

# 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:

#### General Overall Influencing Factors:

1. Type of Governance: Services can be provided by a single tier of government or a two-tier system (combination of Regional and Municipal service)
2. 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
3. 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
4. Demographics: Differences in socio-demographic composition that requires different service needs, i.e. aging population, diversity
5. Climate: Impacts the management of waste collected, disposed and diverted (all streams)
6. Distance: To processing, disposal and/or transfer facilities; transfer facilities to disposal sites and accessibility to local landfill sites with available capacity; processing markets
7. Service Provisions: Reliance on private contractors; transfer disposal and operations; public and private sector
8. Economy: Impacts on waste generation rates, market values of materials, expenses (i.e. contract values), etc.

9. Contractual: Age of contract, fuel provisions, collective agreements
10. Size of Service Area: Density (stops per km); geographical size of service area

#### Waste Collection:

11. Diversion Efforts: The nature and extent of a municipality's diversion efforts including the enforcement of the program, impacts the type and amount of material included in waste collection
12. Complaints: Definition of complaint vs. an inquiry; who receives the complaint (upper tier vs. local municipality, vs. local contractor); changes in service and weather conditions which impede service

#### Waste Transfer and Disposal:

13. Diversion Efforts: The nature and extent of a municipality's diversion efforts
14. Sites: Number of active landfill sites, soil conditions on the landfill site and surrounding sites and number of sites under perpetual care, i.e. landfill liability impact
15. Competition: Presence of competitive markets
16. Disposal Options: Availability of landfill, incineration (energy from waste) options, export
17. Complaints: Definition of complaint vs. an inquiry, who receives the complaint (upper tier vs. local municipality, vs. local contractor), adjacent land uses to transfer or disposal sites

#### Waste Diversion:

18. Markets: Availability, demand, pricing, quality and influences of external programs
19. Promotion: The effort expended on promotion of diversion programs, the level of public participation and influences of external programs
20. Incentives: Partial or full user pay programs for waste collection and increased disposal fees can result in increases in diversion
21. Enforcement: The effort expended on the enforcement of the diversion programs
22. Stewardship: Mandated best practices and associated funding; designation of new materials, i.e. accepted stewardship programs

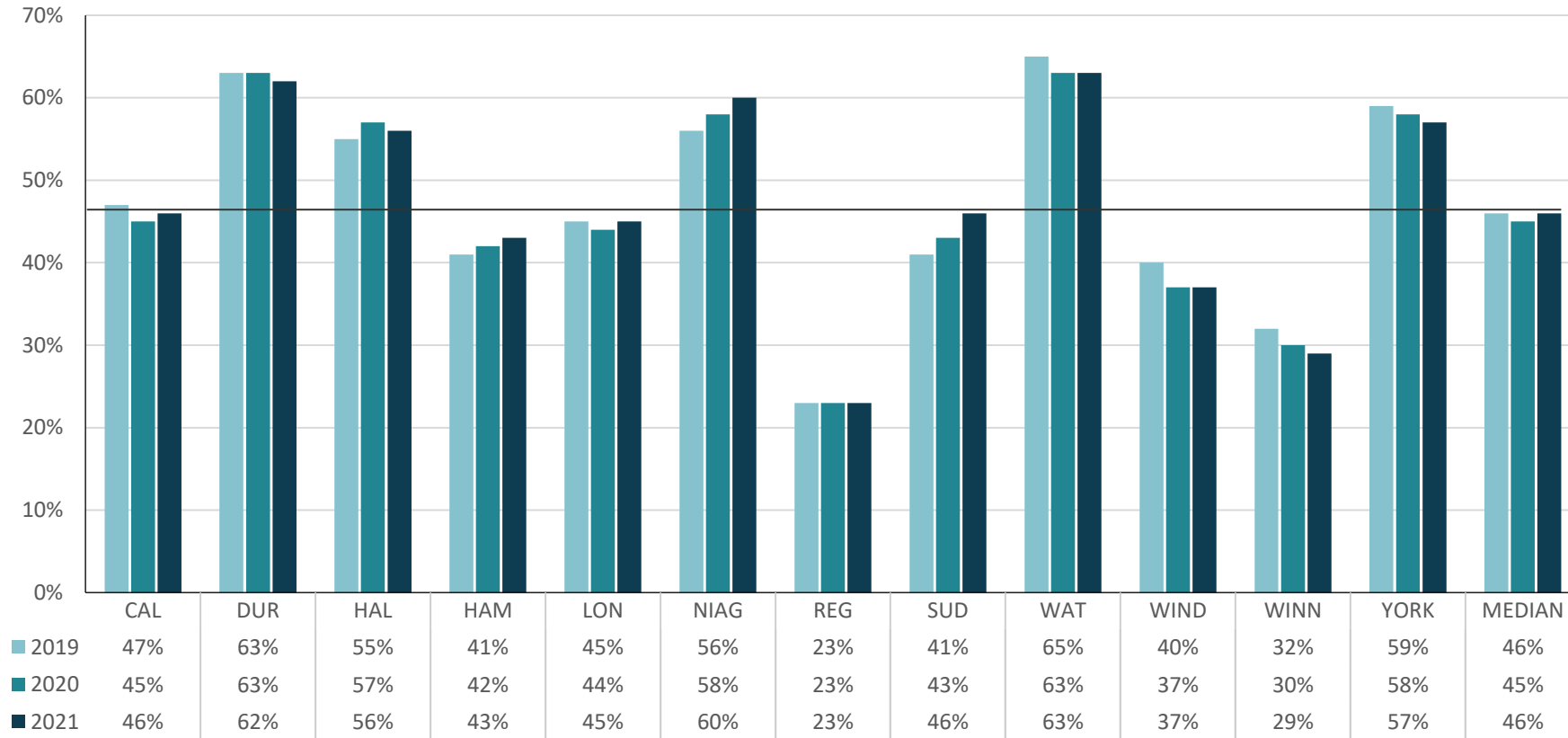
#### Extenuating Circumstances:

- **COVID-19 Pandemic:** Continued pandemic impacts in 2021 were 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.

## Waste Management

### SWST105 - Percent of Residential Solid Waste Diverted – Single and Multi-Residential

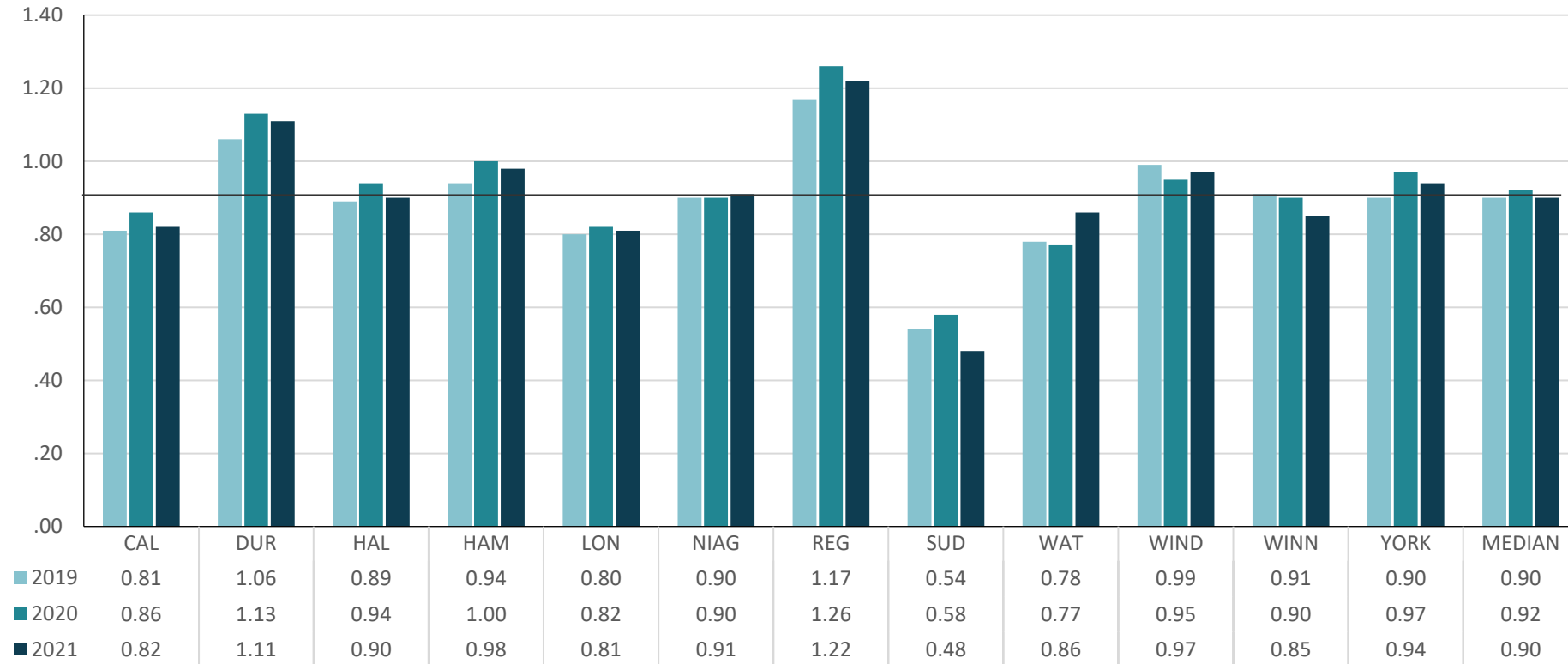
This measure demonstrates the percent of residential waste diverted away from landfills and incineration through programs such as organics, blue box, leaf and yard, municipal hazardous or special waste and other recyclable materials, e.g. wood, metal, tires.



## Waste Management

### SWST205 - 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.

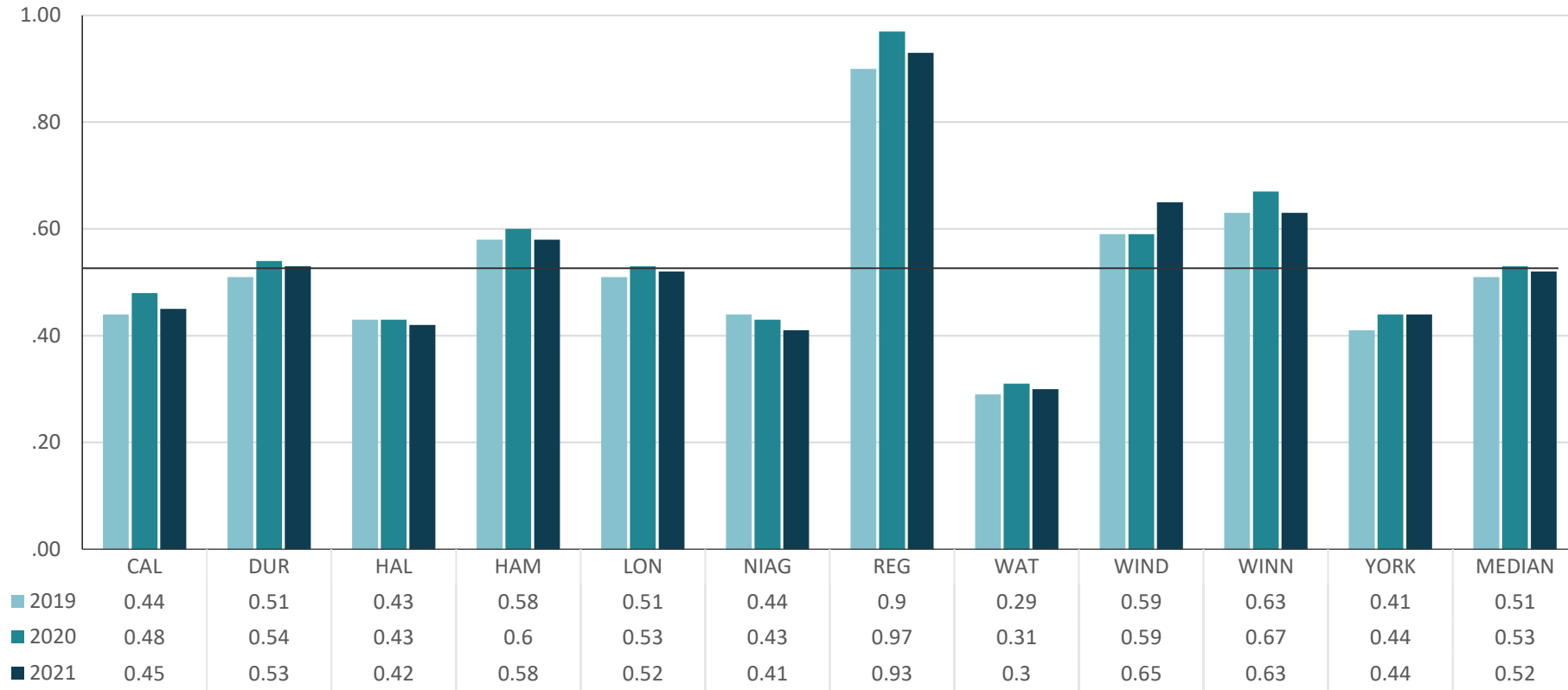


Sudbury: The City implemented collection strategies to encourage residents to divert more waste resulting in a reduction in the amount of material being collected.

## Waste Management

### SWST220 - Tonnes of Residential Solid Waste Disposed per Household

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

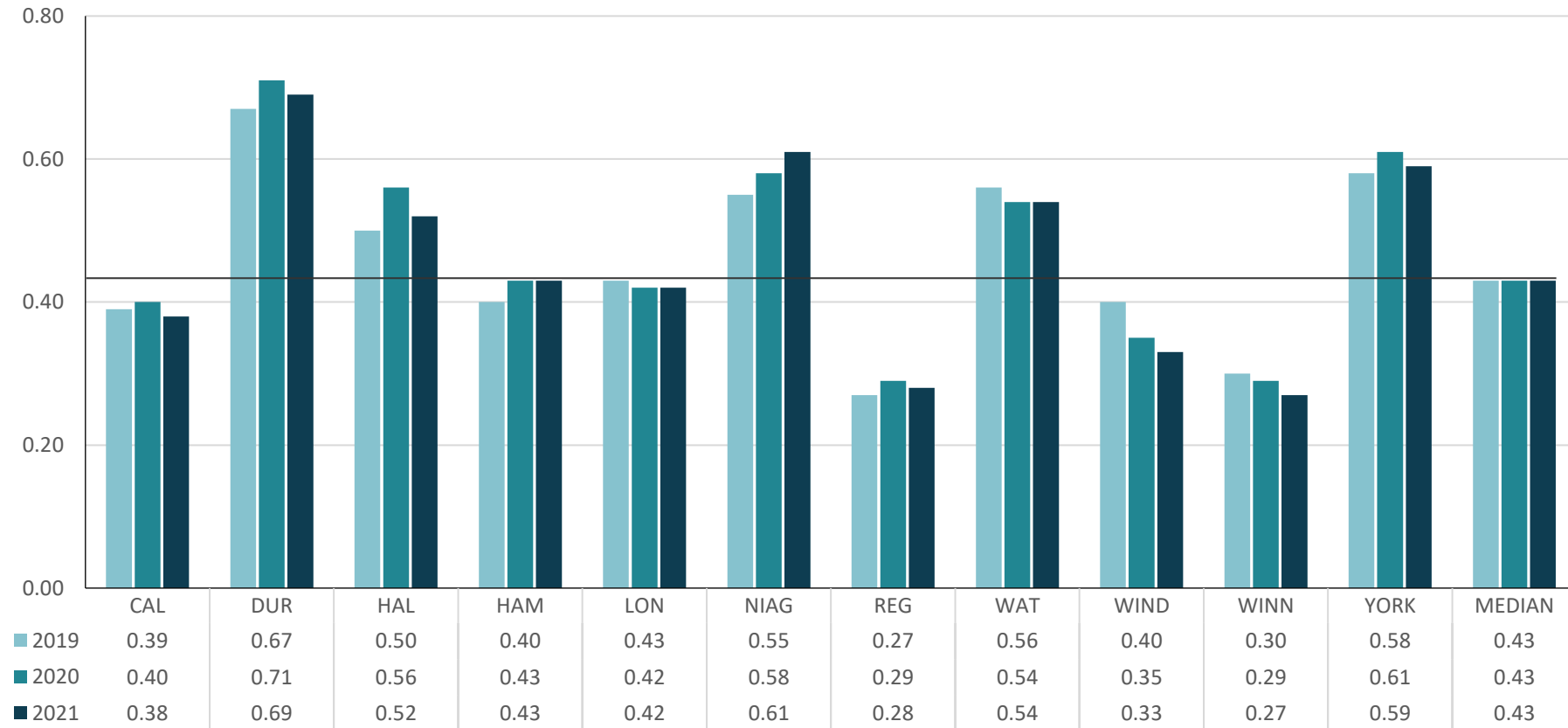


Sudbury: Does not report - unable to separate residential tonnage.

## Waste Management

### SWST235 - 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.

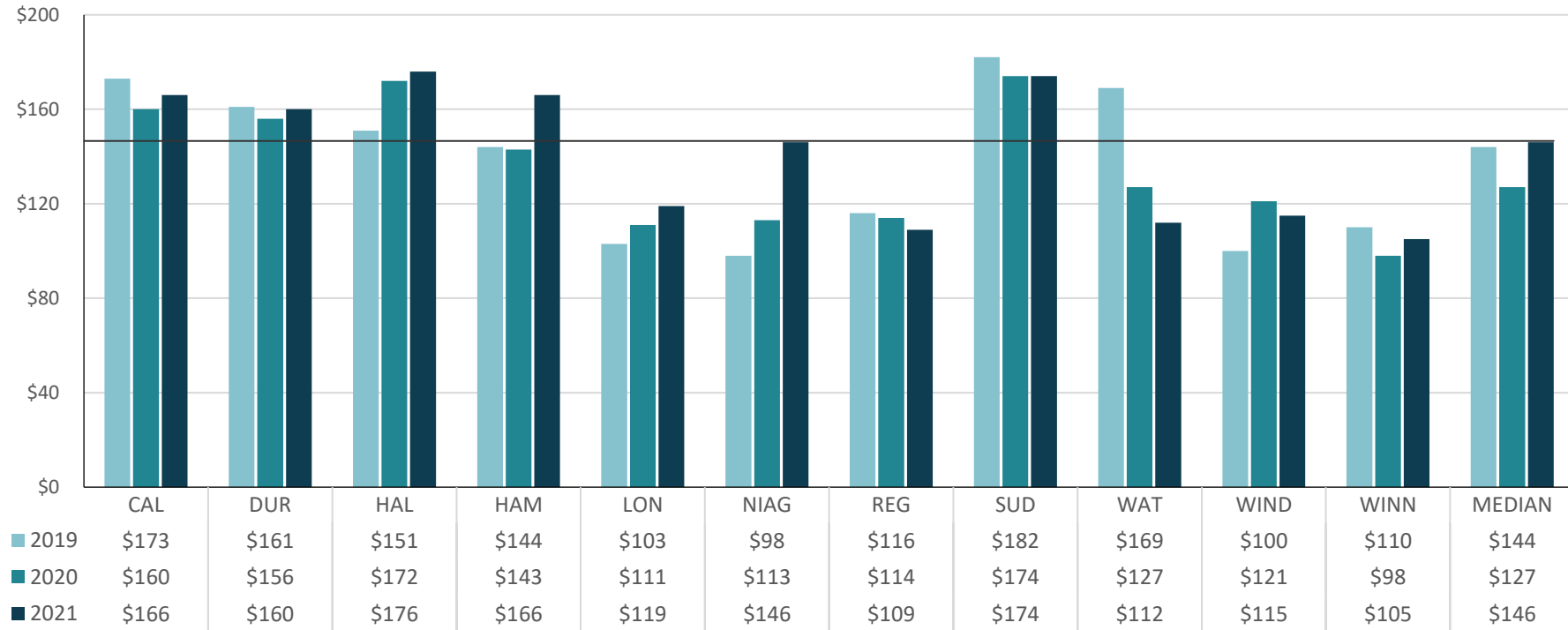


Sudbury: Does not report - unable to separate residential tonnage.

## Waste Management

### SWST311T - 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.



Niagara: Overall garbage collection-related operating costs increased in 2020 and 2021 as a result of the new collection contract, which started on October 19, 2020.

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 SWST205) but is unable to report the total cost.

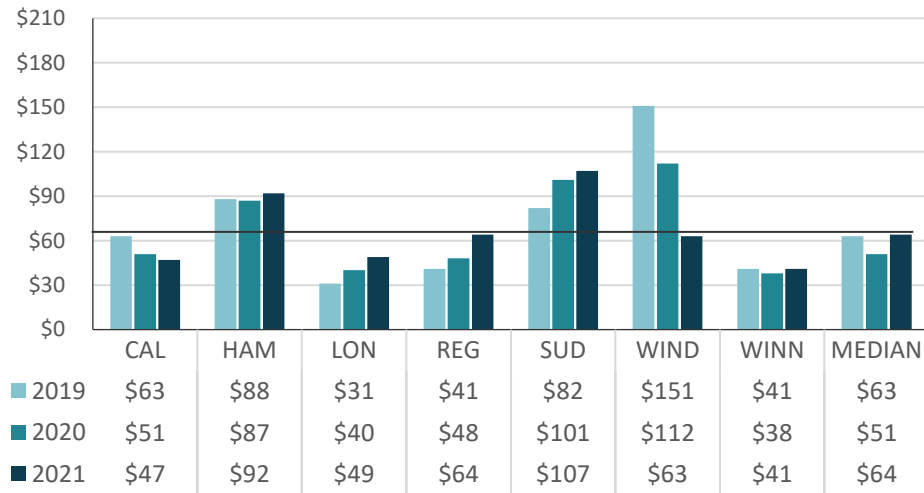


# Waste Management

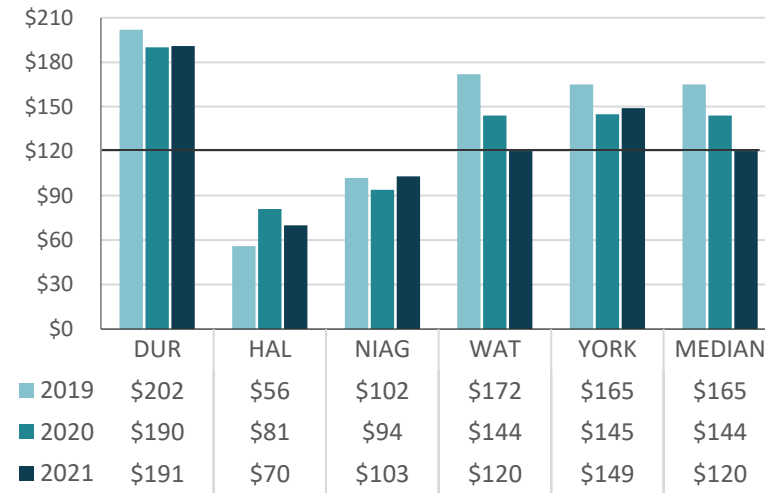
## SWST325T - Total Cost for Solid Waste Disposal per Tonne - All Property Classes

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.

Single Tier



Upper Tier



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

London: Increase in 2020 and 2021 due to landfill post closure accrual costs and landfill contractor equipment costs.

Regina: Capital costs increased in 2021 for spending on expansion activities and updating the gas collection system.

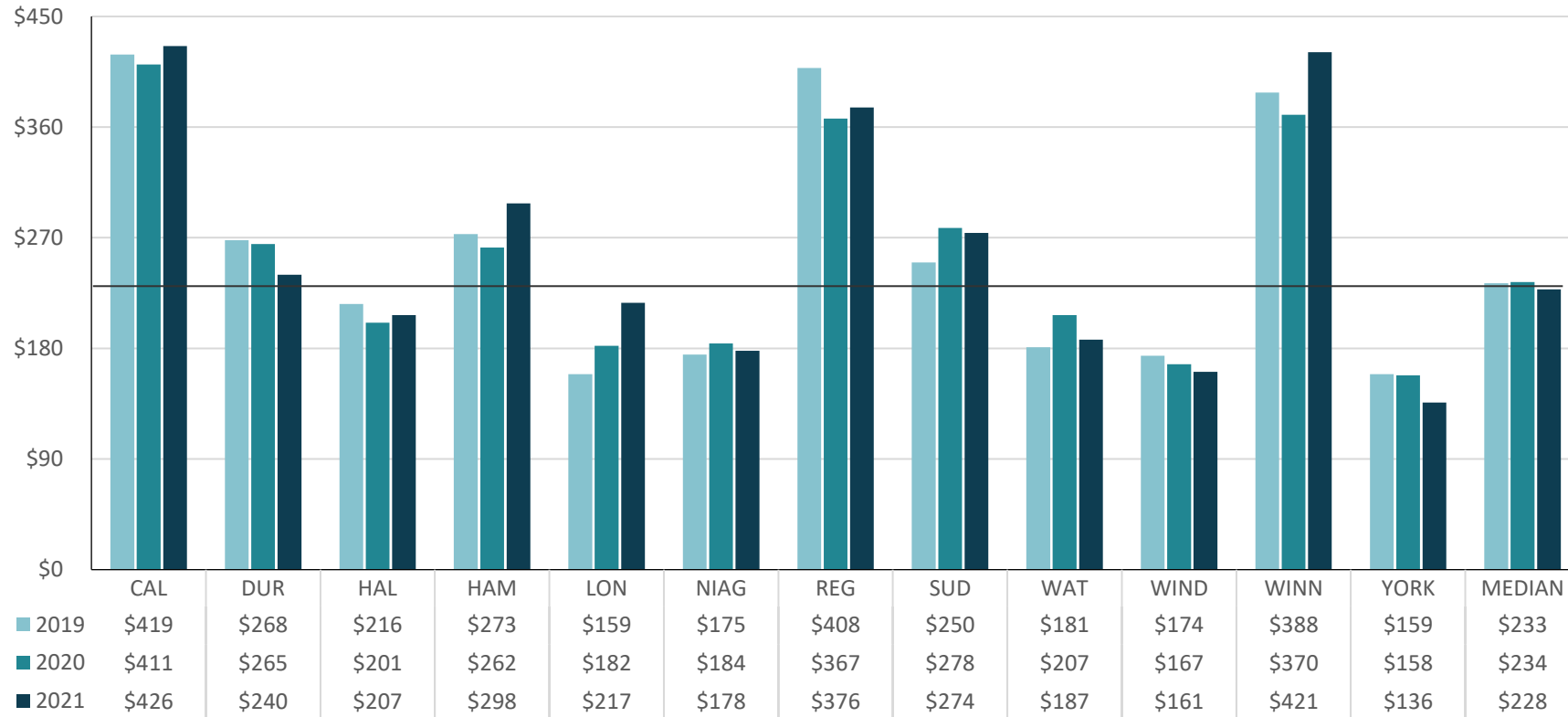
Sudbury: In 2020, Sudbury received 1,984.35 tonnes less waste for disposal at the landfill sites.

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. 2021 decrease due to significant change in landfill post closure liability costs.

## Waste Management

### SWST330T - 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.



London: Increases in 2020 and 2021 due to increase in waste diversion contracted services; recycling collection and processing contracts new in mid-2020.