

ROADS SNAPSHOT MEDIANS FOR 2016

**VEHICLES ON
MAIN ROADS**
1,552,336
per lane kilometre
ROAD112 (COMMUNITY IMPACT)

54%
of roads are
rated good
or very good
ROAD405M
(CUSTOMER SERVICE)



76%

of bridges, culverts
and viaducts are rated
good or very good
ROAD415M
(CUSTOMER SERVICE)

roads maintenance costs

PAVED

SINGLE-TIER \$11,736/km

UPPER-TIER \$19,127/km

WINTER

SINGLE-TIER \$4,736

UPPER-TIER \$4,760



ROAD307T (EFFICIENCY), ROAD309T (EFFICIENCY)

KEEP IN MIND:

Influencing Factors

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



Economic Conditions

Inflationary increases



Level of Government

Single-tier vs. upper-tier municipalities



Maintenance Standards

Road ratings and levels of service



Policies

Capitalization: operating vs. capital expenditures

Amortization: varies depending on type and age of infrastructure, climate, etc.



Traffic Volumes & Urban Form

Affects frequency and cost of maintenance



Utility Cut Repairs

Costs can vary significantly year-to-year



Weather Conditions

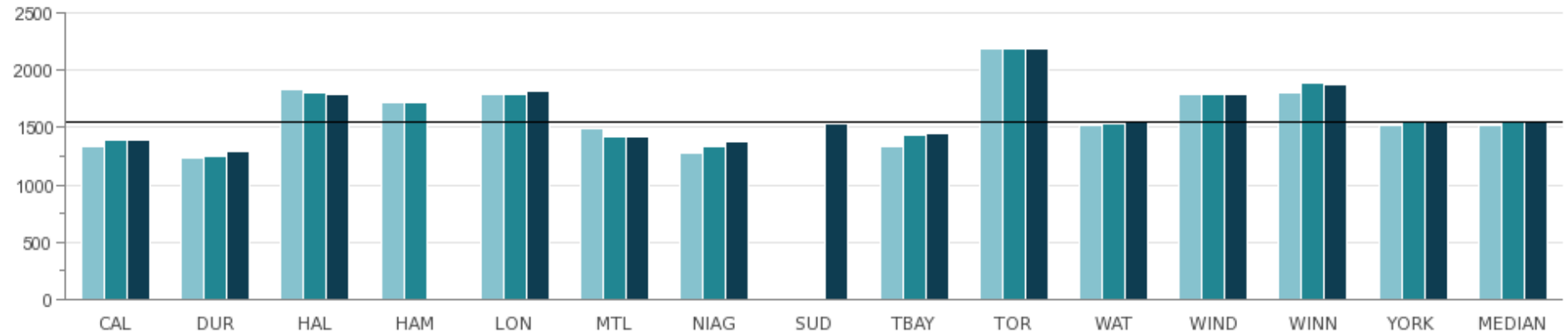
Impact operation and maintenance costs

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

Fig. 28.1 Vehicle Km Traveled per Lane Km (Class 1, 2, and 3 only)

The measure indicates the number of times a vehicle travels over each lane Km of major road, demonstrating road congestion.

(In Thousands)



2014	1,341,766	1,241,319	1,827,649	1,720,598	1,792,853	1,485,565	1,282,862	N/A	1,336,375	2,192,307	1,513,979	1,795,127	1,808,530	1,521,583	1,521,583
2015	1,396,747	1,252,575	1,802,430	1,726,344	1,798,144	1,425,839	1,337,229	N/A	1,438,841	2,186,344	1,533,336	1,793,551	1,885,653	1,548,927	1,548,927
2016	1,397,240	1,285,501	1,786,814	N/A	1,813,929	1,425,839	1,380,678	1,535,319	1,453,542	2,186,344	1,552,336	1,792,297	1,876,027	1,558,607	1,552,336

Source: ROAD112 (Community Impact)

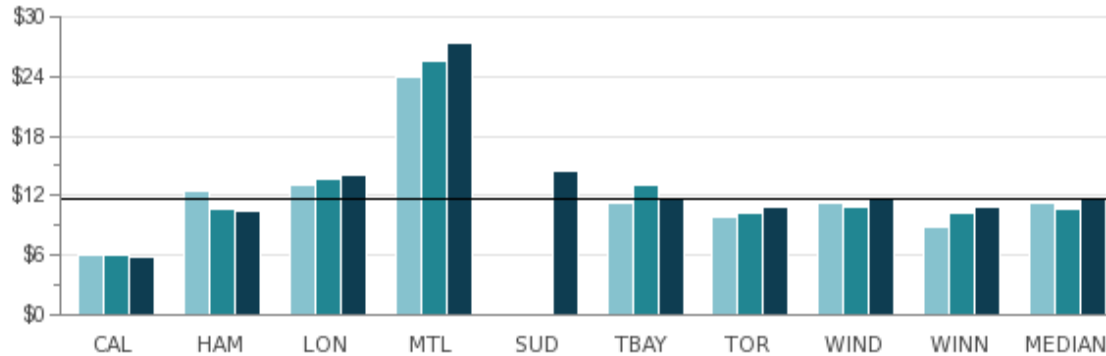
Comment:

The City of Montreal does not include Class 1 Lane Km, as they fall under the jurisdiction of the Province.

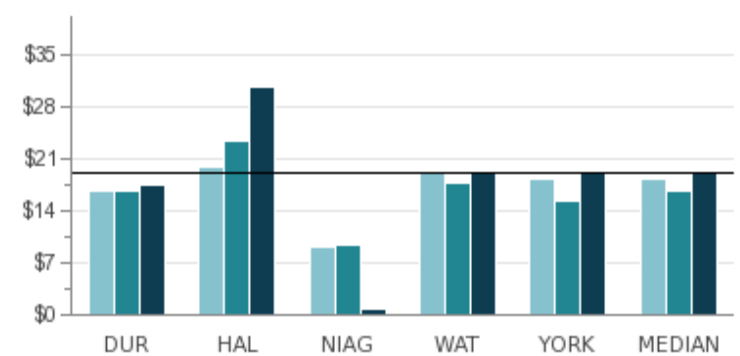
Fig. 28.2 Total Cost for Paved Roads per Lane Km (Hard Top)

A lane-km is defined as a kilometer long segment of roadway that is a single lane in width (for example, a one kilometer stretch of a standard two lane road represents two lane km).

Single-Tier (In Thousands)



Upper-Tier (In Thousands)



2014	\$6,126	\$12,521	\$13,063	\$23,978	N/A	\$11,349	\$9,860	\$11,263	\$8,838	\$11,306	\$16,680	\$19,851	\$9,097	\$18,920	\$18,350	\$18,350
2015	\$6,027	\$10,743	\$13,630	\$25,585	N/A	\$13,027	\$10,229	\$10,770	\$10,167	\$10,757	\$16,523	\$23,467	\$9,352	\$17,835	\$15,357	\$16,523
2016	\$5,812	\$10,517	\$14,061	\$27,447	\$14,454	\$11,746	\$10,846	\$11,736	\$10,777	\$11,736	\$17,500	\$30,479	\$905	\$19,138	\$19,127	\$19,127

Source: ROAD307T (Efficiency)

Comments:

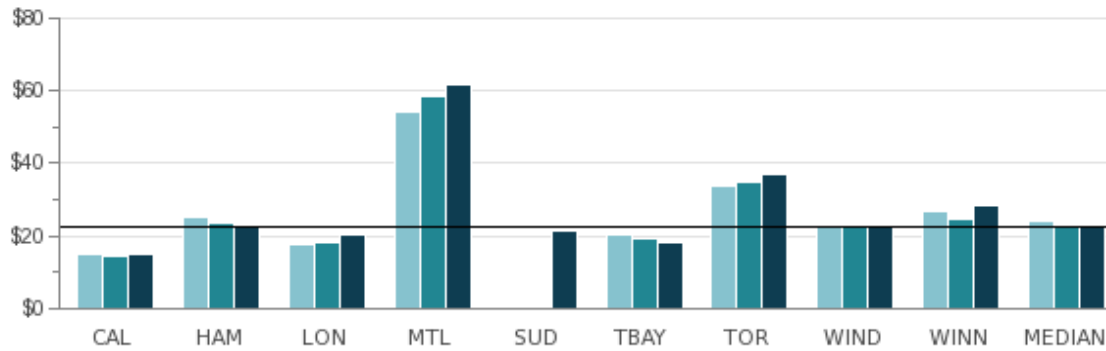
The higher cost in Montreal can be attributed to investments in infrastructure and higher depreciation costs.

Niagara Region has variances in operations due to the implementation of a new financial management system.

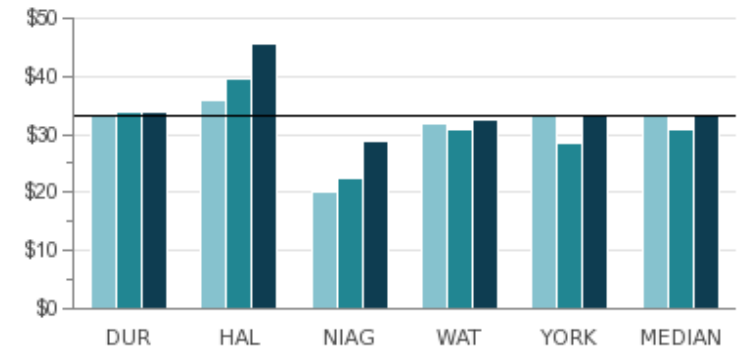
Fig. 28.3 Total Cost for Roads - All Functions per Lane Km

Total cost per lane Km is impacted by the disposal of capital assets associated with the expansion of existing road assets to meet growth.

Single-Tier (In Thousands)



Upper-Tier (In Thousands)



2014	\$15,259	\$25,145	\$17,796	\$54,279	N/A	\$20,118	\$33,575	\$22,943	\$26,680	\$24,044	\$33,389	\$35,723	\$20,161	\$31,966	\$33,625	\$33,389
2015	\$14,523	\$23,591	\$18,463	\$58,371	N/A	\$19,479	\$35,115	\$22,817	\$24,912	\$23,204	\$33,786	\$39,625	\$22,439	\$30,949	\$28,437	\$30,949
2016	\$14,754	\$22,507	\$20,284	\$61,492	\$21,231	\$18,486	\$36,759	\$23,014	\$28,459	\$22,507	\$33,808	\$45,667	\$28,813	\$32,568	\$33,341	\$33,341

Source: ROAD308T (Efficiency)

Comments:

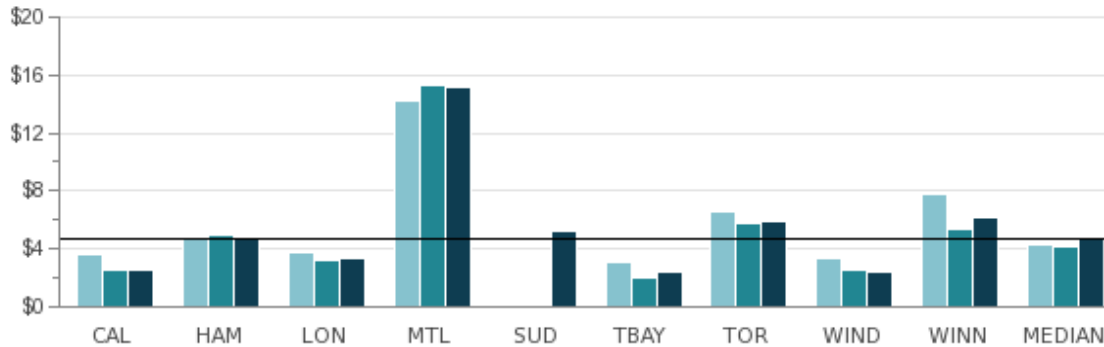
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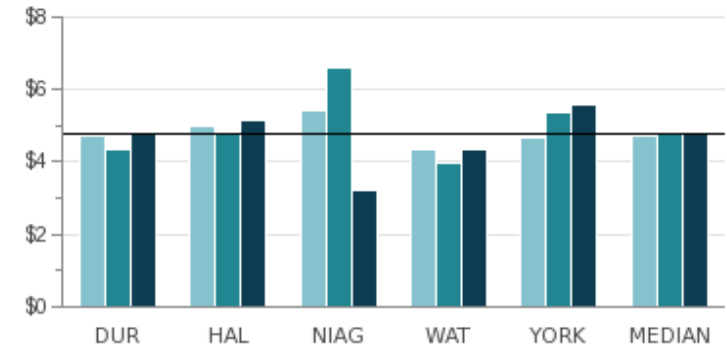
Fig. 28.4 Total Cost for Winter Maintenance of Roadways per Lane Km Maintained

This measure represents the total cost for winter maintenance of a single lane km. It includes all functions included in clearing and maintaining the roadway, and is not inclusive of sidewalk snow clearing.

Single-Tier (In Thousands)



Upper-Tier (In Thousands)



2014	\$3,605	\$4,823	\$3,753	\$14,200	N/A	\$3,133	\$6,582	\$3,345	\$7,715	\$4,288	\$4,741	\$5,009	\$5,394	\$4,355	\$4,675	\$4,741
2015	\$2,491	\$4,971	\$3,279	\$15,291	N/A	\$2,019	\$5,707	\$2,543	\$5,314	\$4,125	\$4,319	\$4,778	\$6,583	\$3,955	\$5,370	\$4,778
2016	\$2,544	\$4,736	\$3,406	\$15,189	\$5,237	\$2,464	\$5,872	\$2,406	\$6,147	\$4,736	\$4,760	\$5,148	\$3,228	\$4,322	\$5,600	\$4,760

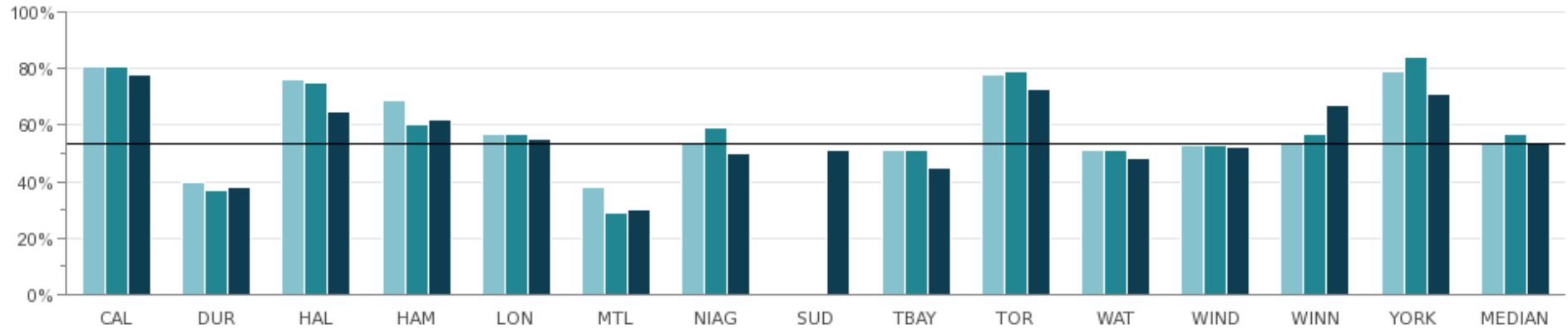
Source: ROAD309T (Efficiency)

Comments:

In Montreal, the service thresholds for responding to weather incidents, and the volume and type of snow removal required due to population density, contribute to Montreal's higher cost.

Niagara Region has variances in operations due to the implementation of a new financial management system.

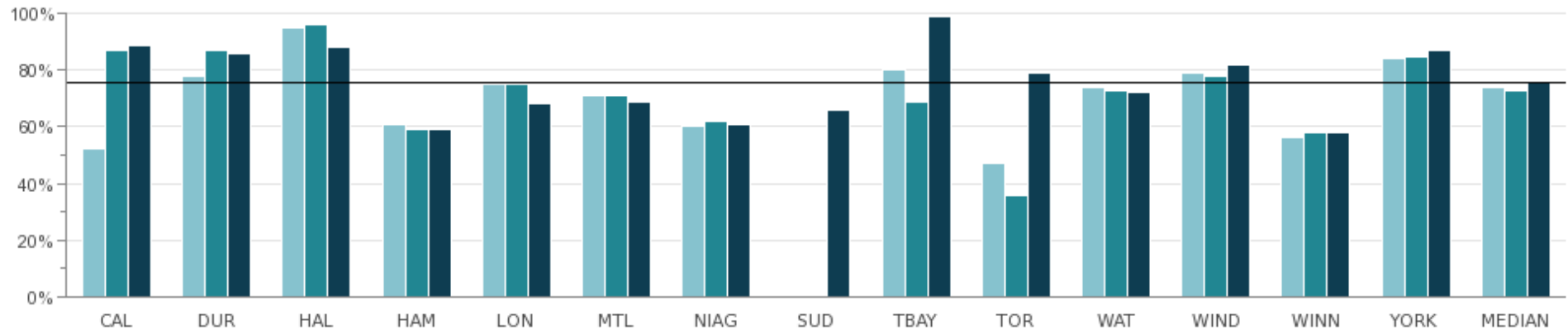
Fig. 28.5 Percent Of Paved Lane Km Where The Condition Is Rated As Good To Very Good



2014	81%	40%	76%	69%	57%	38%	54%	N/A	51%	78%	51%	53%	54%	79%	54%
2015	81%	37%	75%	60%	57%	29%	59%	N/A	51%	79%	51%	53%	57%	84%	57%
2016	78%	38%	65%	62%	55%	30%	50%	51%	45%	73%	48%	52%	67%	71%	54%

Source: ROAD405M (Customer Service)

Fig. 28.6 Percent of Bridges, Culverts and Viaducts Where the Condition is Rated as Good to Very Good



2014	52%	78%	95%	61%	75%	71%	60%	N/A	80%	47%	74%	79%	56%	84%	74%
2015	87%	87%	96%	59%	75%	71%	62%	N/A	69%	36%	73%	78%	58%	85%	73%
2016	89%	86%	88%	59%	68%	69%	61%	66%	99%	79%	72%	82%	58%	87%	76%

Source: ROAD415M (Customer Service)

Comment:

In 2016 the City of Toronto starting using the Bridge Condition Index (BCI) for reporting to be consistent with other jurisdictions. The index was not applied to 2014 and 2015 results.

