

WATER SERVICE ASSET MANAGEMENT PLAN



November 28, 2016



2015 CITIZEN SURVEY - WATER SYSTEM

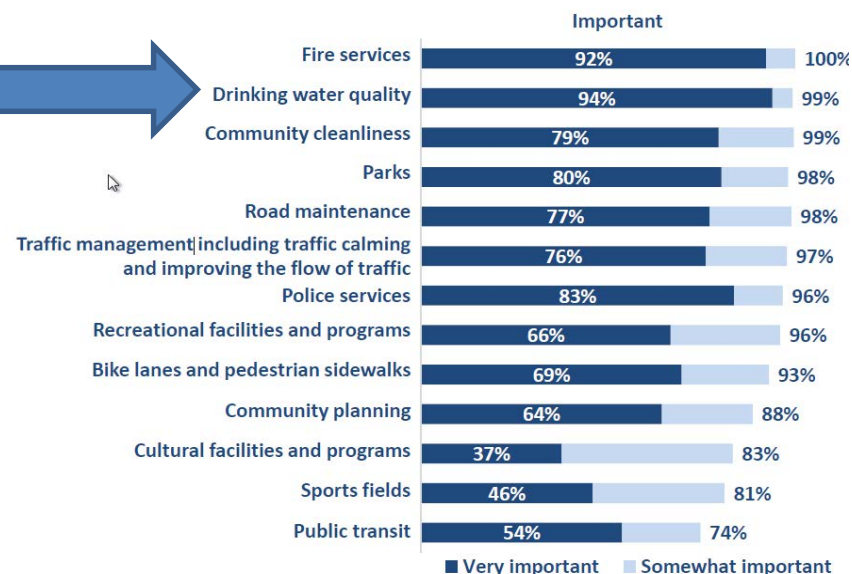
- ▶ Drinking Water Quality (82% satisfied, 47% very satisfied)*

- ▶ 2nd most important service.

- ▶ Top investment priority.



Importance of Specific City Services



*** While all respondents were asked about drinking water, the City of Kelowna's water utility only provides drinking water to 52% of citizens. The majority of the remaining drinking water supply is provided by four independent irrigation districts.**

WHAT IS INFRASTRUCTURE ASSET MANAGEMENT?

- ▶ A comprehensive process to ensure that delivery of services from infrastructure is provided in a financially sustainable manner.

- ▶ Key elements of asset management include:
 - ▶ Taking a lifecycle approach to infrastructure investment,
 - ▶ Defining levels of service and monitoring performance,
 - ▶ Developing cost-effective management strategies for infrastructure renewal and infrastructure that supports growth and improves service,
 - ▶ Managing risks associated with asset failures,
 - ▶ Continuous improvement in asset management practice.

WHY DO WE NEED ASSET MANAGEMENT PLANS?

- ▶ Governance and accountability,
- ▶ Enhance service management and customer satisfaction,
- ▶ Improve risk management,
- ▶ Improve financial efficiency,
- ▶ To be eligible for grants.

KELOWNA WATER UTILITY QUICK FACTS

- ▶ Service approximately 52% of City or about 65,000 customers,
- ▶ Remainder of City serviced primarily by 4 Irrigation District and 27 private suppliers,
- ▶ Delivers 90 million litres of water per day during peak summer demand,
- ▶ System Infrastructure valued at \$417 million,
- ▶ City has not had a water quality advisory in 20-years.

WATER SYSTEM SCORE CARD

Asset component	Quantity	Replacement value (\$ million)	Expected remaining life	Age rating
Watermain	413 km	306.4	60%	Good
Booster Stations & PRV's	53	18.2	51%	Fair
Source Pump Stations	4	17.3	61%	Good
UV Treatment Facilites	4	19.3	87%	Very good
Reservoirs	24	44.6	60%	Good
Meters	17,036	11.0	20%	Poor
Total		417		

Rating scale (remaining service life)



Very good (100-80%)

Good (79-60%)



Fair (59-40%)

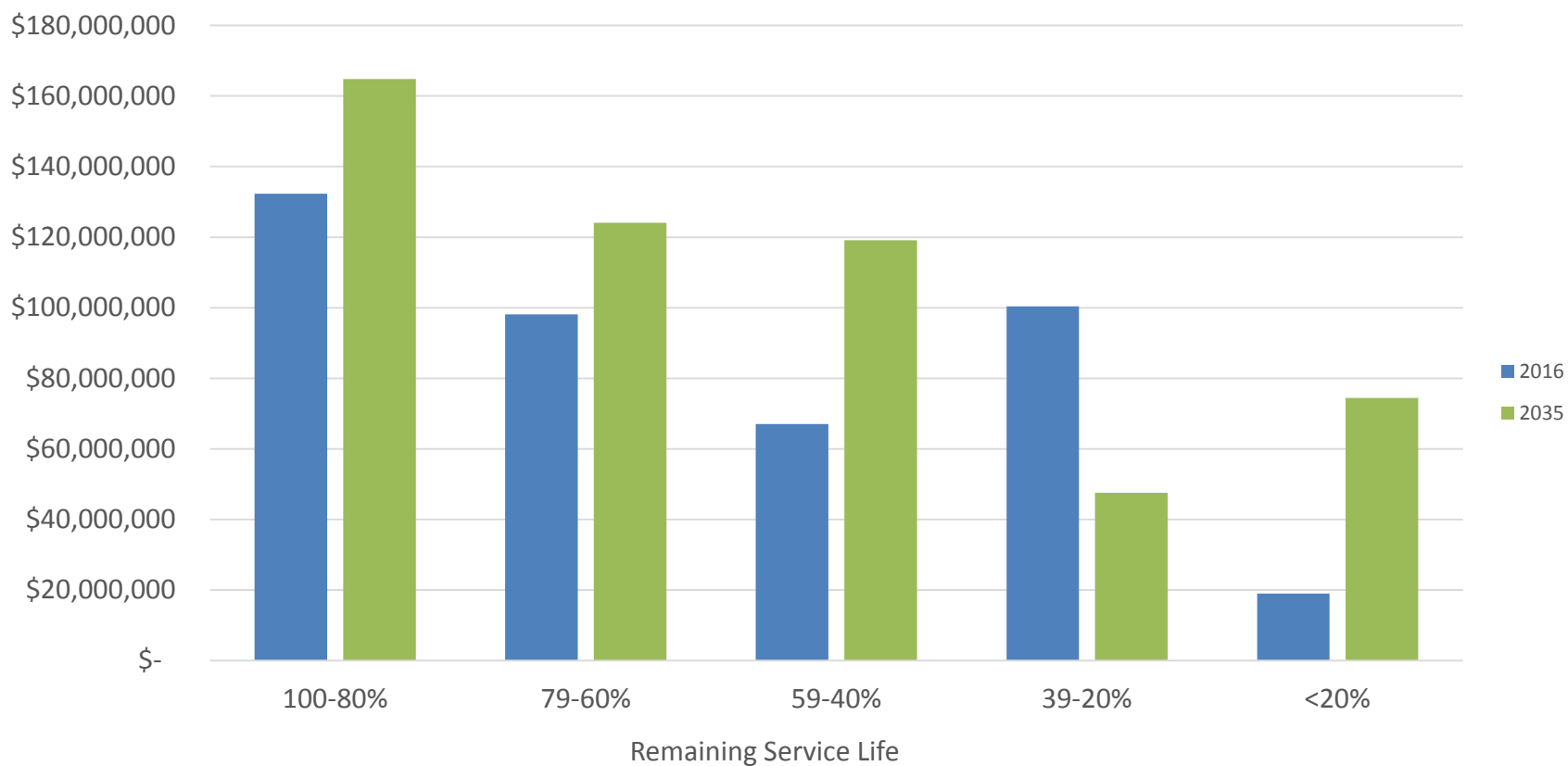
Poor (39-20%)



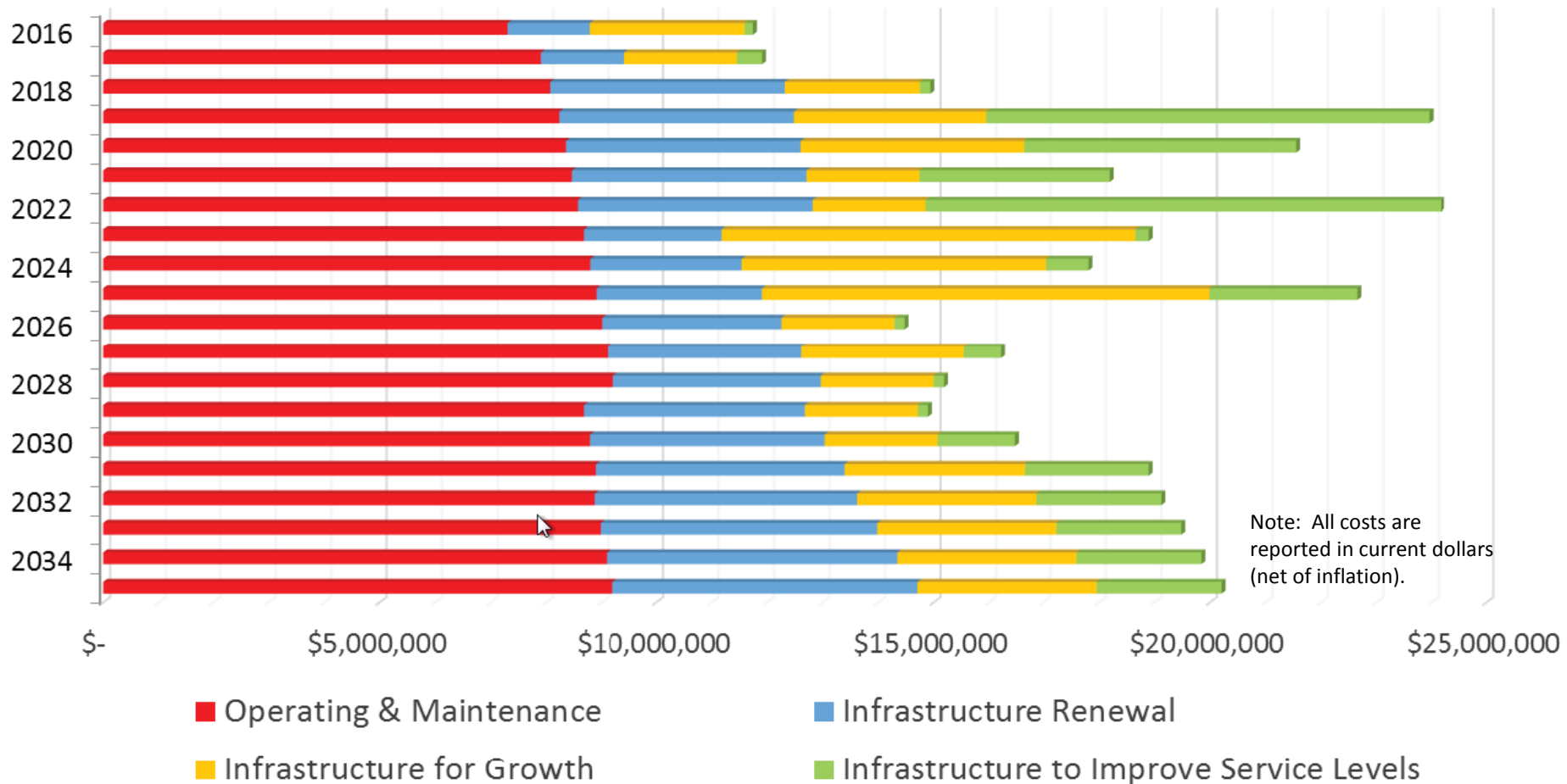
Very poor (19-0%)

WATER SYSTEM CONDITION

Replacement Value of Infrastructure vs Remaining Service Life



20-YEAR FUNDING NEEDS



WATER SYSTEM RISKS AND RESPONSE

Risks	Response
Assets are depreciating faster than they are being renewed.	Renewal Funding is being increased over the next 20-Years to more sustainable levels.
Changing water regulations may require increased infrastructure investment.	Work with provincial regulators to understand the need and timing of any changes so that the City can plan in advance.
Water System is aging and there may be increased risk of asset failure.	Invest in tools and resources to improve preventative maintenance, condition assessment and extend asset service life.

NEXT STEPS

- ▶ Regular Updates to Asset Management Plan,
- ▶ Asset Management System required for better preventative maintenance, condition assessment and to extend assets service life,
- ▶ Continually improve asset management practice.

QUESTIONS?