.4%
Storm						
Wholesale	-	-	-	-	-	-
Local	<u>5.5%</u>	<u>5.5%</u>	<u>5.5%</u>	<u>5.0%</u>	<u>5.0%</u>	<u>5.0%</u>
Total	5.5%	5.5%	5.5%	5.0%	5.0%	5.0%
Combined						
Wholesale	1.9%	0.8%	1.3%	1.5%	1.3%	1.2%
Local	<u>2.7%</u>	<u>3.0%</u>	<u>2.9%</u>	<u>2.8%</u>	<u>2.8%</u>	<u>2.8%</u>
Total	4.6%	3.8%	4.2%	4.3%	4.1%	4.0%
<i>Early Look</i>	4.9%	3.8%	4.2%	4.3%	4.1%	4.0%

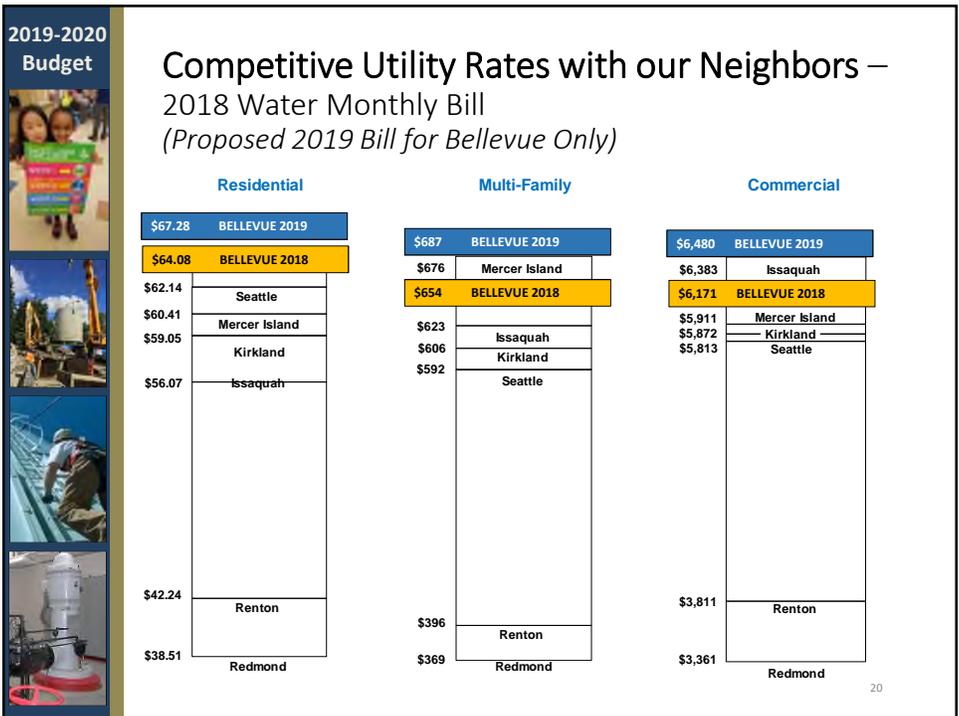
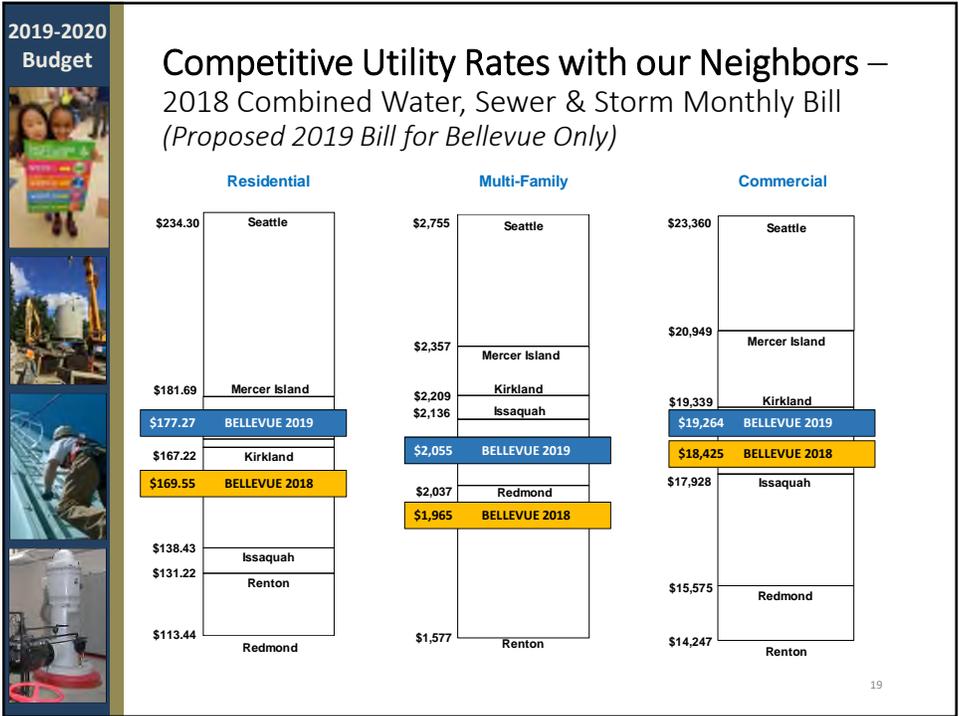
17

2019-2020 Budget

Preliminary Forecast – June 2018

Typical Residential Combined Water, Sewer, & Storm Utility Monthly Bill Rate Drivers

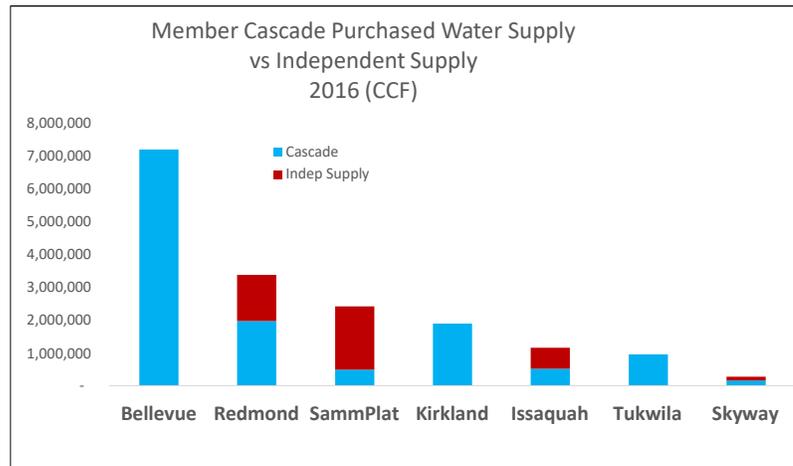
	2019 Bill		2020 Bill	
Prior Year Monthly Bill		\$169.55		\$177.27
Wholesale costs	1.9%	\$3.18	0.8%	\$1.35
Local				
CIP/R&R	1.2%	\$1.99	2.0%	\$3.49
Taxes and Interfunds	0.7%	\$1.15	0.4%	\$0.67
Operations	0.8%	\$1.40	0.6%	\$1.22
Total Local	2.7%	\$4.54	3.0%	\$5.38
Total Increase	4.6%	\$7.72	3.8%	\$6.73
New Monthly Bill		\$177.27		\$184.00



2019-2020
Budget



Water Supply – CWA Members



21

2019-2020
Budget

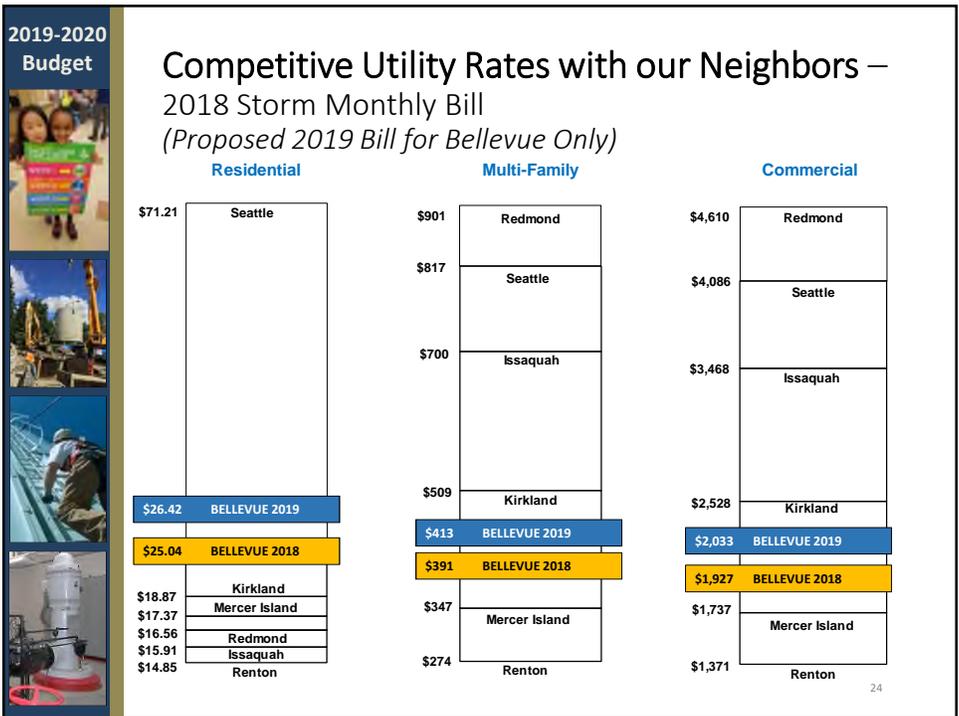
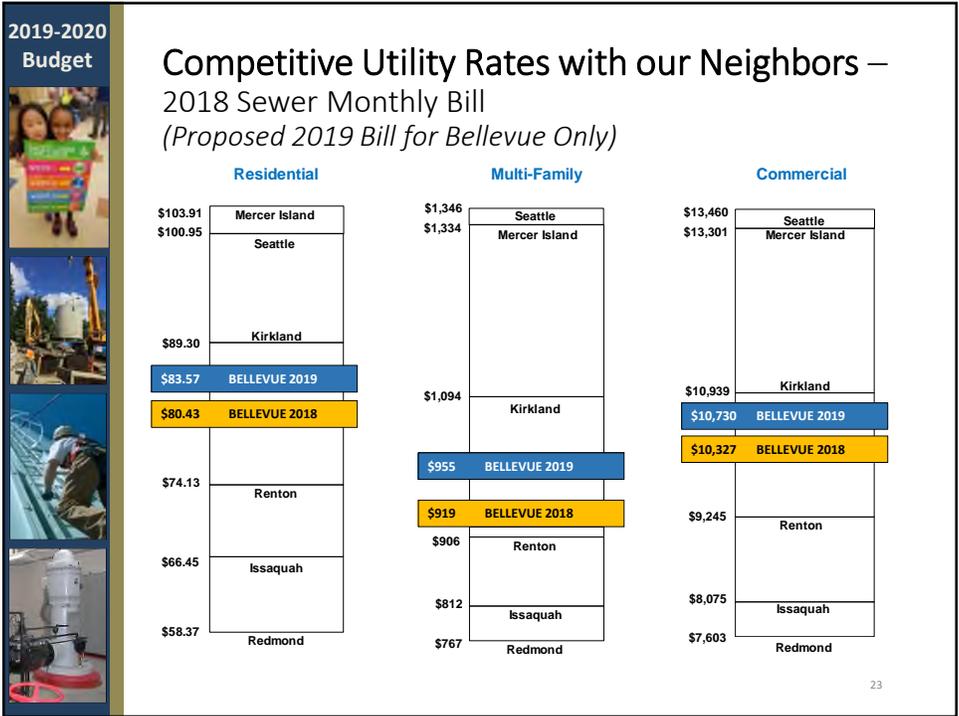


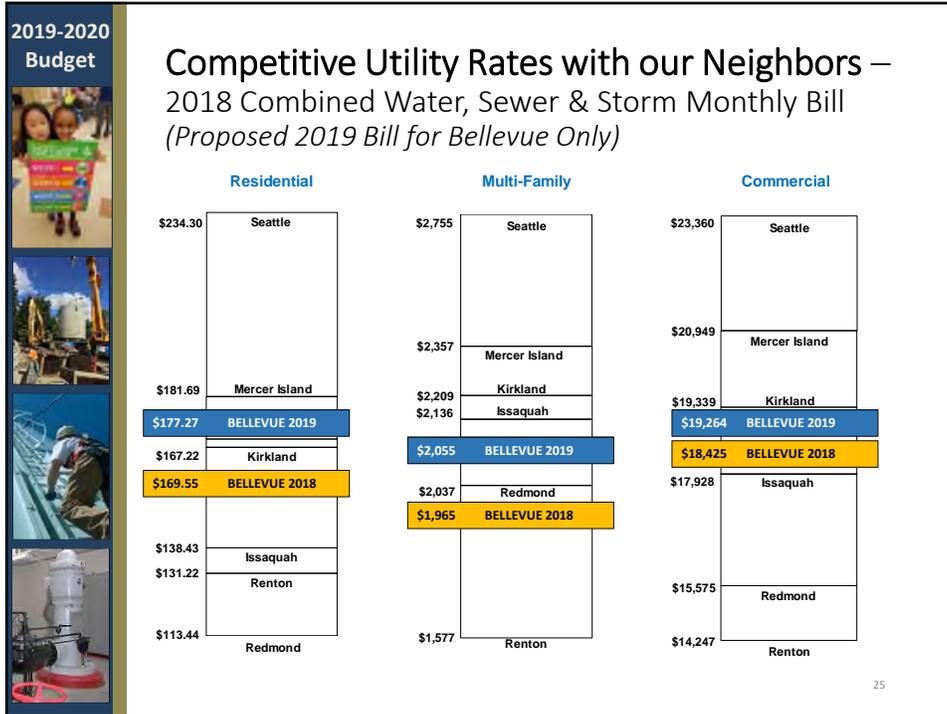
Water CIP per Capita

Jurisdiction	Average Annual Water CIP (\$M)	2017 Residential Population	Average Annual Water CIP per Capita
Bellevue	\$19.4	140,700	\$138
Mercer Island	\$3.3	24,210	\$136
Seattle	\$92.8	713,700	\$130
Issaquah	\$4.5	36,030	\$125
Renton	\$9.5	102,700	\$93
Redmond	\$2.9	62,110	\$47
Kirkland	\$1.6	86,080	\$19

Source: Jurisdiction adopted CIP budgets; Wa. State OFM April 2017 Official Population Estimates. Bellevue data includes the planned contribution to the renewal and replacement fund for the future replacement of water utility infrastructure.

22





2019-2020 Budget

Utilities Budget Review – Next Steps

	Environmental Services Commission	City Council
Q1	<ul style="list-style-type: none"> Proposed CIP changes CIP online open house 	<ul style="list-style-type: none"> Utilities financial policies Early Outlook Rates Forecast
Q2	<ul style="list-style-type: none"> Early Outlook Rates Forecast Budget proposals review Preliminary rates review Budget proposals recommendation to LT 	<ul style="list-style-type: none"> Budget public hearing #1
Q3	<ul style="list-style-type: none"> Final review of City Manager's proposed budget and rates 	<ul style="list-style-type: none"> Budget public hearing #2
Q4	<ul style="list-style-type: none"> Hold budget public hearing Budget & rates recommendation to Council 	<ul style="list-style-type: none"> Preliminary Budget review Budget public hearing #3 Budget & rates adoption

26

2019-2020
Budget



Community Engagement – Utilities Budget & Rates

- Environmental Services Commission meetings
- Online CIP Open House
- Business community - BDA, Chamber, BOMA
- Neighborhoods Leadership Group
- Bellevue Essentials

27