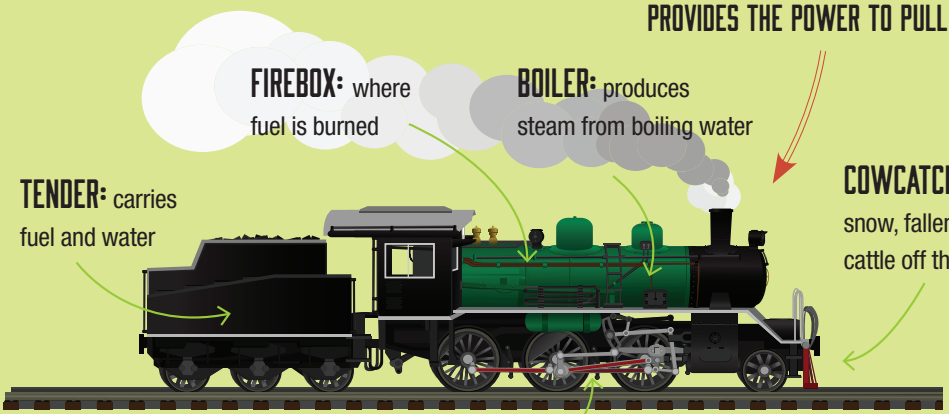
FROM STEAM TO SUBWAYS

For more than 150 years, all kinds of trains have whooshed along tracks throughout Canada.

THE **LOCOMOTIVE** AT THE FRONT PROVIDES THE POWER TO PULL THE TRAIN.



THE FIRST LOCOMOTIVES BURNED WOOD OR COAL, WHICH WERE CARRIED RIGHT BEHIND THE ENGINE IN A TENDER. THE STEAM MOVED METAL RODS CONNECTED TO THE METAL WHEELS THAT MOVED THE TRAIN ALONG IRON RAILS. A WORKER SHOVELLED FUEL INTO A FIREBOX WHICH HEATED WATER IN A BOILER TO MAKE STEAM.

BY THE 1950s, MOST CANADIAN RAILWAYS HAD REPLACED THEIR COAL-BURNING STEAM ENGINES WITH ONES THAT BURNED DIESEL OIL.

Istockphoto, Alamy

ROLLING STOCK IS THE TERM FOR TRAIN CARS OTHER THAN THE LOCOMOTIVE.

THE **CABOOSE** OR **VAN** WAS THE LAST CAR ON A FREIGHT TRAIN. IT COULD BE USED AS A PLACE TO WORK, SLEEP OR WATCH OUT THE BACK OF THE TRAIN. IT HAS BEEN REPLACED BY A COMPUTER OFTEN KNOWN AS **FRED**, FOR **FLASHING REAR-END DEVICE**.

PASSENGER CARS ON TRAINS TRAVELLING SHORTER DISTANCES HAVE SEATS. IF THEY'RE GOING FARTHER, THERE ARE ALSO **BERTHS** – BEDS THAT FOLD DOWN FROM THE WALL – FOR SLEEPING.

THE FIRST FREIGHT CARS WERE JUST PLATFORMS WITH SIDES BUT NO TOP. THERE ARE STILL CARS CALLED **OPEN WAGONS** THAT CARRY THINGS SUCH AS WOOD, GRAVEL AND COAL.

A **HOPPER** IS A COVERED FREIGHT CAR USED TO CARRY ANYTHING THAT NEEDS TO BE KEPT DRY, ESPECIALLY GRAIN.

A **BOXCAR** IS JUST THAT – A SHOEBOX-SHAPED CAR WITH SLIDING DOORS. IT WAS ONCE USED TO CARRY ALL KINDS OF DIFFERENT THINGS, BUT NOW THERE ARE SPECIAL TYPES OF CARS TO TRANSPORT ANIMALS OR AUTOMOBILES.

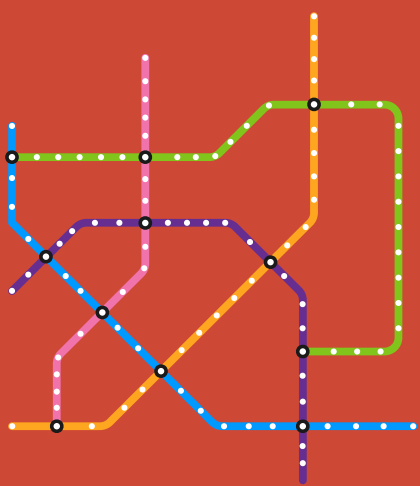
A **TANKER** OR **TANK CAR** IS A ROUNDED CAR FOR CARRYING LIQUIDS SUCH AS OIL, LIQUID HYDROGEN AND EVEN MILK OR VINEGAR.

Istockphoto, Alamy

VIA Rail carries about four million travellers every year. Its passenger trains serve 400 stations all over the country, but it doesn't operate in P.E.I., Newfoundland and Labrador, the Yukon or Northwest Territories, or in Nunavut.

UNDERGROUND TRAINS

Two Canadian cities have **subway** systems — electric trains that carry people through underground tunnels and some aboveground sections. Construction began on Toronto's subway, shown above, in 1949 and the first trains started travelling the 7.4–kilometre route in 1954. (It's now more than 10 times that long.) Montreal's system, known as the Metro, was built between 1962 and 1966, with more stations added in time for the 1967 World's Fair, Expo 67. Each of its stations, many of which are named after famous people from Quebec history, was designed by a different architect.



MR-63 train at Crémazie station (1966)

Istockphoto, Société de transport de Montréal

TRAINS INSTEAD OF TRAFFIC

In a big city, there are a lot of people who need to get back and forth to work around the same time every day. Add in the students going to school, tourists looking around, friends going shopping and families heading to a park or a movie, and that's an awful lot of people who need to get around. Several Canadian cities have set up rail systems to serve those people. That's handy for them, but it's also good for the environment, since there will be fewer cars on the road if people take the train instead. The traffic problem was especially bad in the area around Toronto, so the provincial government started GO (for **G**overnment of **O**ntario . . . get it?) Transit. The first GO trains started running along the north shore of Lake Ontario in 1967. The system now operates hundreds of double-decker trains every day, carrying tens of millions of passengers a year from all over Toronto and beyond. Vancouver's SkyTrain, which started operation in 1986, doesn't have drivers, but it does have some of the prettiest views you'll ever see from a city train. It travels on tracks built high above the streets. It's one of the longest systems of its kind in the world. The city of Calgary hired a company to build a railway in 1893, but the project never happened. In 1981, the CTrain started running in the city's downtown. It now travels to the farthest edges of the city. Ottawa's OTrain is the newest of them all; its first trains hit the tracks in 2001.

Istockphoto, TransLink