27 Roads

What is the Service?

A municipality's transportation system affects the economic vitality and quality of life of residents. The goal of roads services is to provide affordable, well-managed and safe traffic flow for pedestrians, cyclists, drivers, public transit and commercial traffic while contributing to the environment and the quality of community life.

Transportation infrastructure generally includes roads, bridges, culverts, sidewalks, traffic control systems, signage and boulevards. In addition to constructing and repairing infrastructure, roads services include clearing the transportation network of snow and debris to ensure that it is safe and convenient to use.

Influencing Factors:

Capitalization Policy: Dollar thresholds for the capitalization of roads expenditures differ. In one municipality, an activity could be considered an operating expenditure while in another municipality, it could be considered as capital.

Economic Conditions: Inflationary increases in the cost of asphalt, concrete, fuel and contract services can reduce the amount of maintenance done with a given level of funding.

Level of Government: Single-tier municipalities are responsible for maintaining all types of roads, including arterial, collector and local roads and, in some cases, expressways and laneways. Upper-tier governments are not responsible for maintenance of local roads.

Maintenance Standards: Different standards, set by their respective municipal councils, can have an impact on costs and affect municipal backlog of roads rated in poor condition.

Traffic Volumes & Urban Form: Traffic volumes can accelerate the rate at which roads deteriorate and increase the frequency and costs of road maintenance. Traffic congestion, narrow streets, additional traffic signals and after-hour maintenance can also lead to higher costs.

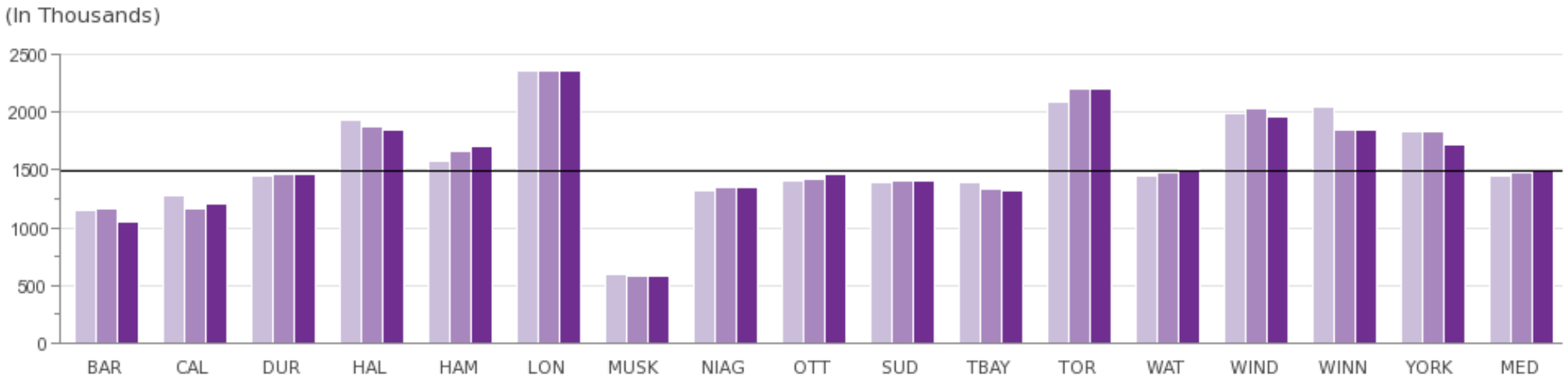
Utility Cut Repairs: Cost of utility cuts associated with fibre optic cables can vary significantly from one year to another.

Weather Conditions: The frequency and severity of winter storm events can impact winter maintenance costs as well as each municipality's service threshold for responding to a winter storm event and service standard for road conditions after a storm event.

Roads

What is the volume of traffic on our main roads?

Fig 27.1 Vehicle Km Traveled per Lane Km (Major Roads)



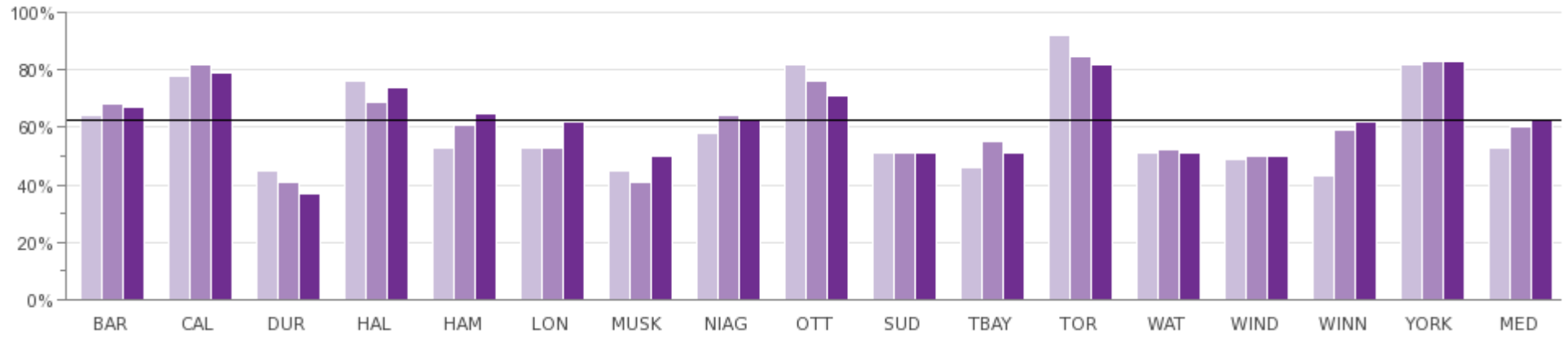
2010	1,155	1,276	1,445	1,929	1,580	2,363	593	1,322	1,406	1,389	1,392	2,087	1,443	1,993	2,053	1,841	1,444
2011	1,171	1,170	1,469	1,871	1,669	2,365	575	1,346	1,419	1,400	1,334	2,203	1,483	2,035	1,842,572	1,841	1,476
2012	1,046	1,208	1,461	1,852	1,702	2,363	575	1,347	1,467	1,401	1,321	2,200	1,506	1,965	1,849	1,713	1,487

Source: ROAD112 (Community Impact)

Comment: The measure indicates the number of times, *in thousands*, that a vehicle travels over each lane kilometer of road and demonstrates road congestion.

What percent of paved roads are rated good to very good?

Fig 27.2 Percent of Paved Lane Km where the Condition is Rated as Good to Very Good

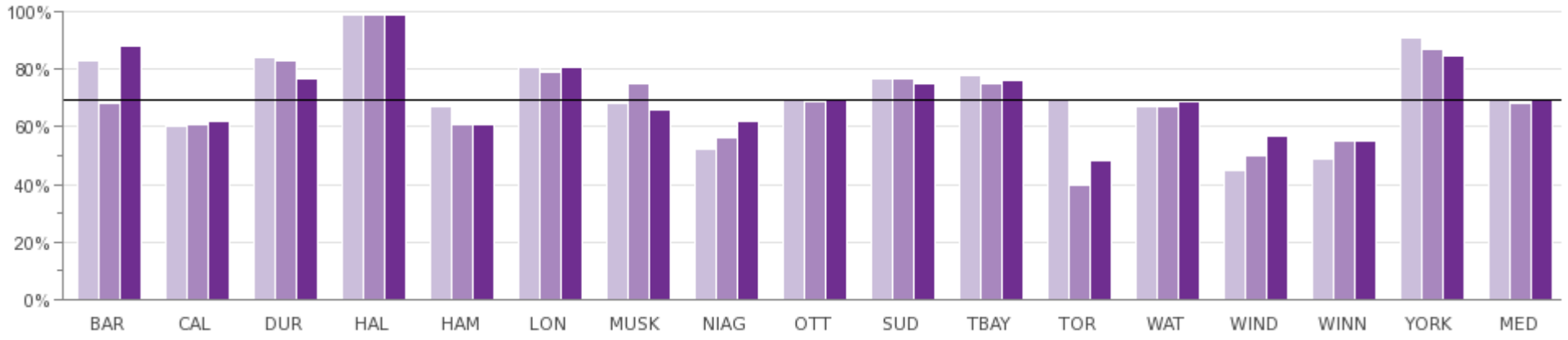


2010	64%	78%	45%	76%	53%	53%	45%	58%	82%	51%	46%	92%	51%	49%	43%	82%	53%
2011	68%	82%	41%	69%	61%	53%	41%	64%	76%	51%	55%	85%	52%	50%	59%	83%	60%
2012	67%	79%	37%	74%	65%	62%	50%	63%	71%	51%	51%	82%	51%	50%	62%	83%	63%

Source: ROAD405M (Customer Service)

What percent of bridges and culverts are rated good to very good?

Fig 27.3 Percent of Bridges and Culverts where the Condition is Rated as Good to Very Good

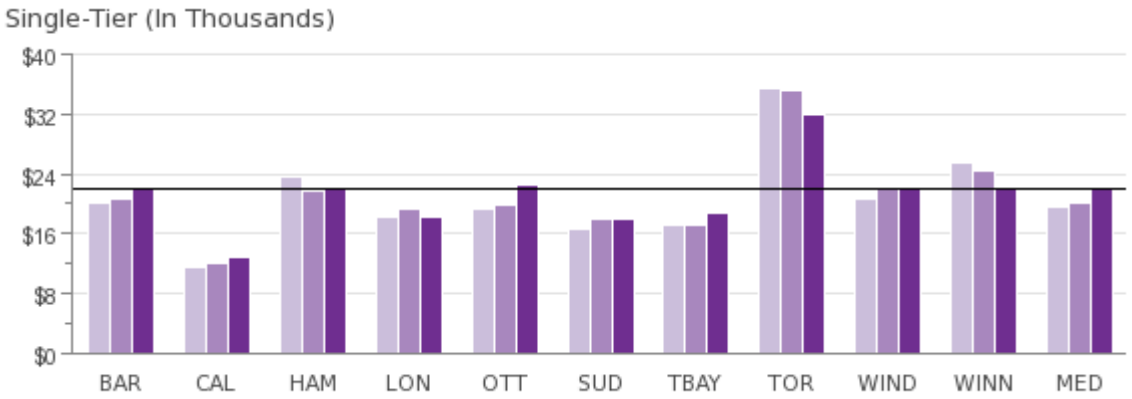


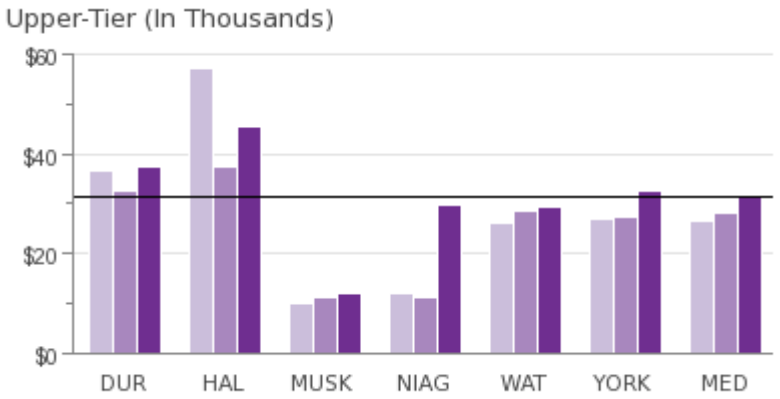
2010	83%	60%	84%	99%	67%	81%	68%	52%	70%	77%	78%	70%	67%	45%	49%	91%	70%
2011	68%	61%	83%	99%	61%	79%	75%	56%	69%	77%	75%	40%	67%	50%	55%	87%	69%
2012	88%	62%	77%	99%	61%	81%	66%	62%	70%	75%	76%	48%	69%	57%	55%	85%	70%

Source: ROAD415M (Customer Service)

What is the total cost to maintain our roads per lane Km?

Fig 27.4 OMBI Total Roads (All Functions) Cost per Lane Km (includes amortization)





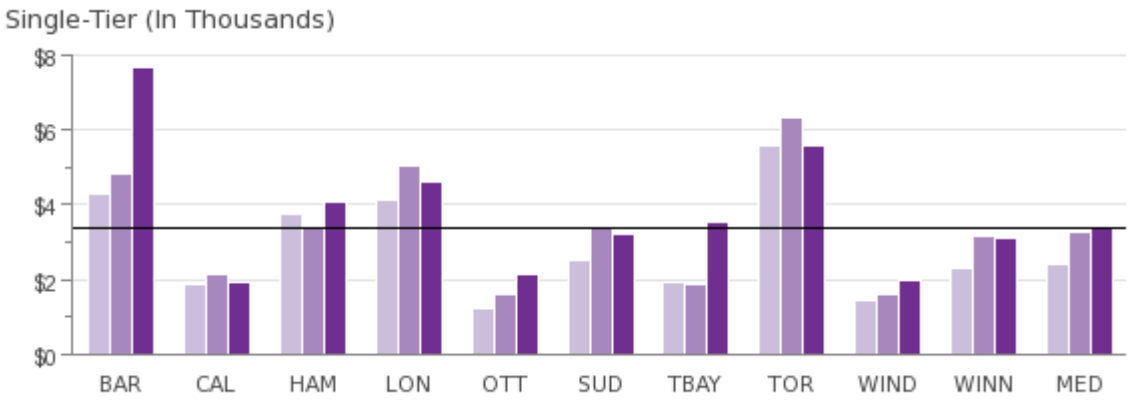
2010	$20,031	$11,610	$23,572	$18,112	$19,383	$16,612	$17,174	$35,413	$20,543	$25,417	$19,707	$36,786	$57,131	$10,136	$12,190	$25,964	$26,837	$26,401
2011	$20,711	$12,052	$21,798	$19,263	$19,754	$17,944	$17,265	$35,035	$22,031	$24,484	$20,233	$32,440	$37,382	$11,206	$11,281	$28,604	$27,334	$27,969
2012	$21,950	$12,798	$22,255	$18,233	$22,491	$18,076	$18,682	$31,947	$22,162	$22,164	$22,056	$37,546	$45,577	$11,887	$29,960	$29,398	$32,464	$31,212

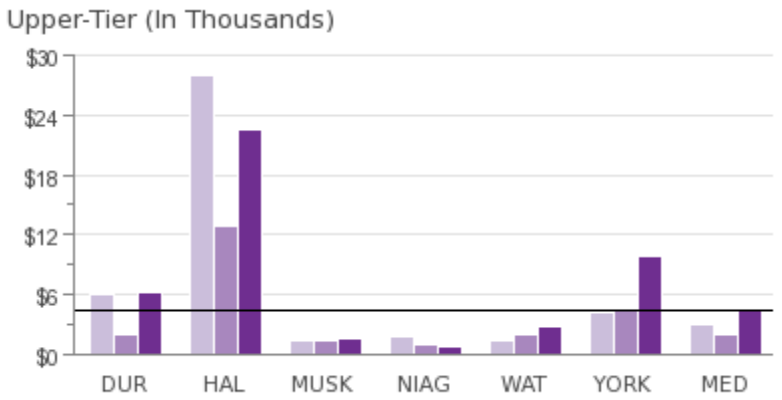
Source: ROAD308T (Efficiency)

Comment: Roads annexation and other extraordinary expenses significantly impacted Halton's result in 2010; and the widening of Halton's existing road network to meet the demands of growth impacted results for 2012.

How much does it cost to maintain one Km of paved road?

Fig 27.5 Operating Costs for Paved (Hard Top) Roads per Lane Km





2010	$4,305	$1,877	$3,739	$4,144	$1,217	$2,515	$1,913	$5,587	$1,433	$2,300	$2,408	$6,133	$27,962	$1,414	$1,839	$1,495	$4,156	$2,998
2011	$4,848	$2,121	$3,370	$5,067	$1,612	$3,355	$1,894	$6,354	$1,625	$3,161	$3,258	$1,953	$12,797	$1,492	$1,068	$2,025	$4,465	$1,989
2012	$7,659	$1,955	$4,074	$4,634	$2,160	$3,234	$3,551	$5,571	$1,968	$3,119	$3,393	$6,241	$22,439	$1,595	$851	$2,740	$9,814	$4,491

Source: ROAD901 (Efficiency)

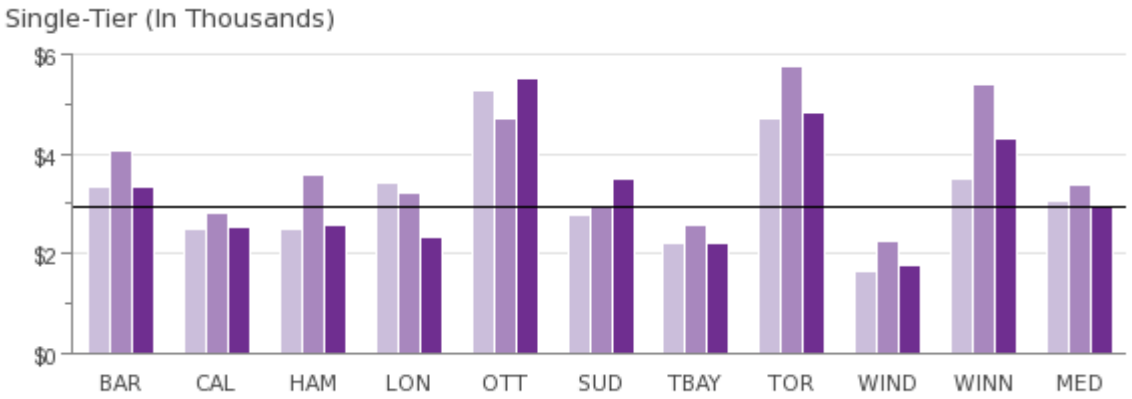
Comments: Roads annexation and other extraordinary expenses significantly impacted Halton's result in 2010; and the widening of Halton's existing road network to meet the demands of growth impacted results for 2012.

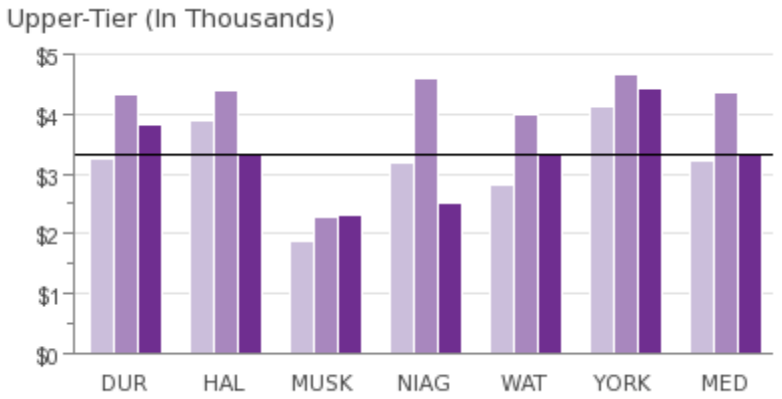
Barrie experienced higher asset disposal costs in 2012 than in previous years.

In York, repairs and construction costs related to 2 capital projects were expensed to operating as a result of new reporting requirements for TCAs.

How much does it cost to maintain our roads in winter?

Fig 27.6 Operating Costs for Winter Maintenance of Roadways per Lane Km Maintained





2010	$3,352	$2,508	$2,510	$3,411	$5,260	$2,783	$2,227	$4,720	$1,660	$3,520	$3,068	$3,250	$3,878	$1,893	$3,186	$2,803	$4,115	$3,218
2011	$4,082	$2,819	$3,569	$3,221	$4,724	$2,931	$2,592	$5,770	$2,240	$5,399	$3,395	$4,334	$4,404	$2,277	$4,578	$3,997	$4,665	$4,369
2012	$3,320	$2,517	$2,586	$2,318	$5,510	$3,505	$2,225	$4,815	$1,784	$4,298	$2,953	$3,811	$3,316	$2,314	$2,512	$3,321	$4,410	$3,319

Source: ROAD903 (Efficiency)

Note: Winter maintenance includes plowing, sanding, salting and pre-treating roads for hazardous conditions.