PEMBINA institute

Fast Cities

A comparison of rapid transit in major Canadian cities

Photo: "O Train over Rideau by Wikier" from Wikimedia Commons

Investing in transit infrastructure is essential to relieve gridlock in Canada's cities and provide commuters with convenient ways to get around. However, not all cities are improving their transit systems to the same degree, and some are falling behind.

This report compares rapid transit in five of Canada's largest cities: Toronto, Montreal, Vancouver, Calgary and Ottawa. It analyzes how well transit networks serve residents in each of these cities, and how effectively they have responded to the pressures of growth and the need for expanded rapid transit that comes with it.

The factors we examined include the length of existing rapid transit networks — that is, subways, SkyTrains, light rail, right-of-way streetcars and right-of-way rapid buses — along with express bus networks (such as Toronto's Rocket and Vancouver's B-Line). We also looked at ridership levels and the proximity of each city's population to transit stations or stops.

Key findings

1. **Toronto has the highest rapid transit ridership per capita** with residents of the city taking an average of 133 transit trips per year.

2. **Calgary leads Canada's cities in rapid transit infrastructure per capita.** Despite its high ridership, Toronto has less rapid transit infrastructure per capita to accommodate riders than Calgary, Ottawa and Montreal.

3. **Vancouver has built the most rapid transit over the last 20 years,** opening 44 kilometres (km) of new lines, followed by Calgary with 29 km. By comparison, Toronto has opened 18 km of new rapid transit during the same time period.

4. **Over the past decade, Calgary and Vancouver built the most transit.** The two cities have opened 22 km and 20 km of new rapid transit lines respectively, followed by Ottawa with 9 km and Toronto with 7 km.

5. **Montreal leads the way in access to rapid transit** with 37% of its population living within walking distance of a rapid transit stop or station. It is followed by Toronto, where 34% of residents can walk to rapid transit.

Fast Cities is a project of the Pembina Foundation for Environmental Research and Education, which has entered into a service agreement with the Pembina Institute to produce this report.

Summary of analysis

		Toronto	Montreal	Vancouver	Calgary	Ottawa
Rapid and express transit	Length of existing rapid transit lines	**83** km	69 km	68 km	59 km	43 km
	Length of existing rapid transit lines per million residents	32 km	37 km	29 km	**53 km**	49 km
	Annual rapid transit trips per capita	**133**	93	52	74	104
	Residents living within 1 km of existing rapid transit service	34 %	**37 %**	19 %	21 %	28 %
	Length of rapid transit lines opened in past 20 years	18 km	5 km	**44 km**	29 km	23 km
	Length of rapid transit lines opened in past 10 years	7 km	5 km	20 km	**22 km**	9 km
	Length of express bus lines opened in past 20 years	**87 km**	0 km	38 km	16 km	0 km

Table 1: Comparison of transit infrastructure and investment in major Canadian cities

Table figures are for the service area of each municipality's transit system. See the "Transit service areas studied" section in the full report for more details. Trips refer to boardings of individual transit lines. See Appendix A in the full report for methodological details.