**Trains will soon be running again between Toronto and Northern Ontario. But first, they’re going in the freezer**

Northlander trains will be returning to service between Toronto and Northern Ontario, where winters are bitterly cold. Here’s how they are being tested before they start making the trips.

By [**Kristin Rushowy**](https://www.thestar.com/authors.rushowy_kris.html)Queen's Park Bureau Mon., Jan. 9, 2023 timer3 min. read

Soon they’ll be on the rails from Toronto to Northern Ontario.

But first, the new Northlander trains are being put to the test.

The three trainsets recently purchased by the provincial government — piggybacking on an order by the federal government — are in use in some areas of North America and being evaluated both outdoors and [in an indoor climate chamber](https://www.youtube.com/watch?v=EBnvWOMBnLo) to see how they perform in the bitter cold.

Given they’ll be in service by 2026, travelling from Toronto to Timmins and Cochrane, the manufacturer will look at the impact of snow, wind and ice as well as warm summer weather on the units that each include a locomotive and three passenger cars.

“We’ve had several orders from companies like Amtrak, Via Rail, California transport and now Ontario Northland, so it’s becoming a very popular intercity rail product for many reasons,” Yves Desjardins-Siciliano, CEO of Siemens Mobility Canada, told the Star in an interview.

“First and foremost, it’s built here in North America to the highest environmental standards. In terms of energy and carbon footprint and particle emissions, these have the lowest carbon footprint, the lowest particle emissions — greater actually than the EPA standards — so it makes it very popular as governments are trying to fight the climate change,” he said.

“On top of that, the passenger cars are accessible — again, going beyond the government regulated standards, with wheelchair lifts in cars for the accessible bathrooms, wide aisles so a wheelchair can actually go through the car.

“Accessibility standards, as the population is aging, is becoming even more important and so these trends are very well designed from that point of view.”

The Ontario government announced late last year it would fulfil an election promise to return the train service up north, spending $140 million on trains that will be in use by 2026.

Associate Transportation Minister Stan Cho said the trainsets are among the most environmentally friendly diesel locomotive models.

By adding the Northlander order to a federal government order, he said, the service can restart on a faster schedule, given testing is already underway.

“It has shaved off years and years,” Cho told the Star in an interview last month, saying the design, manufacture and testing phases could otherwise have taken a decade.

In a controversial move, the northern rail service was cancelled by the previous Liberal government a decade ago, after having run for more than a century.

The lack of service has impacted northerners, who say their travel options — especially in the winter — are limited.

Danny Whalen, a Temiskaming Shores city councillor who is also president of the Federation of Northern Ontario Municipalities, had called on politicians to stop making promises and get the trains rolling.

“I don’t want sympathy,” he told the Star in an interview before last spring’s provincial election. “I want action.”

The new Northlander service is expected to run four to seven days a week, depending on the season, with stops in Toronto (at Union Station), Langstaff, Gormley, Washago, Gravenhurst, Bracebridge, Huntsville, South River, North Bay, Temagami, Temiskaming Shores, Englehart, Kirkland Lake/Swastika, Matheson, Timmins and Cochrane.

The trainsets on order were winter-tested for Via Rail Canada last year. They are in use in the Montreal-Ottawa corridor, and are also on the rails in Chicago and California, said Desjardins-Siciliano.

All new trains are tested for safety and crashworthiness, he said, and undergo specific testing for Canada’s winters.

“You have to test it to make sure that in harsh winter conditions … the equipment can function despite the very cold climate and intrusions by either snow or water or ice,” including around the engine, ventilation systems on top or sides and braking systems underneath. “You have to make sure that all of those components don’t freeze up and that they continue to perform despite very harsh weather.”

From November 2021 to last April, the trains were tested without passengers “just to experience the winter, to detect any weaknesses or corrective measures that have to be taken based on the performance,” he said.

The trains, which are built in Sacramento, “performed extremely well,” he added.

This year, they will be taken indoors to a research centre in Ottawa, which is equipped to simulate intense heat or cold, wind and ice — “all of these different elements of nature, to see what the impact is on the equipment.”

The indoor testing will help get the Northlander certified for use sooner than if the Ontario government had started the process on its own, he added.