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Wastewater Utility & Collection

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Goal	KPI	Applicable System Type	Breakdown	Units
Ensure Adequate Capacity	Connections with Sanitary Flooding by Mainline Issue	Collection	Main Blockage	# / 1,000 Service Connections
			Other	# / 1,000 Service Connections
			PS Failure	# / 1,000 Service Connections
	Lab Service Workorders Exceeding Turnaround Time	All Systems	Lab Service Workorders Exceeding Turnaround Time	%
	Reported Overflows due to Capacity	All Systems	Reported Overflows due to Capacity	# / 100 km
Have Satisfied and Informed Customers	Wastewater Related Customer Complaints	All Systems	Wastewater Related Customer Complaints	# / 1,000 People Served
Meet Service Requirements with Economic Efficiency	Annual O&M Cost as a Percentage of Replacement Value	All Systems	Annual O&M Cost as a Percentage of Replacement Value	%
	Cost of CCTV Inspection	Collection	Contracted Services	$ / km
			In-house	$ / km
	Cost of Cleaning Hydraulically	Collection	Cost of Cleaning Hydraulically	$ / km Length Cleaned
	Debt Payment	All Systems	Interest	$
			Principal	$
	Debt Ratio	All Systems	Debt Ratio	%
	FTEs	All Systems	Laboratory	# / 100 km Length
			O&M	# / 100 km Length
			Program Support	# / 100 km Length
			Supervisor/ Management	# / 100 km Length
			Tech / Eng	# / 100 km Length
	Internal Laboratory Services Cost	All Systems	Internal Laboratory Services Cost	$ / Internal Parameters Analyzed
	O&M Cost + Capital Reinvestment	All Systems	Capital Reinvestment	('000 $) / km Length
			O&M	('000 $) / km Length
	Pipe and Pump O&M Cost	All Systems	Pipe	('000 $) / km Length
			Pump	('000 $) / km Length
	Pump Station Energy Consumption	All Systems	Diesel	kWh / Pump Station Horsepower
			Electricity	kWh / Pump Station Horsepower
			Natural gas	kWh / Pump Station Horsepower
	Pump Station Energy Cost	All Systems	Diesel	$ / HP
			Electricity	$ / HP
			Natural gas	$ / HP
	Pump Station O&M Cost	All Systems	Pump Station O&M Cost	$ / Pump Station Horsepower
	Sewer Charge for a Typical Size Residential Connection using Canadian Average Consumption Rate (210m^3 of Water / Year)	Collection	Sewer Charge for a Typical Size Residential Connection using Canadian Average Consumption Rate (210m^3 of Water / Year)	$
	Total Cost to Provide Wastewater Services	All Systems	Capital Cost	$ / Population Served
			Customer Billing	$ / Population Served
			Debt Servicing	$ / Population Served
			Indirect Cost	$ / Population Served
			O&M Cost	$ / Population Served
			Regional Treatment Cost	$ / Population Served
	Total Laboratory Services Costs	All Systems	External	$ / Population Served
			Internal	$ / Population Served
	Total O&M Cost	All Systems	Energy	('000 $) / km Length
			Equipment and Materials	('000 $) / km Length
			External Contracted Services	('000 $) / km Length
			Internal Contracted Services	('000 $) / km Length
			Other Costs	('000 $) / km Length
			Staff Training	('000 $) / km Length
			Wages	('000 $) / km Length
	Utility Indirect Costs / Total Utility Revenue	All Systems	Administrative Overheads	%
			Dividends Paid to City	%
			Property Taxes	%

Goal	KPI	Applicable System Type	Breakdown	Units
Protect the Environment	Breakdown of External Lab Parameters Analyzed	All Systems	Inorganic	%
			Metals	%
			Micro	%
			Organic	%
	Breakdown of Internal Lab Parameters Analyzed	All Systems	Inorganic	%
			Metals	%
			Micro	%
			Organic	%
	Breakdown of Internal vs. External Lab Parameters Analyzed	All Systems	External	%
			Internal	%
	Number of Lab Non-Conformances	All Systems	Number of Lab Non-Conformances	# / 1,000 Samples
	Reported Overflows by Cause	All Systems	Capacity	# / 100 km Length
			Internal Blockage	# / 100 km Length
			Other	# / 100 km Length
			PS Failure	# / 100 km Length
	Total Annual Internal Lab Parameters Analyzed	All Systems	Total Annual Internal Lab Parameters Analyzed	# / FTE
Provide a Safe and Productive Workplace	Distribution of Workforce by Age	All Systems	20-30 yrs	%
			31-40 yrs	%
			41-50 yrs	%
			51-60 yrs	%
			61-70 yrs	%
	Field Accidents with Lost Time	All Systems	Field Accidents with Lost Time	# / 1,000 O&M Labour Hours
	Lost Hours Due to Field Accidents	All Systems	Lost Hours Due to Field Accidents	# / 1,000 O&M Labour Hours
	Sick Days Taken	All Systems	Sick Days Taken	# / O&M Employee
	Total Overtime Hours / Total Paid O&M Hours	All Systems	Total Overtime Hours / Total Paid O&M Hours	%
	Unavailable O&M Hours / Total Paid O&M Hours	All Systems	Expended Banked Time	%
			Long Term Leave	%
			Other	%
			Other Training	%
			Safety Training	%
			Sick Time	%
			Union Time	%
			Vacation	%
Provide Reliable Service and Infrastructure	Capital Reinvestment / Replacement Value	All Systems	Capital Reinvestment / Replacement Value	%
	Corrective Maintenance Hours / Total Maintenance Hours	All Systems	Corrective Maintenance Hours / Total Maintenance Hours	%
	Forcemain Sewer Repairs	All Systems	Emergency	# / 100 km
			Scheduled	# / 100 km
	Gravity Sewer Repairs	All Systems	Emergency	# / 100 km
			Scheduled	# / 100 km
	Number of Mainline Sewer Blockages by Cause	All Systems	Debris	# / 100 km
			Grease	# / 100 km
			Roots	# / 100 km
			Structures	# / 100 km
			Unknown	# / 100 km
	Number of Service Connection Blockages Resulting in Back-ups	Collection	Debris	# / 1,000 Service Connections
			Grease	# / 1,000 Service Connections
			Roots	# / 1,000 Service Connections
			Structures	# / 1,000 Service Connections
			Unknown	# / 1,000 Service Connections
	Percent of Length CCTV Inspected	All Systems	Contracted Services	%
			In-house	%
	Percent of Manholes Inspected	All Systems	Percent of Manholes Inspected	%
	Percent of Manholes Repaired and Replaced for I&I	All Systems	Percent of Manholes Repaired and Replaced for I&I	%
	Percent of Sewer Length Renewed	All Systems	Relined	%
			Replaced	%
	Pump Station Failure by Cause	All Systems	Blockages	# / Pump Station
			Equipment Fault	# / Pump Station
			Loss of Power	# / Pump Station
			Other Issues	# / Pump Station
	Service Connection Repairs & Replacement	Collection	Emergency	# / 1,000 Service Connections
			Scheduled	# / 1,000 Service Connections
	Total Length of Sewer Cleaned / Total Sewer Length	All Systems	Total Length of Sewer Cleaned / Total Sewer Length	%
	Total Maintenance Hours	All Systems	Corrective	Hours / km Length
			Preventative	Hours / km Length
	Total Number of CSOs	Collection	Total number of CSOs	#
	Volume of CSOs as a Percentage of Total Wastewater Volume	All Systems	Volume of CSOs as a Percent of Total Wastewater Volume	%

About AECOM

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