

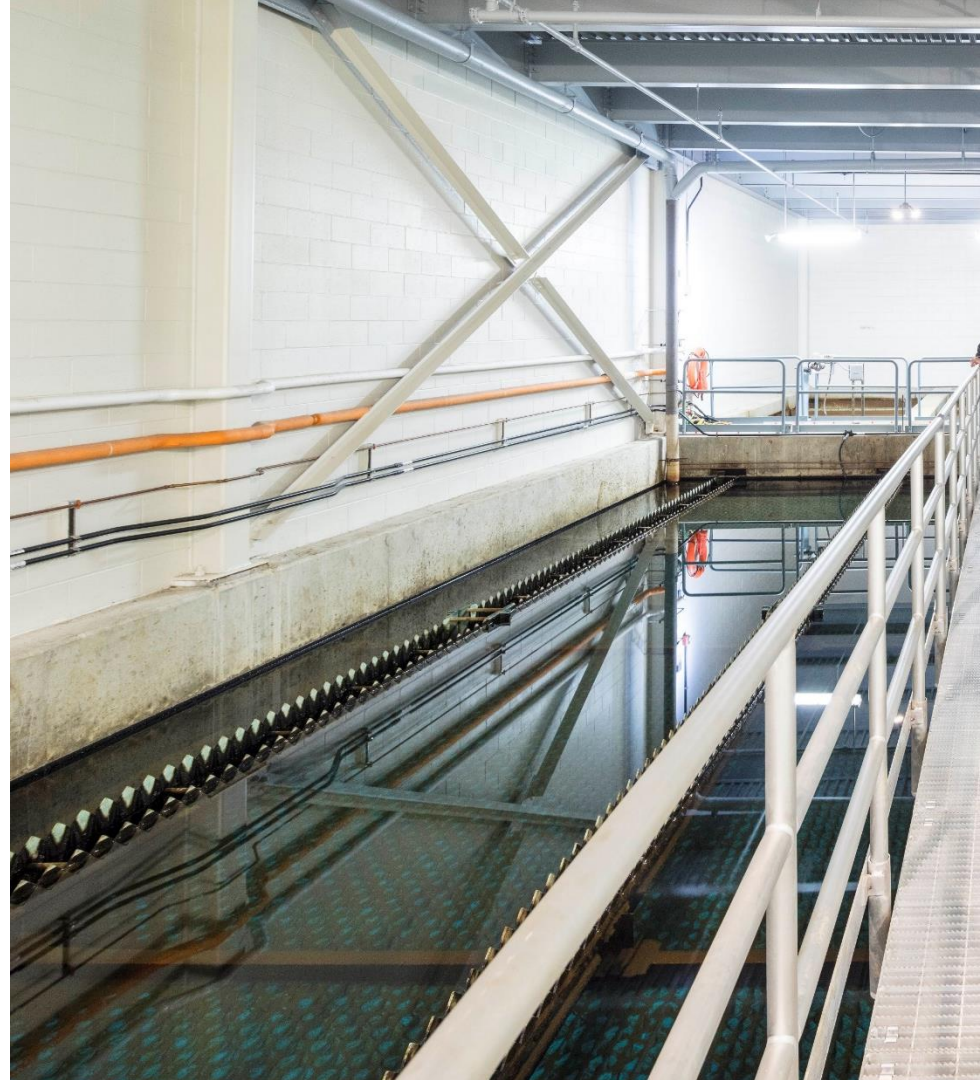
Using Benchmarking to Put Data in the Hands of Municipal Infrastructure Managers & Operators

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Session Outline

- History of CIBI
- CIBI outputs
- How the data is used



Introduction

What is Benchmarking?

The process of comparing products, services, and practices with others to gain actionable insights that will help your organization optimize its performance.

1) How well are we doing?

2) How do we compare?

3) Are we providing value for money?

4) How do we improve?

Introduction – CIBI Background



1997 – Pilot study including 4 cities

2001 – Major expansion to include 35 cities in W/ WW/ SW

Present – 40+ Municipalities



7 Service Areas



**Water
Treatment**



**Water Utility &
Distribution**



**Wastewater
Treatment**



**Wastewater Utility &
Collection**



Solid Waste

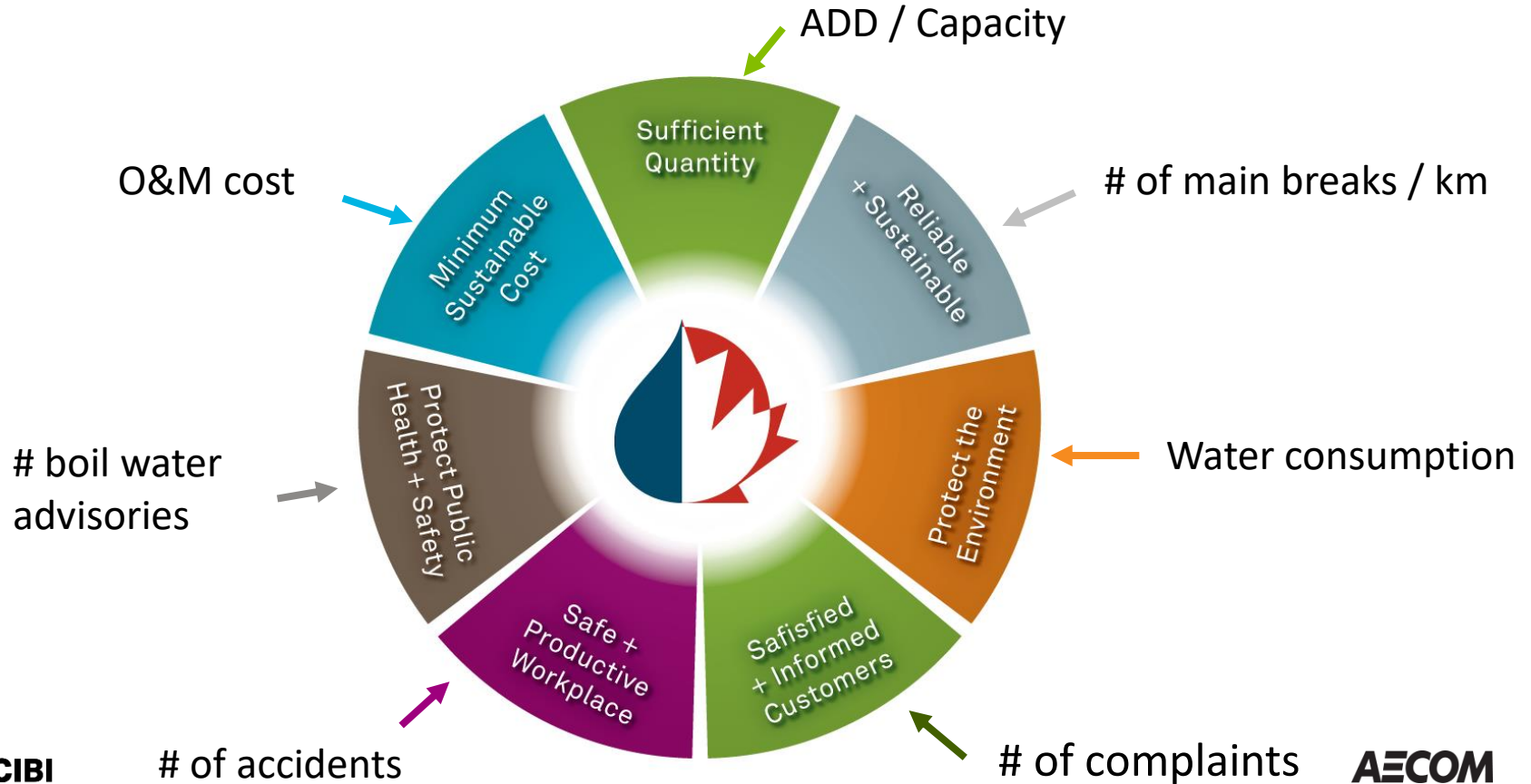


Stormwater



Roads

Goal Model & KPI's



Project Outputs

Metric Benchmarking (KPI Graphs)

- How often should I.....?
- How many staff?
- How much does it cost?
- What level of service are we providing and how does it compare with others?
- Communication tool

Collaboration

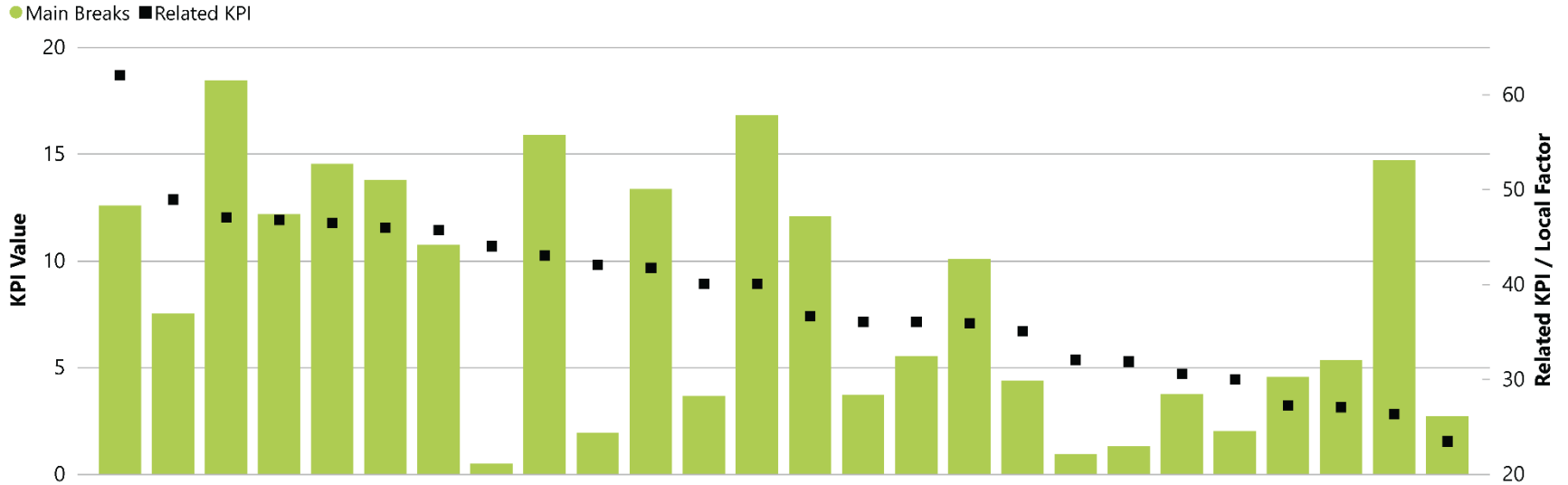
- How do you...?



Main Breaks and Pipe Age

Displaying: Main Breaks (# / 100 km Length) - All Orgs.

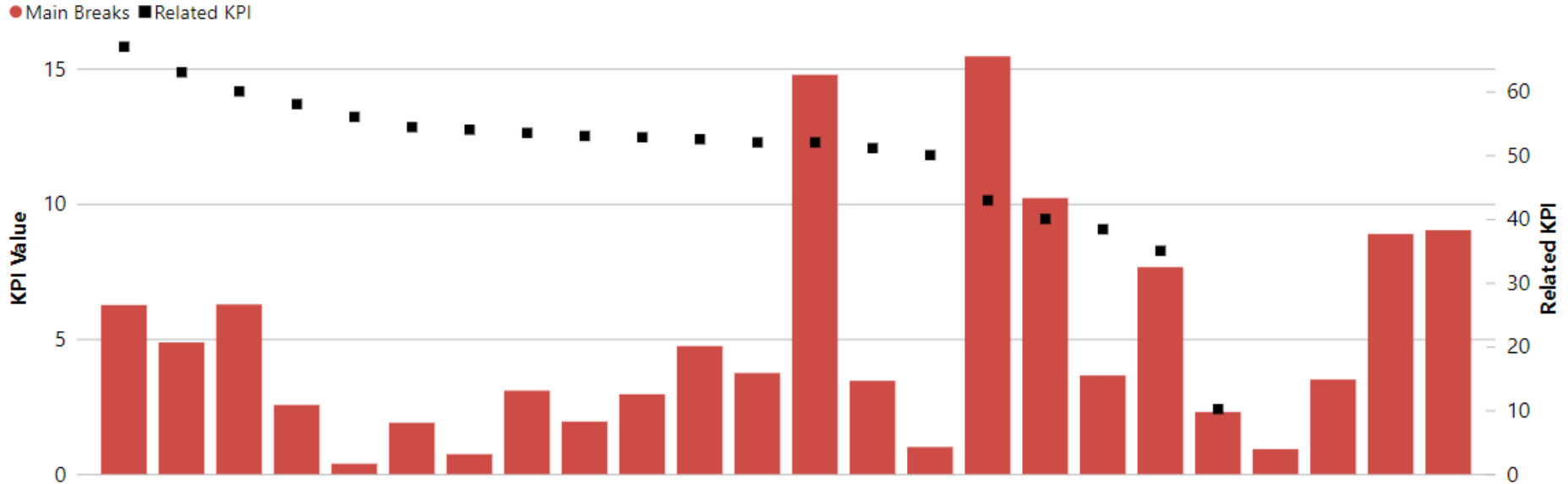
Related KPI: Average age of watermains (Years)



Main Breaks and Operating Pressure

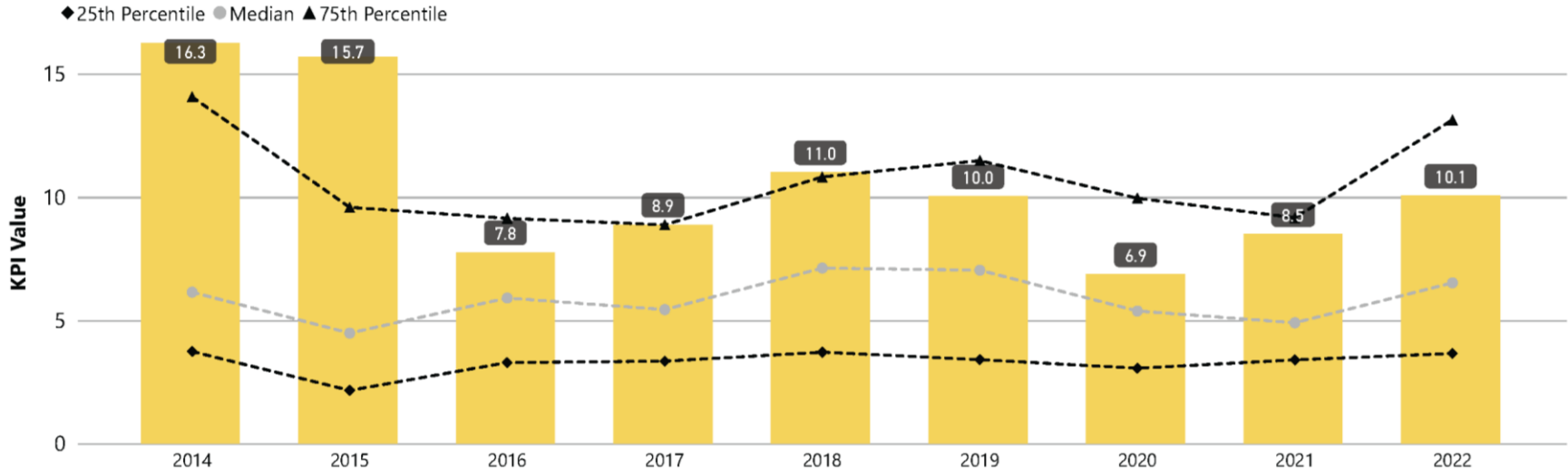
Displaying: Main Breaks (# / 100 km Length) - All Orgs.

Related KPI: Average Operating Pressure (m of head)



Multi-year metric benchmarking

Displaying: Main Breaks (# / 100 km Length)

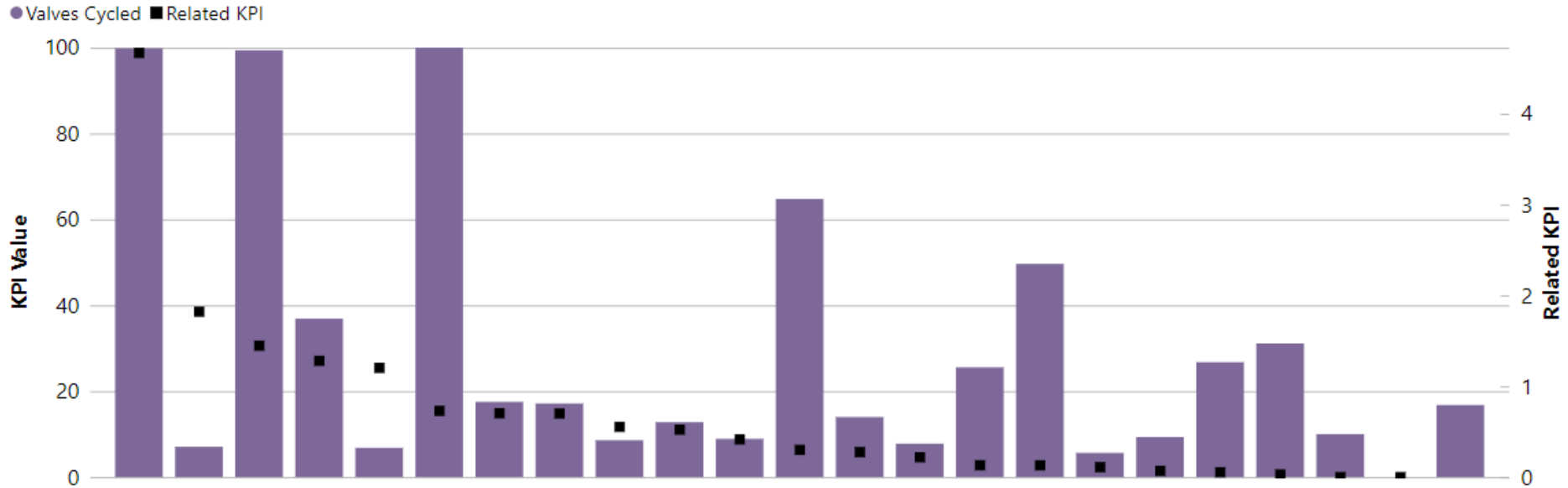


NOTE: Zero values will have data labels above the respective year. If data labels are missing then the value is missing / blank.

Reducing the Impact of Main Breaks

Displaying: Valves Cycled (%) - All Orgs.

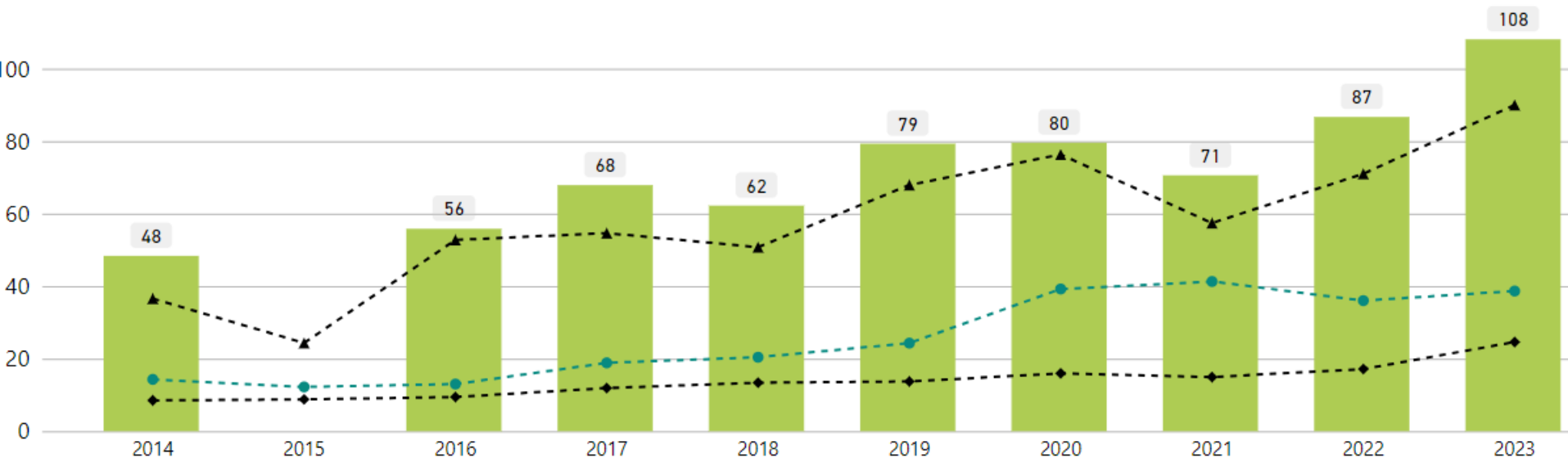
Related KPI: Inoperable or Leaking Valves (%)



Increasing Costs....

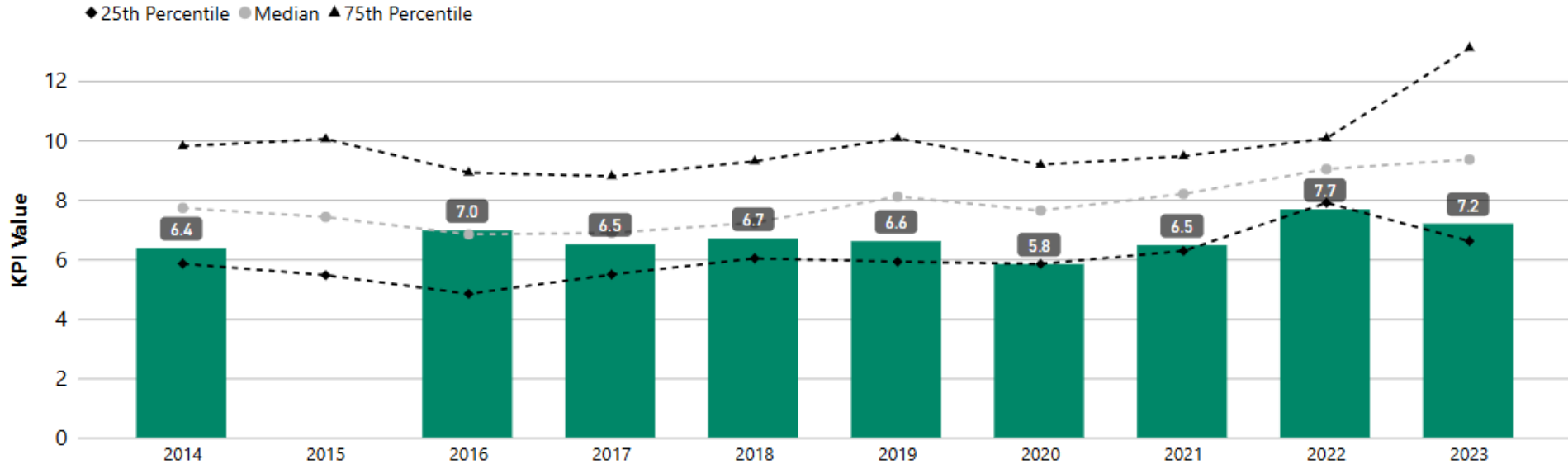
Displaying: Chemical Cost / Volume Treated (\$ / ML Treated)

◆ 25th Percentile ● Median ▲ 75th Percentile



O&M Budgets

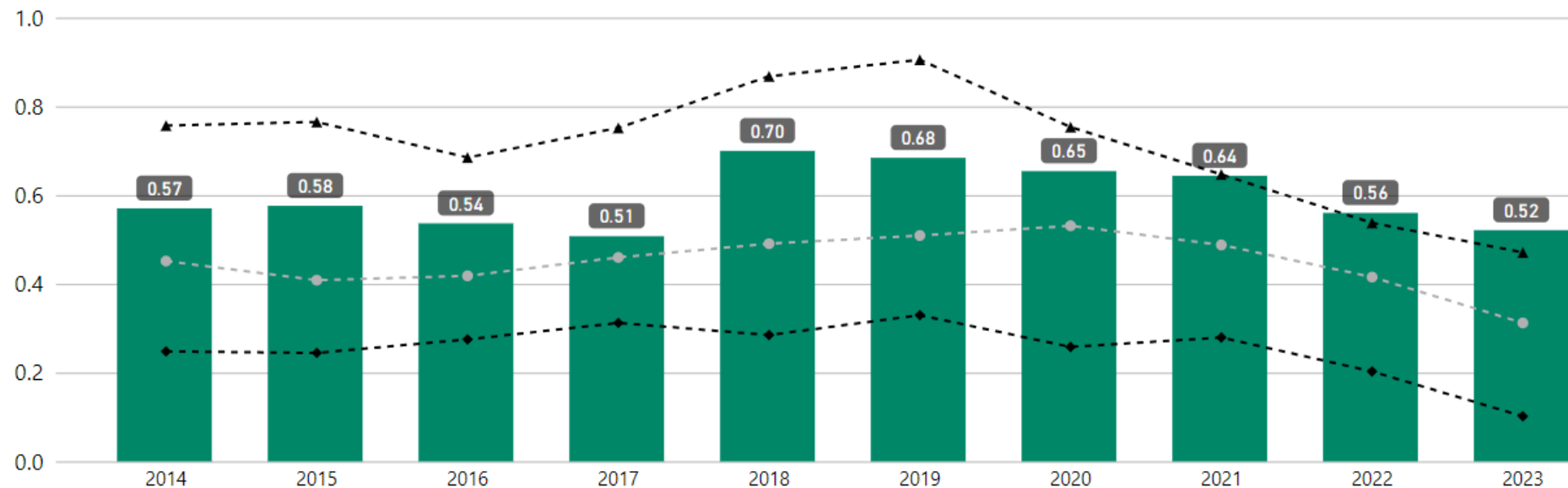
Displaying: O&M Cost (('000 \$) / km Length)



O&M Budgets

Displaying: Annual O&M Cost as a Percentage of Replacement Value (%)

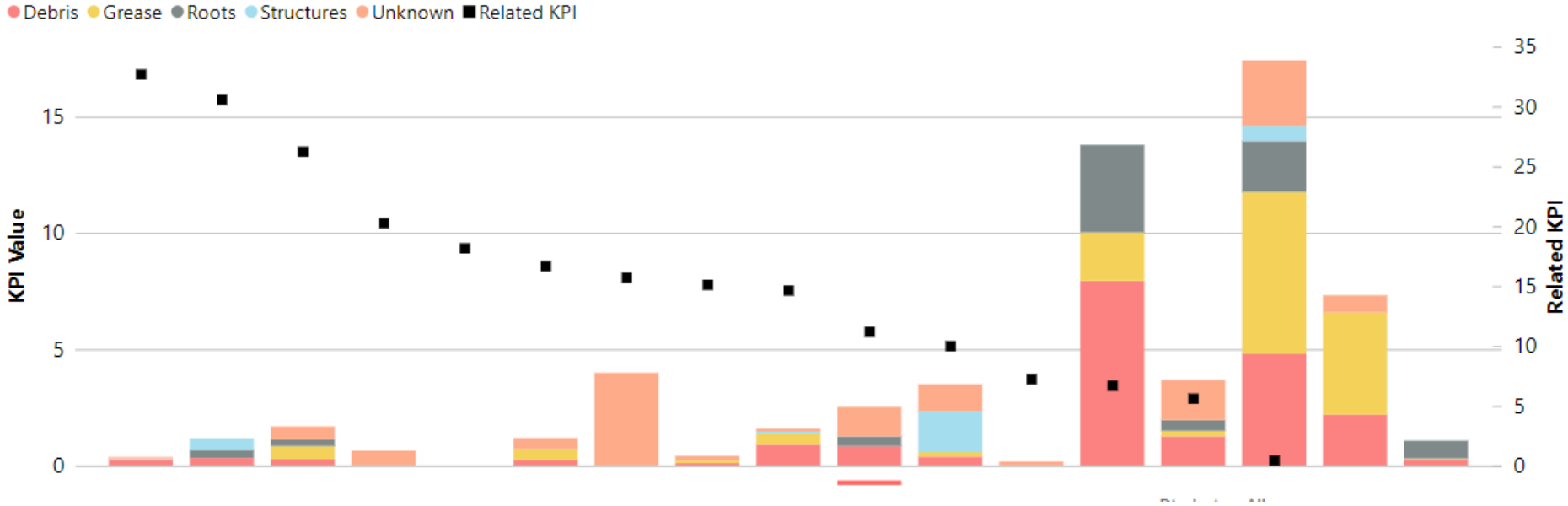
AR ◆ 25th Percentile ● Median ▲ 75th Percentile



Sewer Blockages

Displaying: Number of Mainline Sewer Blockages by Cause (# / 100 km) - All Orgs.

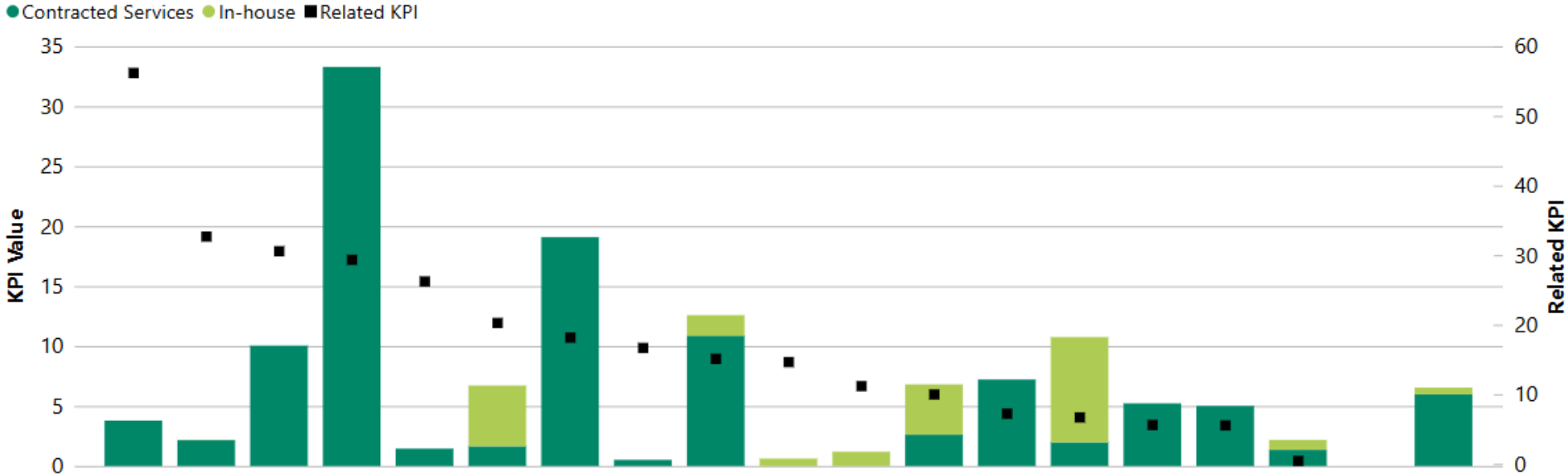
Related KPI: Percent of Sewer Cleaned (%)



Sewer Inspections and Cleaning

Displaying: Percent of Length CCTV Inspected (%) - All Orgs.

Related KPI: Percent of Sewer Cleaned (%)



Annual workshop



Small breakout sessions with discussion-based format



Confidentiality Agreement

- Participants are required to keep all outcomes confidential to their organization
- Blinded graphs are permitted outside of the group
- Non-blinded group or customized graphs are permitted with participants' consent

The results of the benchmarking process are used within the group for the sole purpose of individual utility and participant group performance improvement and education.

Annual Process



January

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Jan 25 Proposals Distributed

February

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29		

Feb 28 Data Portal Opens for 2023 Data Collection

Feb 29 Data Collection Portal Training Sessions

March

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Mar 11 Data Collection Portal Training Sessions

Draft Data Collection

April

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

Apr 9 - 11 Summit Workshop in Victoria, BC

May

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

June

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

Jun 17 Draft Data Deadline

Draft Data Review and Corrections

July

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

August

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

September

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

October

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

November

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

December

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Group Summary Sessions

Executive Summary Reports Available

Questions?

