## Affordability Benchmarks & Evaluation for the Combined Sewer Overflow Program

April 17, 2020

**Seattle Public Utilities** 



#### **Project Objectives**

Use current Drainage and Wastewater Line of Business costs to determine Community Affordability and Customer Affordability for implementation of the Combined Sewer Overflow program.

- Assess Community Affordability using Environmental Protection Agency (EPA) Financial Capability Assessment Guidance.
- Assess Customer Affordability using 2018 Affordability Framework recommendations compiled by NACWA/AWWA/WEF
- Use the information for the Combined Sewer Overflow (CSO) Plan Update.



### **Community Affordability**

#### **1997 EPA Financial Capability Assessment** (FCA) Matrix for Community Affordability

Uses Median Household Income for the Residential Indicator plus Utility Financial Capability to determine:

Community ability to afford a Combined Sewer Overflow (CSO) Program and Length of Schedule for CSO Program

**Residential Indicator** (Cost per Household as a % on MHI) Low Mid-Range High (1.0% to 2.0%) (Above 2.0%) (Bebw 1.0%) 0.0% 2.0% 1.0%0.0 Weak (Below 1.5) Permittee Financial Capability Indicator Medium Burden High Burden High Burden 1.5 Mid-Range (1.5 to 2.5) Low Burden Medium Burden High Burden 2.5 RI: 2.04% Strong (Above 2.5) PI: 2.7 Low Burden Low Burden Medium Burden

FCA Matrix Showing SPU's Position Based on FCA Model Result



# 2018 Affordability Framework recommendations compiled by NACWA/AWWA/WEF

## SPU seeks to take advantage of the wealth of new research for evaluating affordability of drainage and wastewater rates

#### A Report by a Panel of the

NATIONAL ACADEMY OF PUBLIC ADMINISTRATION

Developing a New Framework for Community Affordability of Clean Water Services



Measuring Household Affordability for Water and Sewer Utilities

> Manuel P. Teodoro, PhD Texas A&M University mteodoro@tamu.edu

> > 20 September 2017

The Evolving Landscape for Financial Capability Assessment

> Clean Water Act Negotiations and the Opportunities of Integrated Planning





### Important numbers for Customer Affordability Analysis

Median Household Income in Seattle = \$93,481

20% Lowest Quintile Household Income = \$31,400

200% of Federal Poverty Level for family of 4 = \$51,500

King County Minimum Wage = \$15.00



#### **Customer Affordability - Household Burden**

HOUSEHOLD 2020 6.4% ↓ 7% ⊙ ↑ 10% ⊗ Household Burden - The Household Burden Indicator (HBI) is a metric calculated by dividing the total annual water service costs (water, wastewater and drainage) by the upper limit of the annual income of the 20<sup>th</sup> percentile (Lowest Quintile) of households in the Seattle.



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#### **Customer Affordability - Poverty Prevalence**

POVERTY PREVALENCE 2020 21% → 35% × Poverty Prevalence - The Poverty Prevalence Indicator (PPI) reports the percent of households within the City living at or below 200% of the Federal Poverty Level, as reported in the annual American Community Survey published by the US Census Bureau.



#### **Additional Measures of Customer Affordability**



Affordability Ratio (AR)- The AR<sub>20</sub> Ratio was developed by Professor Manny Teodoro.

Measures the percent of discretionary income being spent to pay for total annual stormwater, wastewater and water costs for a household at the Lowest Quintile Income level.



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#### **Additional Measures of Customer Affordability**



Bill in Hours at Minimum Wage - Developed by Professor Manny Teodoro.

Presents the number of hours of work per month at King County minimum wage (\$15/hour) required to pay the typical bimonthly total wastewater, stormwater and water service costs.



#### **Next Steps**

- Finish work
- Run alternative cash flow scenarios to calculate affordability measures.
- Discuss which measures best describe our customers situation

