18. TRANSIT SERVICES

Transit Services provide citizens with a safe, reliable, efficient and affordable means of traveling to work, school, home or play. Greater use of public transit systems in a community eases traffic congestion and improves air quality.

An effective and efficient transit system places emphasis on the following objectives:

- quality of life: provides mobility options for all residents to ensure access to work, education, health care, shopping, social and recreational opportunities
- sustainability: needs to be affordable for everyone in the community, be fiscally responsible to taxpayers and support the goal of improving the environment
- economic development: services and costs need to reflect and encourage residential and commercial growth.

What should you consider when reviewing these results?

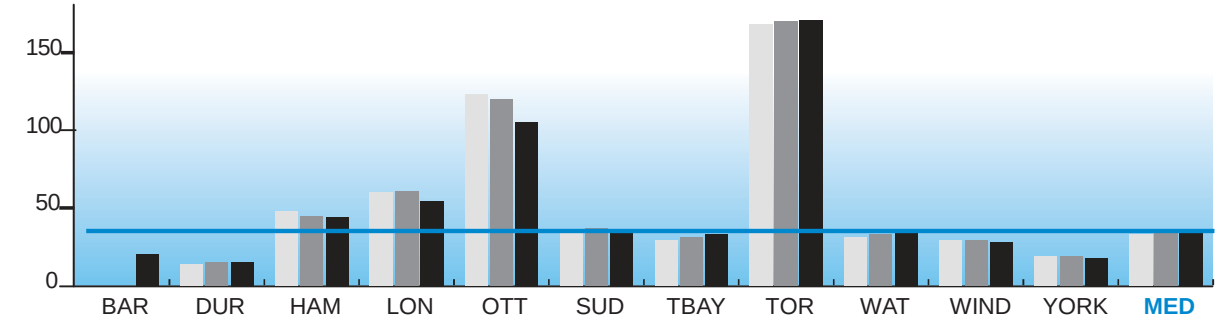
Each municipality's results are influenced to varying degrees by a number of factors, including:

- size and urban form within the service area: service and cost are affected by type of development, topography and density
- demographics and socio-economic factors: auto ownership rates, population age, immigrant levels and household incomes will impact transit market share
- nature of transit service design and delivery: number of routes, proximity and frequency of service, service coverage and hours of operation can vary significantly among systems; automated fare systems, Geographic Positioning Systems, traffic signal priority and dedicated bus lanes could be used to facilitate 'express' service
- transit system type: composition of fleet (bus, subway or light-rail transit (LRT), diesel vs. natural gas, high floor vs. low floor accessible, and age of fleet
- demand for services: rising fuel prices, a growing urban population and increased awareness of environmental issues can increase demand; catchment area for transit riders may extend beyond municipal boundaries
- economic conditions: ridership growth, fare increases, fluctuations in commodity and energy prices, foreign exchange rates, magnitude of external contracting and contractual obligations with labour bargaining units
- legislated requirements: increased cost due to compliance with the Accessibility for Ontarians with Disabilities Act, 2005 (AODA)

What are the results?

How often do people take public transit?

Fig. 18.1 Number of Conventional Transit Trips per Capita in Service Area (MPMP)



2009	20	15	44	54	105	35	33	171	35	28	18	35
2008		15	45	61	120	37	31	170	33	29	19	35
2007		14	48	60	123	36	29	168	31	29	19	33

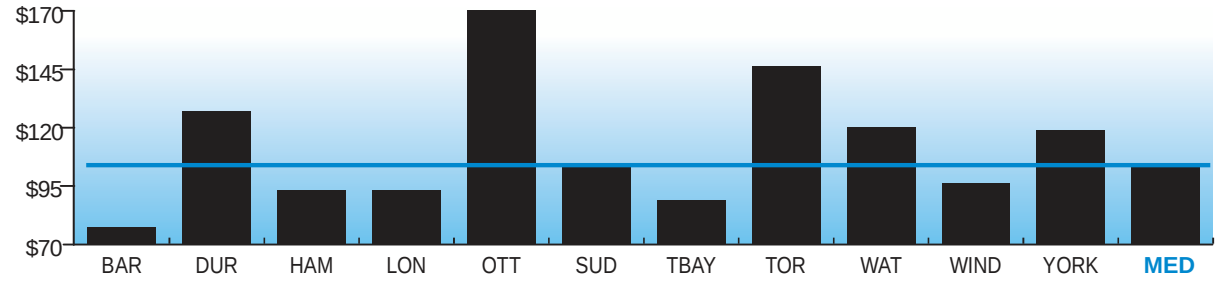
Source: TRNT105M (Community Impact)
NOTE: Ottawa decrease in 2009 due to transit labour disruption.

Figure 18.1 illustrates the extent of transit service utilization on a per capita basis. This measure includes conventional transit which includes all modes with the exception of specialized, door-to-door services for persons with disabilities.

Toronto has the highest transit use per person due to their extensive transit system (including the subway) and the close proximity of residents to at least one mode of transit service. This, combined with Toronto's level of non-resident travel, contributes to a significantly higher result in relation to the other municipalities.

How much does it cost to operate a transit vehicle for each hour the vehicle is in-service?

Fig. 18.2 Transit Operating Cost per In-service Vehicle Hour



2009	77	127	93	93	170	104	89	146	120	96	119	104

Source: TRNT305 (Efficiency)

Figure 18.2 demonstrates the cost to operate a transit vehicle for each hour that the vehicle is in-service. Municipal results for this measure are influenced by service design and delivery such as the diversity and number of routes, the frequency and hours of service and the type of transit vehicle used.

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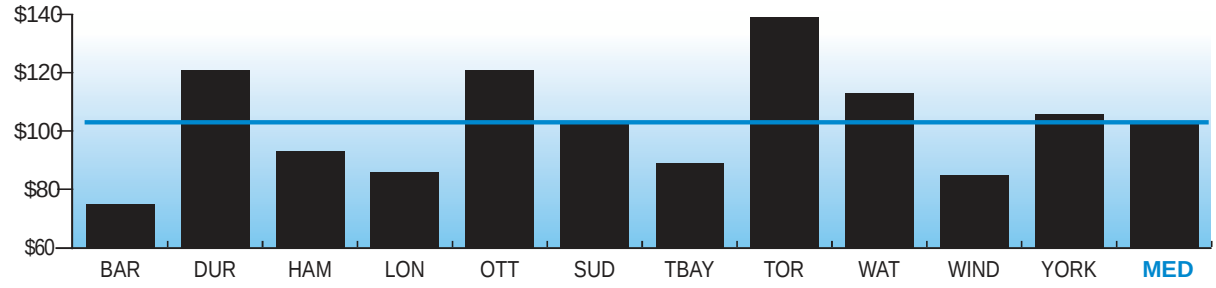
How much does it cost to operate a transit vehicle for all hours of its operation?

Fig. 18.3 Transit Operating Cost per Total Vehicle Hour



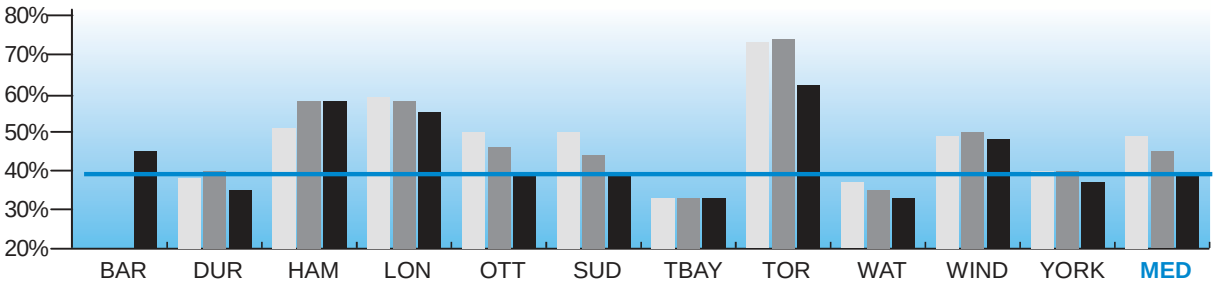
2009	75	121	93	86	121	103	89	139	113	85	106	103

Source: TRNT310 (Efficiency)

Figure 18.3 indicates service efficiency, as measured by the total transit cost per vehicle hour. This includes costs associated with traveling without passengers, trips to and from the garage, training, etc.

What percentage of the total cost is recovered through revenues?

Fig. 18.4 Transit Revenue to Transit Operating Cost Ratio (R/C Ratio)



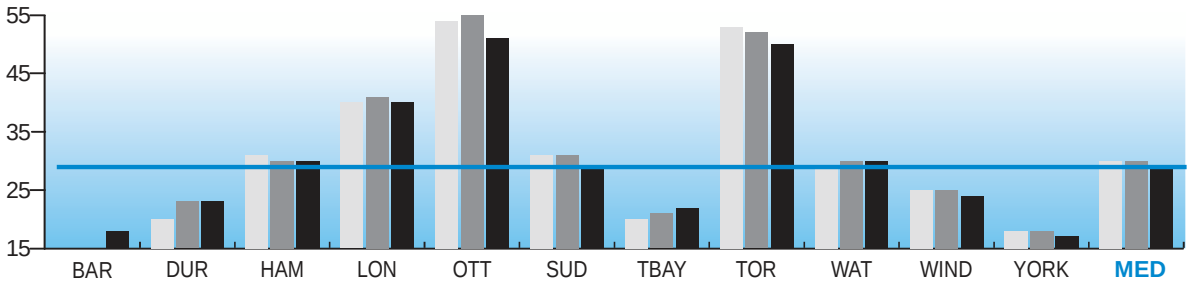
2009	45%	35%	58%	55%	39%	39%	33%	62%	33%	48%	37%	39%
2007		40%	58%	58%	46%	44%	33%	74%	35%	50%	40%	45%
2008		38%	51%	59%	50%	50%	33%	73%	37%	49%	40%	49%

Source: TRN315 (Efficiency)

Figure 18.4 illustrates the percentage of transit operating costs that are recovered by revenues earned from passenger fares as well as other operating revenues (local charters, school contracts, advertising, etc.). The cost recovery ratio can be influenced by size and density of the population, as well as cost increases. Some municipalities have fare structures that offer rewards to frequent customers. These can increase ridership, but may lower the overall revenue earned per passenger trip.

How well utilized are transit vehicles?

Fig 18.5 Passenger Trips per In-service Vehicle Hour



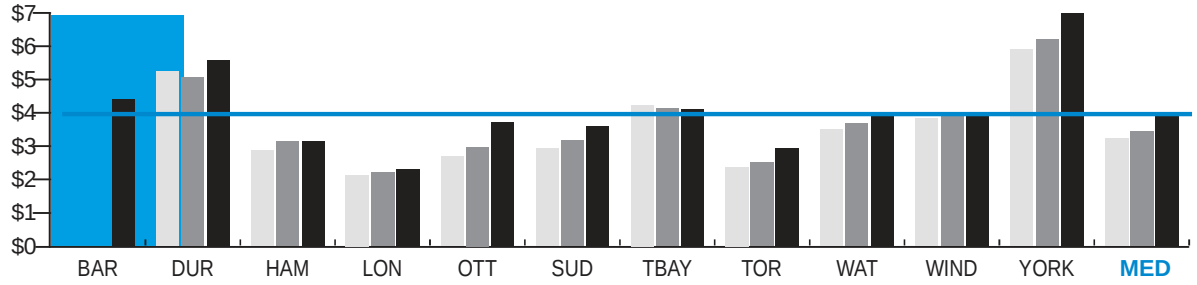
2009	18	23	30	40	51	29	22	50	30	24	17	29
2008		23	30	41	55	31	21	52	30	25	18	30
2007		20	31	40	54	31	20	53	29	25	18	30

Source: TRN340 (Efficiency)

Figure 18.5 reflects the degree to which the service is used compared to the service provided. This measure provides an indication of how productive a transit system is in providing service. The higher the ratio of passenger trips to in-service vehicle hour, the greater the usage level of the transit services. This measure can be affected by economic conditions as well as socio-economic and demographic factors.

How much does it cost to provide a passenger trip?

Fig. 18.6 Operating Costs for Conventional Transit per Regular Service Passenger Trip (MPMP)



2009	4.42	5.56	3.15	2.31	3.72	3.58	4.11	2.94	3.94	3.97	6.98	3.94
2008		5.05	3.14	2.20	2.97	3.18	4.14	2.51	3.68	3.90	6.20	3.43
2007		5.26	2.88	2.14	2.69	2.94	4.25	2.38	3.50	3.82	5.91	3.22

Source: TRNT901M (Efficiency)

Figure 18.6 shows the overall efficiency of the transit service on a cost per trip basis. This performance measure examines efficiency from a utilization perspective, and takes into consideration only the actual use of the available transit supply. Results are influenced by factors unique to each municipality, including level of transit investment by the municipality, size and density of the service area, and other factors such as cost escalation and service levels. As transit services become more frequently utilized, the cost per passenger trip should decline.