

NEW CORRIDOR FLEET

VIA Rail's current Corridor fleet will be replaced by Siemens Venture trainsets and will operate in the Quebec City – Windsor corridor, VIA Rail's busiest route, which represented 96% of its ridership in 2019.

Performance

- Powered by Siemens Charger locomotives, which are equipped with a proven propulsion system powered by a fuel-efficient Cummins QSK95, 16-cylinder diesel engine providing 4200 hp.
- The engine feeds an alternator and the IGBT traction converters provide single axle control for operation of up to 201 km/h (125 mph)* while meeting the latest EPA (Environmental Protection Agency) Tier 4 emission standards.

Accessibility

- Each train set has three (3) cars with onboard wheelchair lifts available in Economy class and Business class. Five (5) mobility aid spaces per trainset allow ample space for wheelchair users.
- Large and fully accessible washrooms allow for easy wheelchair maneuverability, clearer floor area, more hand grabs, a wider door opening and a power-operated door.
- Braille signage is provided on important features such as seat numbers and call-for-aid buttons. At-seat attendant call buttons at Mobility Aid Spaces. Onboard announcements available in both audio and visual formats.

Safety

- Sliding-plug side doors with trap doors and retractable low-level entry steps offer improved ease of entry and exit for high- and low-level platform access.
- Passenger areas are equipped with CCTV that can be accessed by the Operations Control Center.
- Modern sealed gangways (passage between cars) are wider and have a smooth floor surface allowing for an easy transition, isolated from weather, from one car to another.

Performance and Capacity

Maximum operational speed	201 km/h (125 mph)*
Rated power maximum	4,200 hp @ 1,800 rpm
Operating range	600 to 1,800 rpm
Head end power	600kW
Tractive effort (max.)	65,000 lbs. (290 kN)
Fuel tank volume	8320 litres
	Economy: 194 seats
Passenger capacity	Business: 87 seats
(standard configuration)	Wheelchair lifts: 6
	Mobility aid spaces: 5

*While the new Corridor fleet is able to travel at a speed of up to 201 km/h the current maximum speed allowed for passenger trains in Canada, which is determined by the Class of Track on which these trains operate, is 160km/h (100mph).

Information provided by VIA Rail Canada, November 30, 2021



Passenger Comfort

- Modern suspension design, featuring air spring technology delivers the highest level of comfort.
- Wider aisles, automatic touchless interior doors, large and adjustable tray tables, comfortable and ergonomic seats with integrated power outlets, USB charging and overhead reading lights. In-seat recline allows seat adjustment without encroaching into the space behind.
- A self-contained roof-mounted HVAC system with thermal and acoustic insulation maintains a pleasant environment.
- Enhanced Wi-Fi improves connectivity and supports high-speed reliable data connection.
- Latest state-of-the-art galleys optimize passenger service abilities.

Environmental Considerations

- These bi-directional trainsets operate more efficiently, reducing emissions and operating costs.
- The engines will meet EPA (Environmental Protection Agency) - Tier 4 emission standards which will allow for an 85%-95% reduction in particulate matter (PM) and Nitrogen Oxide (NOx) emissions and significantly contribute to improving air quality.
- The trains feature energy-saving LED lighting and dual pane windows.
- The locomotives use a microprocessorcontrolled electrodynamic braking system which allows the braking energy of the traction motors to feed into the train's onboard electrical system, reducing overall fuel consumption.
- Water dispensers provide passengers with access to fresh water using their own water bottles.

Intelligent Train

 The fully integrated IT system provides the backbone for innovative applications such as vehicle diagnostics, Maintenance, Passenger information system, CCTV, and internet on board.

Optimized Maintenance

- Continuous trainset data monitoring and data analytics ensures early detection of faults, preventative maintenance and reduced downtime.
- Predictive and condition-based maintenance paired with a newly introduced computerized maintenance management information system (CMMIS) extends the useful life of components and optimizes the maintenance schedule, ultimately increasing the fleet reliability and availability.

Coach and Cab Car Dimensions*	
Length	85 ft (25 908 mm)
Width	10 ft 6 in (3 201 mm)
Height	14 ft (4 268 mm)
Floor height	51 in (1 296 mm)
(above top of rail)	
Side door width	34 in (864 mm)
Aisle width	27.4 in (696 mm)
	to 36.2 in (920 mm)
Distance between	59 ft 6 in (18 136 mm)
truck centers	

* For a standard trainset configuration, which consists of four coaches, one cab car and one locomotive. The configuration is flexible and can be decreased and increased as needed.



