

WASTE MANAGEMENT



VALUE PROPOSITION

I need my waste collected in a reliable manner and as scheduled. I expect my waste to be managed in an environmentally sustainable way and that any issues are addressed in a timely manner.

KEEP IN MIND: Influencing Factors

Influencing factors can create variances in comparison data from year-to-year and from municipality-to-municipality.



Diversion Efforts

Nature and extent of municipality's diversion efforts



Education

How municipalities educate citizens through services and programs



Geography

Service provisions are impacted by various population types



Government Structure

Single-tier vs. Upper-tier municipalities



Infrastructure

Accessibility and distance to transfer stations and landfills



Organizational Form

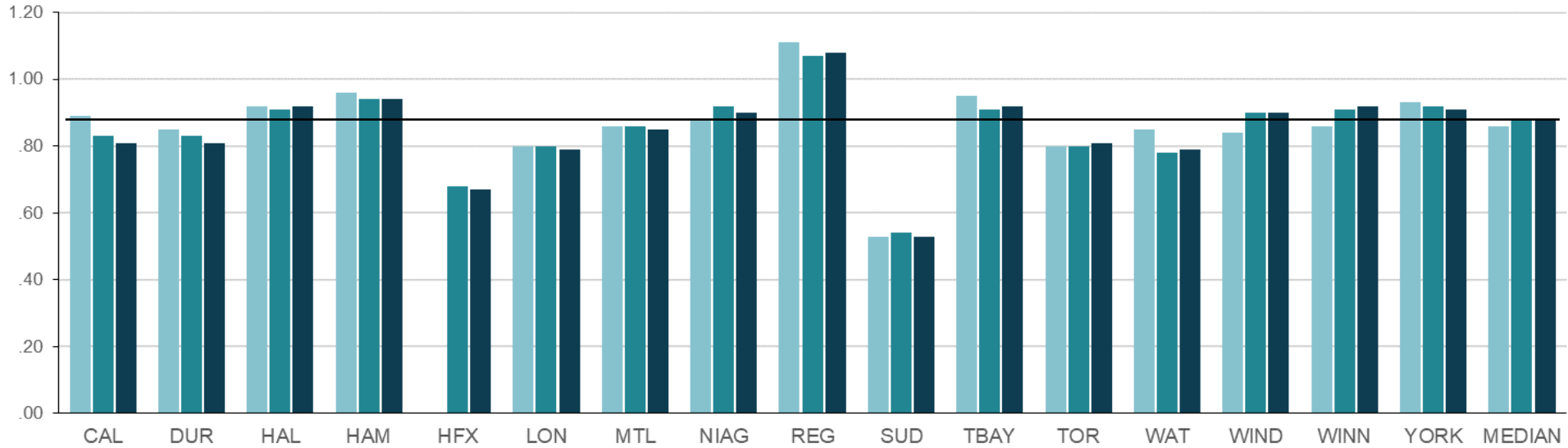
Different service levels and standards

For a full description of influencing factors, please go to: www.mbncanada.ca

Waste Management

Figure 34.1 Tonnes of All Residential Material Collected per Household

Residential waste includes organics, blue box, leaf and yard, municipal hazardous or special waste, other recyclable materials such as wood, metal and tires, as well as construction and demolition materials.



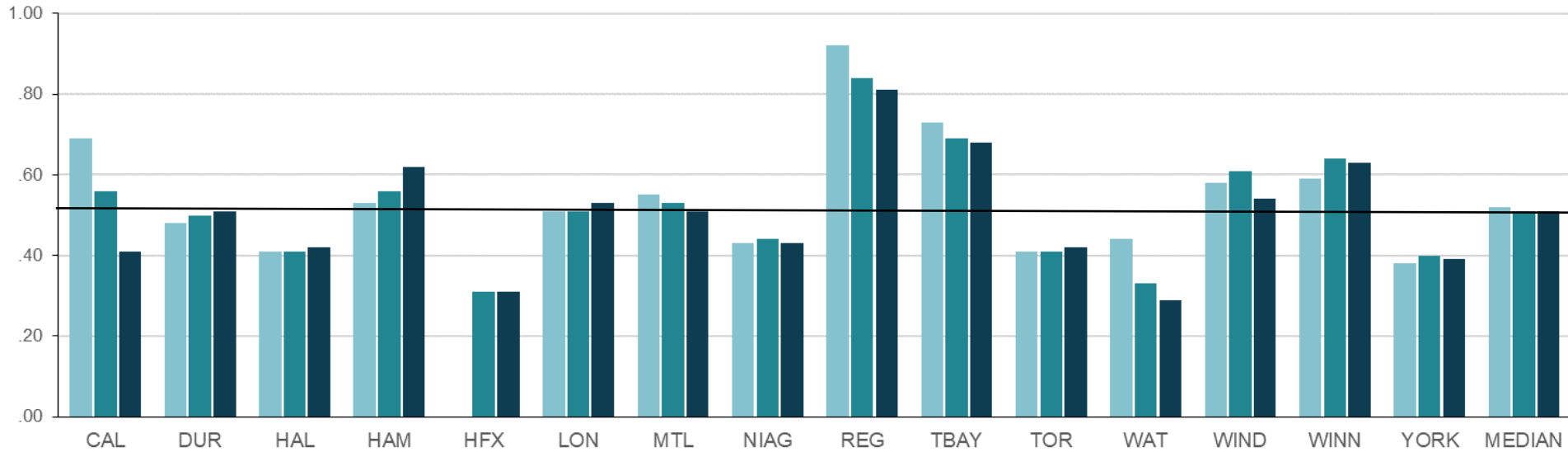
2016	0.89	0.85	0.92	0.96	N/A	0.80	0.86	0.88	1.11	0.53	0.95	0.80	0.85	0.84	0.86	0.93	0.86
2017	0.83	0.83	0.91	0.94	0.68	0.80	0.86	0.92	1.07	0.54	0.91	0.80	0.78	0.90	0.91	0.92	0.88
2018	0.81	0.81	0.92	0.94	0.67	0.79	0.85	0.90	1.08	0.53	0.92	0.81	0.79	0.90	0.92	0.91	0.88

Source: SWST205 (Service Level)

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Figure 34.2 Tonnes of Residential Solid Waste Disposed per Household

This measure indicates the amount of solid waste (or garbage) that is sent to landfills.



2016	0.69	0.48	0.41	0.53	N/A	0.51	0.55	0.43	0.92	0.73	0.41	0.44	0.58	0.59	0.38	0.52
2017	0.56	0.50	0.41	0.56	0.31	0.51	0.53	0.44	0.84	0.69	0.41	0.33	0.61	0.64	0.40	0.51
2018	0.41	0.51	0.42	0.62	0.31	0.53	0.51	0.43	0.81	0.68	0.42	0.29	0.54	0.63	0.39	0.51

Source: SWST220 (Service Level)

Hamilton: The increase in 2018 was primarily due to the temporary shut down of the Central Composting Facility.

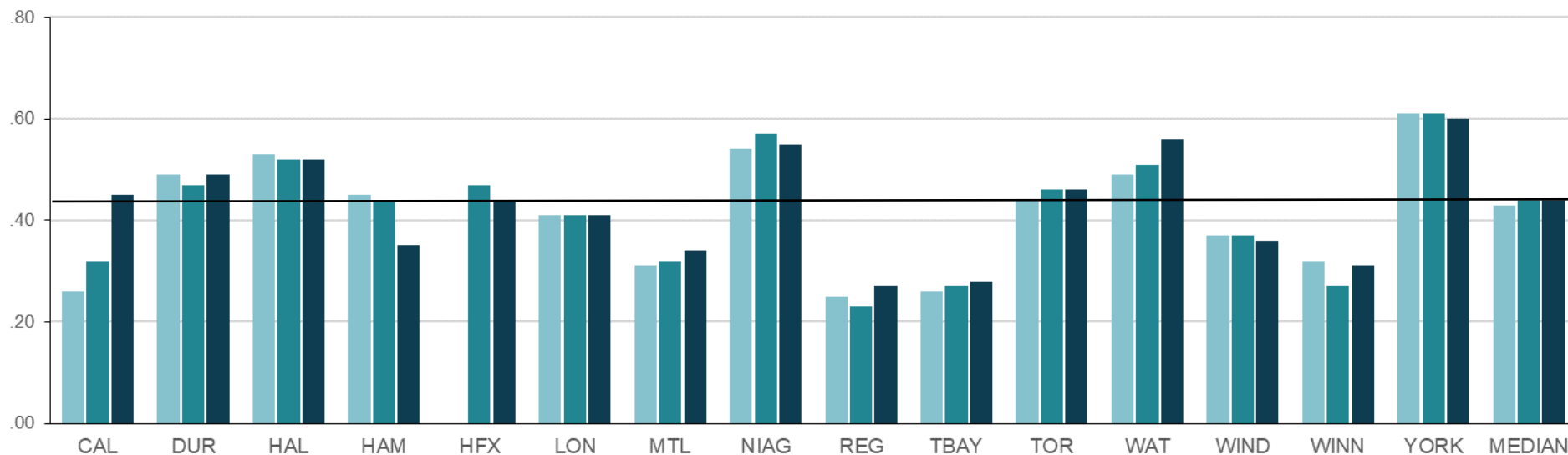
Sudbury: Does not report - unable to separate residential tonnage.

Windsor: 2017 results are high due to a catastrophic flooding that occurred in 2017.

Waste Management

Figure 34.3 Tonnes of Residential Solid Waste Diverted per Household

This measure demonstrates the tonnes of residential waste diverted away from landfills and incineration through programs such as organics, blue box, leaf and yard, municipal hazardous or special waste and other recyclable materials.



2016	0.26	0.49	0.53	0.45	N/A	0.41	0.31	0.54	0.25	0.26	0.44	0.49	0.37	0.32	0.61	0.43
2017	0.32	0.47	0.52	0.44	0.47	0.41	0.32	0.57	0.23	0.27	0.46	0.51	0.37	0.27	0.61	0.44
2018	0.45	0.49	0.52	0.35	0.44	0.41	0.34	0.55	0.27	0.28	0.46	0.56	0.36	0.31	0.60	0.44

Source: SWST235 (Service Level)

Calgary: The large increase in diversion was due to the implementation of the Green Cart Program and change to every other week garbage collection, which was completed in the second half of 2017. 2018 was the first full year of program results.

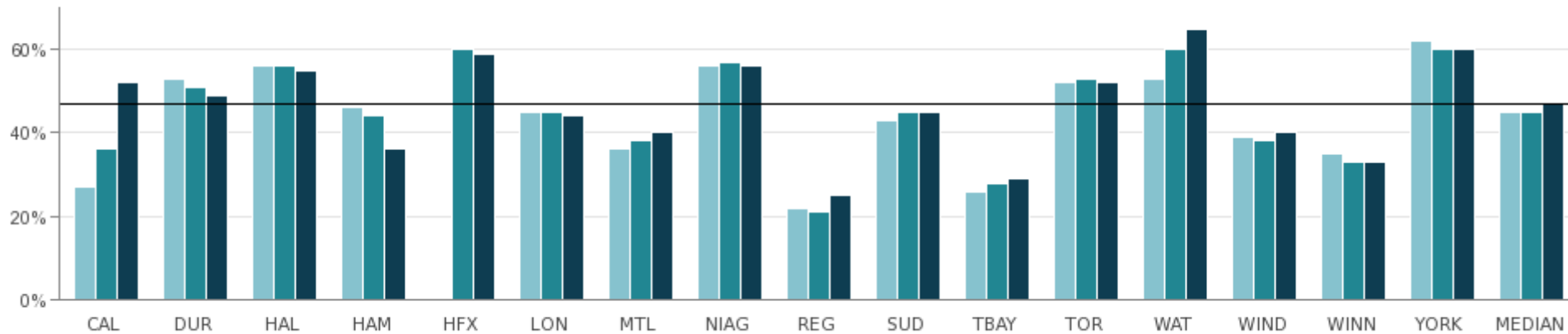
Hamilton: The decrease in 2018 was primarily due to the temporary shut down of the Central Composting Facility.

Sudbury: Does not report - unable to separate residential tonnage.

Waste Management

Figure 34.4 Percent of Residential Solid Waste Diverted

This measure demonstrates the percent of residential waste diverted away from landfills and incineration through programs such as organics, blue box, leaf and yard, municipal hazardous or special waste and other recyclable materials, e.g. wood, metal, tires.



2016	27%	53%	56%	46%	N/A	45%	36%	56%	22%	43%	26%	52%	53%	39%	35%	62%	45%
2017	36%	51%	56%	44%	60%	45%	38%	57%	21%	45%	28%	53%	60%	38%	33%	60%	45%
2018	52%	49%	55%	36%	59%	44%	40%	56%	25%	45%	29%	52%	65%	40%	33%	60%	47%

Source: SWST105 (Community Impact). Formerly SWST105M.

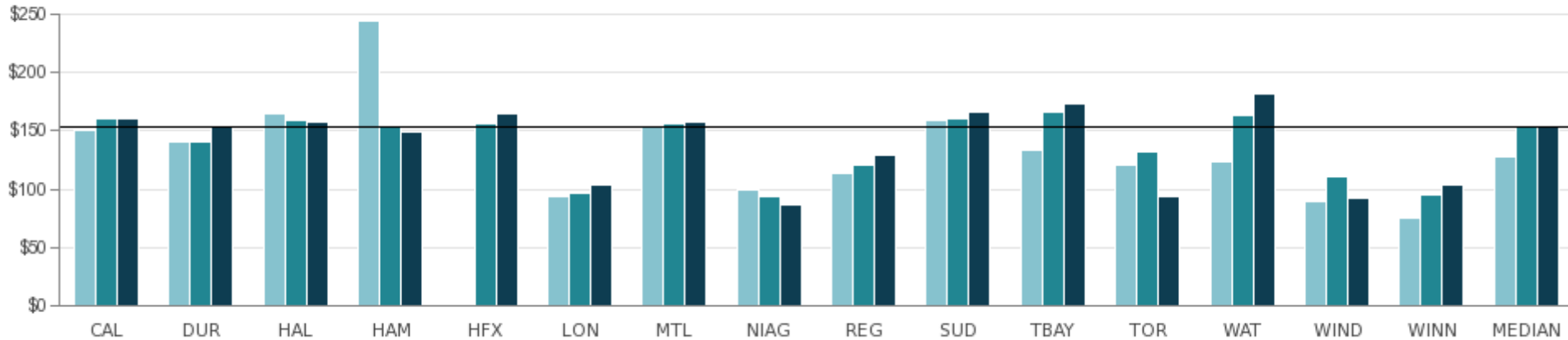
Calgary: The large increase in diversion was due to the implementation of the Green Cart Program and change to every other week garbage collection, which was completed in the second half of 2017. 2018 was the first full year of program results.

Hamilton: The decrease in 2018 was primarily due to the temporary shut down of the Central Composting Facility.

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Figure 34.5 Total Cost for Garbage Collection per Tonne - All Property Classes

This measure reflects the total cost for garbage collection for all property classes which includes residential, and industrial, commercial and institutional (ICI) locations on a per tonne basis.



2016	\$151	\$140	\$165	\$245	N/A	\$94	\$153	\$99	\$113	\$159	\$133	\$121	\$124	\$90	\$75	\$129
2017	\$160	\$141	\$159	\$154	\$156	\$96	\$156	\$94	\$120	\$160	\$167	\$132	\$164	\$111	\$95	\$154
2018	\$161	\$154	\$158	\$149	\$165	\$103	\$158	\$87	\$129	\$167	\$173	\$93	\$182	\$92	\$104	\$154

Source: SWST311T (Efficiency)

Hamilton: The decrease from 2016 to 2017 was due to the reallocation of costs for the City's recycling collection contract.

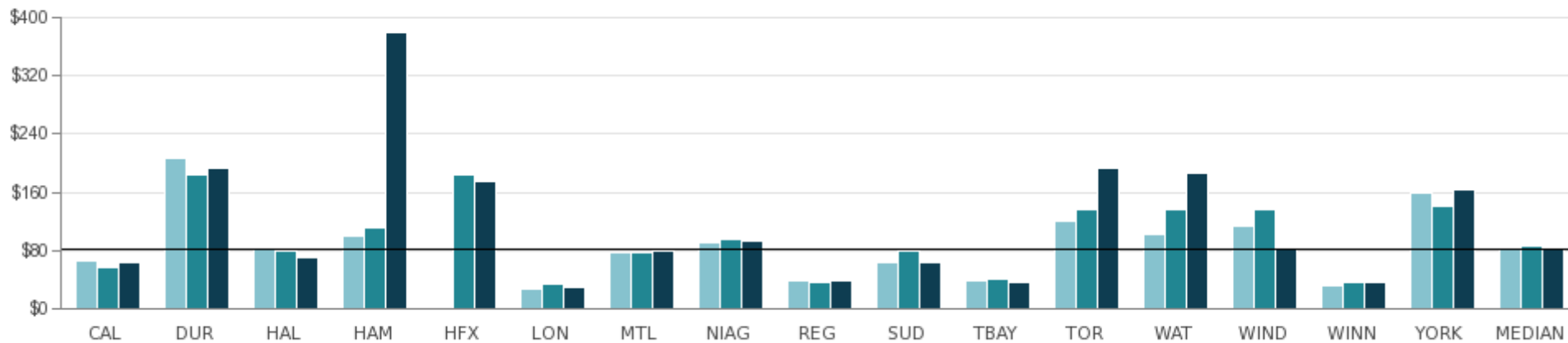
Windsor: Cost increase in 2017 due to a storm event that caused catastrophic flooding in the City.

York: Does not report - The Region operates a two-tier system. It is not responsible for curbside collection; however, the Region is responsible for all processing. York reports the total tonnes collected (see Fig 34.1 - SWST205) but is unable to report the total cost.

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Figure 34.6 Total Cost for Solid Waste (All Streams) Disposal per Tonne - All Property Classes

This measure reflects the total cost for solid waste disposal for all Property Classes which includes residential, and industrial, commercial and institutional (ICI) locations on a per tonne basis. Additional costs such as transporting waste outside a community, aging infrastructure, capital costs, and the cost associated with the incineration of garbage, service agreements, increase in leachate treatment and fluctuating fuel costs can impact the results. In addition, declining landfill capacities typically result in increased landfill rates. The results can be impacted significantly due to the recording of post-closure landfill liability costs.



2016	\$66	\$207	\$83	\$99	N/A	\$27	\$77	\$95	\$38	\$62	\$38	\$120	\$102	\$114	\$32	\$159	\$83
2017	\$56	\$184	\$78	\$111	\$183	\$33	\$77	\$87	\$36	\$78	\$41	\$136	\$135	\$137	\$35	\$141	\$83
2018	\$63	\$194	\$70	\$381	\$175	\$29	\$78	\$93	\$38	\$64	\$35	\$193	\$186	\$83	\$35	\$164	\$81

Source: SWST325T (Efficiency)

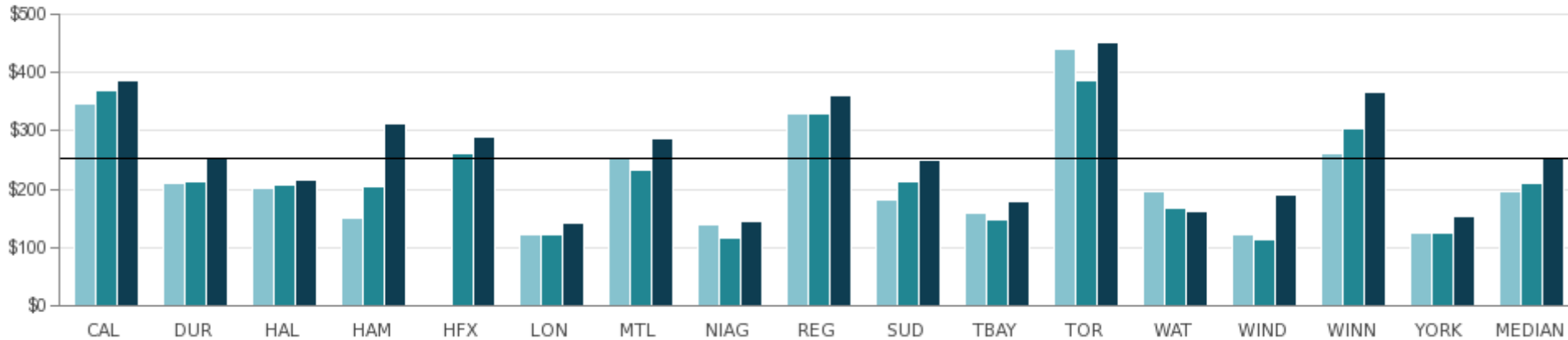
Hamilton: Reported costs increased significantly in 2018 due to an increase in landfill liability resulting from resetting the post period monitoring of closed landfills to 50 years.

Windsor: Cost increase in 2017 due to a storm event that caused catastrophic flooding in the City.

Waste Management

Figure 34.7 Total Cost for Solid Waste Diversion per Tonne - All Property Classes

This measure reflects the total cost for solid waste diversion for all Property Classes which includes residential, and industrial, commercial and institutional (ICI) locations, on a per tonne basis.



	2016	2017	2018
CAL	\$346	\$370	\$387
DUR	\$211	\$213	\$254
HAL	\$201	\$208	\$216
HAM	\$151	\$204	\$312
HFX	N/A	\$262	\$290
LON	\$123	\$122	\$141
MTL	\$257	\$232	\$286
NIAG	\$138	\$116	\$144
REG	\$331	\$329	\$360
SUD	\$181	\$212	\$250
TBAY	\$159	\$147	\$180
TOR	\$442	\$388	\$451
WAT	\$195	\$166	\$161
WIND	\$123	\$114	\$190
WINN	\$260	\$303	\$368
YORK	\$125	\$125	\$152
MEDIAN	\$195	\$210	\$252

Source: SWST330T (Efficiency)

Calgary: The Green Cart program was introduced in 2017. One-time program implementation costs were included in the 2017 results.

Hamilton: The increase in 2017 was due to the reallocation of costs for the City's recycling collection contract. The increase in 2018 was primarily due to the temporary shut down of the Central Composting Facility.

Windsor: Increased costs in this measure are attributable to a new collection contract, additional contracted processing costs, significant repairs to equipment, an LED lighting initiative as well as an increase in the valuation of the City's post retirement benefits and WSIB liabilities.

