WASTE MANAGEMENT

VALUE STATEMENT

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.

WASTE MANAGEMENT

What is this Service?

Waste Management includes a wide range of collection, disposal, diversion and processing activities for most residential households, and a portion of these services may be provided to businesses. The goal of Waste Management is to reduce and/or divert the amount of waste ending up in landfill sites, and to lessen the detrimental impact on the environment.

Objectives May Include:

- Minimizing the impact on the environment, support greenhouse gas reduction and climate change mitigation efforts and maximize landfill capacity by providing a variety of waste diversion programs to the residential, and industrial, commercial and institutional sectors (ICI).
- Providing efficient and economical waste collection, waste diversion and disposal services that meet the needs of the community and regulatory bodies.
- Increasing awareness of waste management issues and promote waste reduction through education.

Influencing Factors:

- **Type of Governance:** Services can be provided by a single tier of government or a two-tier system (combination of Regional and Municipal service).
- **Program Design and Service Levels:** Different service levels and standards (in part due to budget limitations); differences in the age of their infrastructure and equipment; frequency of pick-ups; hours of operations; average number of people per household; residential vs. commercial and industrial service; single stream waste collection vs. co-collection program; number and types of materials collected; bag limits; special programs.
- **Urban Form:** Urban/rural population, seasonal population, socio-economic factor, and the mix of single-family residences and multi-unit residential buildings that impact service provision.
- **Demographics:** Differences in socio-demographic composition that requires different service needs, i.e., aging population, diversity.
- **Climate:** Impacts the management of waste collected, disposed and diverted (all streams).
- **Distance:** To processing, disposal and/or transfer facilities; transfer facilities to disposal sites and accessibility to local landfill sites with available capacity; processing markets.

- **Service Provisions:** Reliance on private contractors; transfer disposal and operations; public and private sector.
- **Economy:** Impacts on waste generation rates, market values of materials, expenses (i.e., contract values), etc.
- **Contractual:** Age of contract, fuel provisions, collective agreements.

Extenuating Circumstances:

- **COVID-19 Pandemic:** Increased residential waste, decreased industrial commercial and institutional waste, collection disruption, reduced hiring of seasonal employees, restrictions at landfill sites, and staff redeployment contributed to the impact on waste management services.

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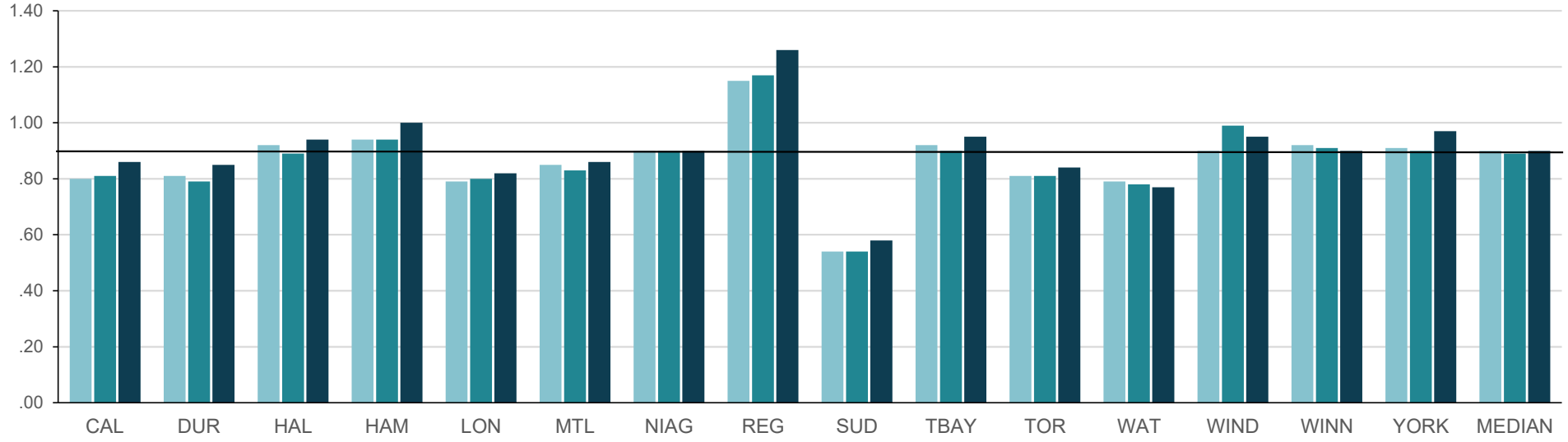
Figure 34.1 Tonnes of All Residential Material Collected per Household

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.



2018	0.80	0.81	0.92	0.94	0.79	0.85	0.90	1.15	0.54	0.92	0.81	0.79	0.90	0.92	0.91	0.90
2019	0.81	0.79	0.89	0.94	0.80	0.83	0.90	1.17	0.54	0.90	0.81	0.78	0.99	0.91	0.90	0.89
2020	0.86	0.85	0.94	1.00	0.82	0.86	0.90	1.26	0.58	0.95	0.84	0.77	0.95	0.90	0.97	0.90

Source: SWST205 (Service Level)

Windsor: An increase in bulk collection frequency as well as waste tonnage from local construction projects contributed to the 2019 increase.

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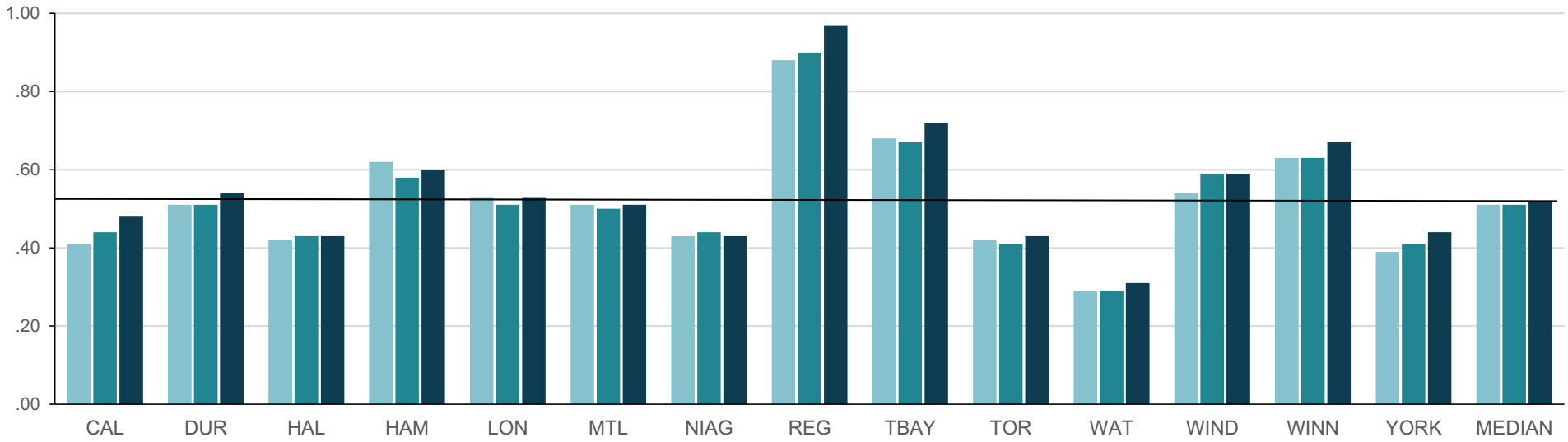
Figure 34.2 Tonnes of Residential Solid Waste Disposed per Household

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



2018	0.41	0.51	0.42	0.62	0.53	0.51	0.43	0.88	0.68	0.42	0.29	0.54	0.63	0.39	0.51
2019	0.44	0.51	0.43	0.58	0.51	0.50	0.44	0.90	0.67	0.41	0.29	0.59	0.63	0.41	0.51
2020	0.48	0.54	0.43	0.60	0.53	0.51	0.43	0.97	0.72	0.43	0.31	0.59	0.67	0.44	0.52

Source: SWST220 (Service Level)

Hamilton: There was an 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: In 2019, the City saw an increase in bulk collection frequency as well as an increase in waste tonnage from local construction projects.

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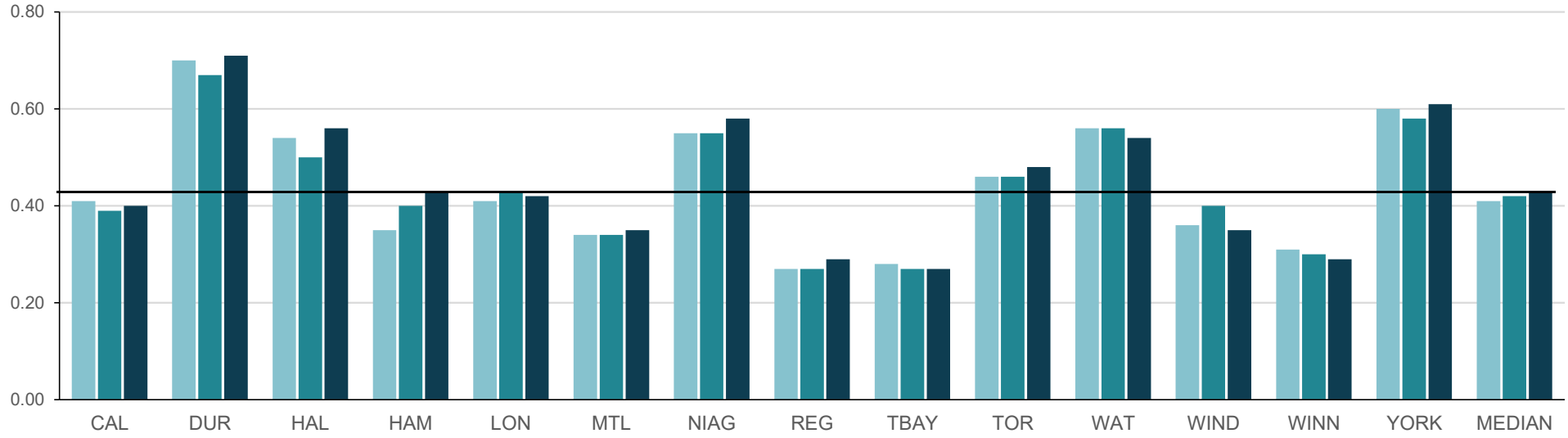
Figure 34.3 Tonnes of Residential Solid Waste Diverted per Household

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.



2018	0.41	0.70	0.54	0.35	0.41	0.34	0.55	0.27	0.28	0.46	0.56	0.36	0.31	0.60	0.41
2019	0.39	0.67	0.50	0.40	0.43	0.34	0.55	0.27	0.27	0.46	0.56	0.40	0.30	0.58	0.42
2020	0.40	0.71	0.56	0.43	0.42	0.35	0.58	0.29	0.27	0.48	0.54	0.35	0.29	0.61	0.43

Source: SWST235 (Service Level)

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.

Windsor: Increase in diversion in 2019 was the result of higher than normal yard waste tonnages.

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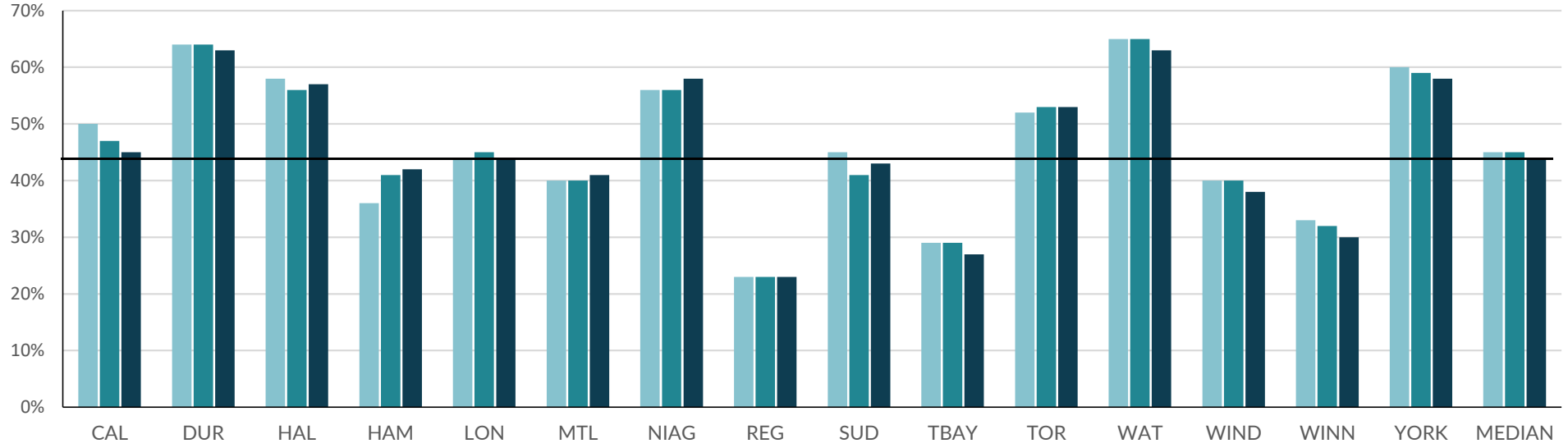
Figure 34.4 Percent of Residential Solid Waste Diverted

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.



2018	50%	64%	58%	36%	44%	40%	56%	23%	45%	29%	52%	65%	40%	33%	60%	45%
2019	47%	64%	56%	41%	45%	40%	56%	23%	41%	29%	53%	65%	40%	32%	59%	45%
2020	45%	63%	57%	42%	44%	41%	58%	23%	43%	27%	53%	63%	38%	30%	58%	44%

Source: SWST105 (Community Impact)

Hamilton: The fluctuation in diversion rate was due to the temporary shut-down of the Central Composting Facility in 2018.

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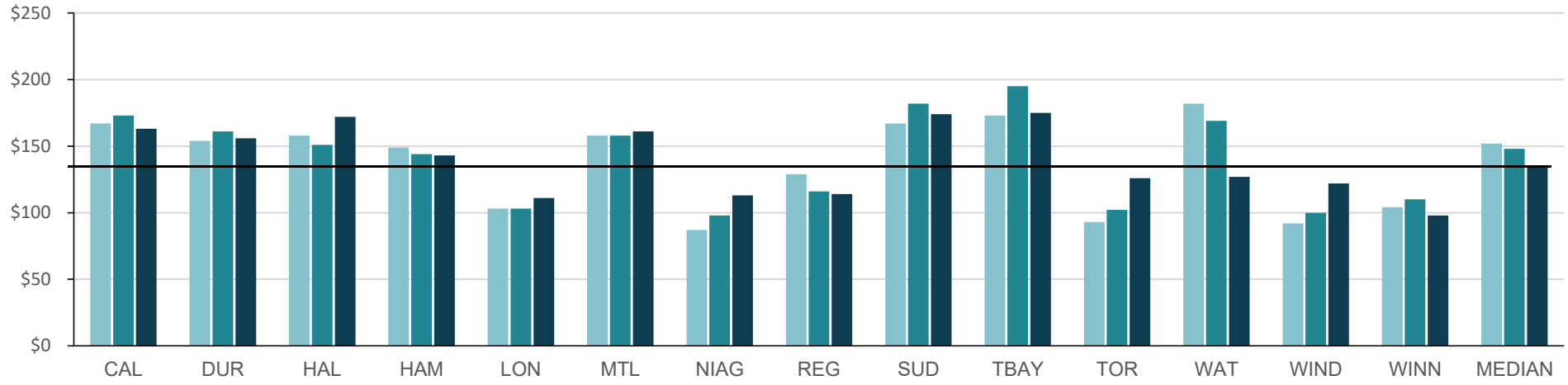
Figure 34.5 Total Cost for Garbage Collection per Tonne - All Property Classes

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.



2018	$167	$154	$158	$149	$103	$158	$87	$129	$167	$173	$93	$182	$92	$104	$152
2019	$173	$161	$151	$144	$103	$158	$98	$116	$182	$195	$102	$169	$100	$110	$148
2020	$163	$156	$172	$143	$111	$161	$113	$114	$174	$175	$126	$127	$122	$98	$135

Source: SWST311T (Efficiency)

Niagara: Overall garbage collection-related operating costs increased in 2020 from 2019, as a result of the new collection contract, which started on October 19, 2020.

Thunder Bay: The increase in 2019 was due to a change in unfunded liabilities, including WSIB. Also, the tonnage of waste collected in 2019 went down, while the fixed costs of delivering the service increased. It should be noted the City of Thunder Bay uses municipal forces to provide this service.

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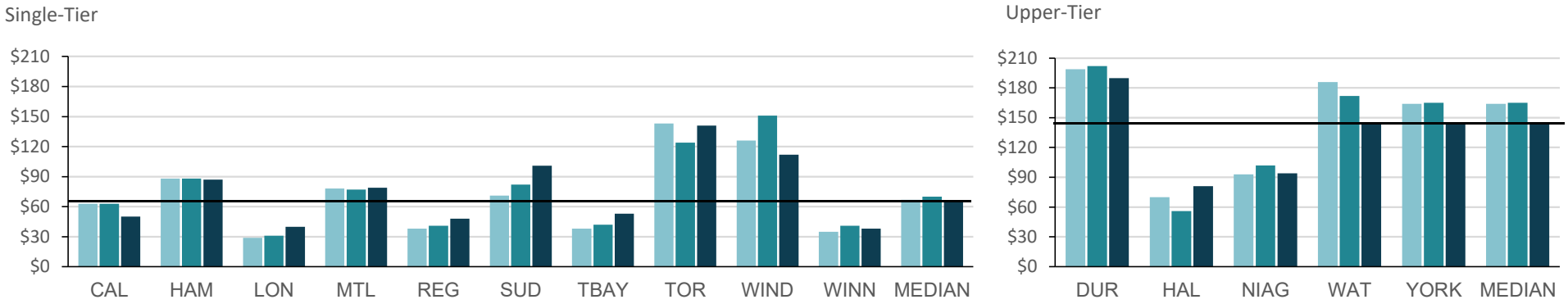
Figure 34.6 Total Cost for Solid Waste (All Streams) Disposal per Tonne - All Property Classes

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.



2018	$63	$88	$29	$78	$38	$71	$38	$143	$126	$35	$67	$199	$70	$93	$186	$164	$164
2019	$63	$88	$31	$77	$41	$82	$42	$124	$151	$41	$70	$202	$56	$102	$172	$165	$165
2020	$50	$87	$40	$79	$48	$101	$53	$141	$112	$38	$66	$190	$81	$94	$144	$145	$144

Source: SWST325T (Efficiency)

Halton: Decrease in 2019 due to increased Blue Box residue disposed and reduced amortization cost associated with the compression landfill.

London: Increase in 2020 due to landfill post closure accrual costs.

Sudbury: In 2020, Sudbury received 1,984.35 tonnes less waste for disposal at the landfill sites.

Windsor: In 2019, an increase in tipping fee and tonnages, high leachate from new open cell and post closure costs increased overall costs. For 2020, a significant reduction in contaminated soil received at the Regional landfill decreased costs.

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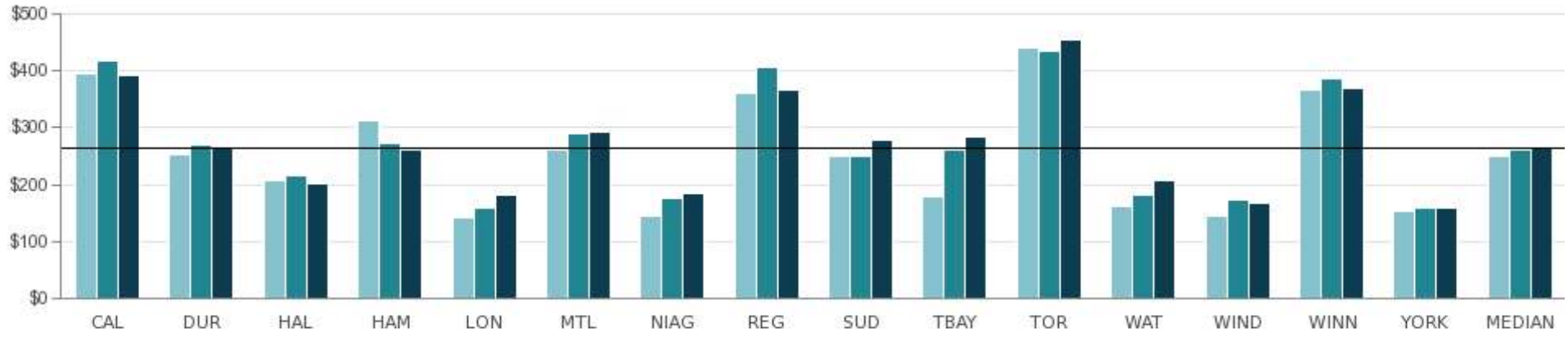
Figure 34.7 Total Cost for Solid Waste Diversion per Tonne - All Property Classes

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.



2018	$396	$254	$207	$312	$141	$261	$144	$360	$250	$180	$441	$161	$145	$368	$152	$250
2019	$419	$269	$216	$273	$159	$290	$175	$408	$250	$262	$435	$181	$174	$388	$159	$262
2020	$392	$265	$201	$262	$182	$294	$184	$367	$278	$283	$454	$207	$167	$370	$158	$265

Source: SWST330T (Efficiency)

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

London: Increase in 2020 due to increase in waste diversion contracted services; recycling collection and processing contracts new in mid-2020.

Niagara: Increase in 2019 net operating cost was the result of decrease in end market revenues.

Thunder Bay: 2019 increase was due to a new service provider contract for recycling services and increased processing costs.