Frequent, fast and reliable service

CÉGEP MARIE-VICTORIN

ROBERT-BOURASSA

POINTE-AUX-TREMBLES





View from the riverbank, aboard an REM de l'Est car on Notre-Dame Street East
*for reference only

Mobility.

Integration.





Réseau express métropolitain (REM) de l'Est

Subsidiary of Caisse de dépôt et placement du Québec

cdpqinfra.com

CDPQ Infra

Overview

32 km
of new light rail

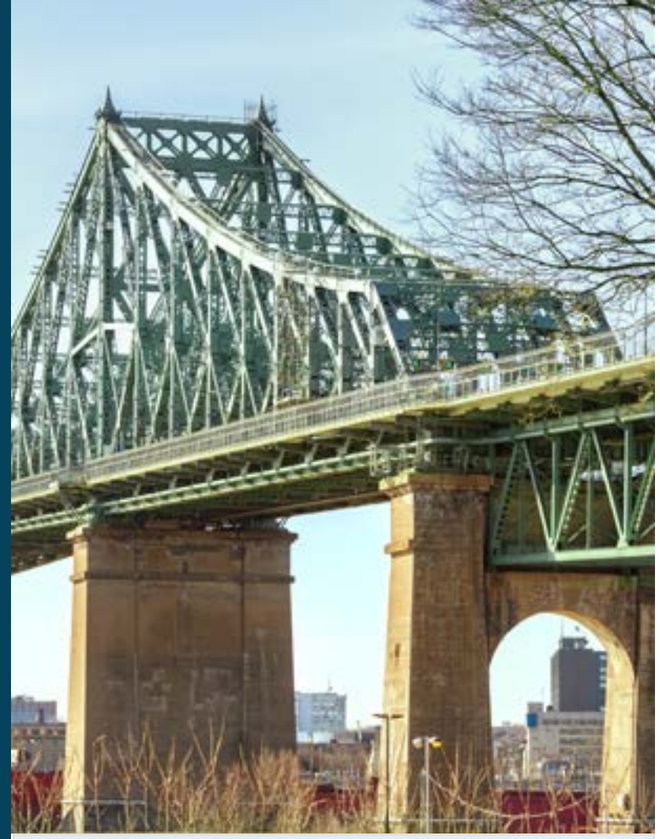
23
universally accessible stations

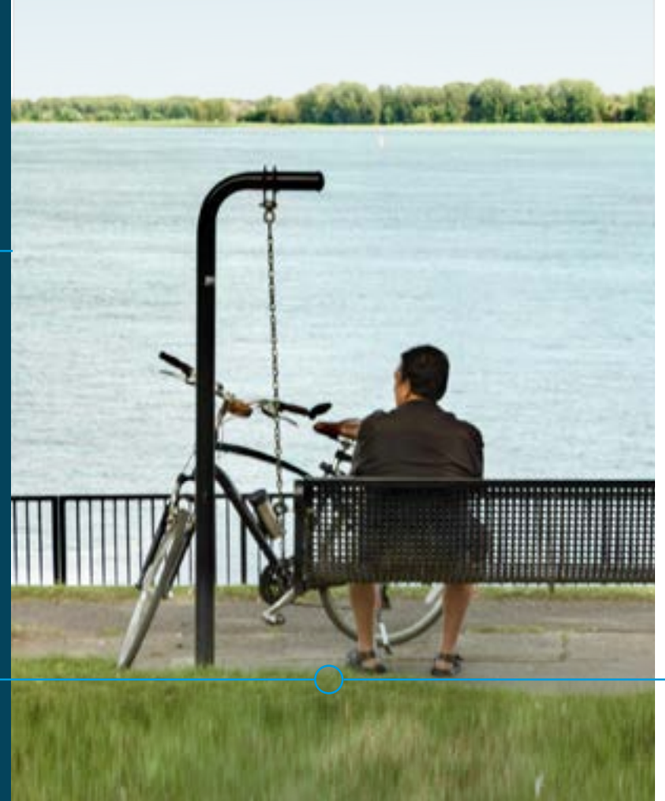
Stations
40
metres long

Automated system with
screen doors

2-car trainset

100%
automated
electric light rail cars





The REM de l'Est

PROJECTED INITIAL SERVICE

Frequency: approximately every 2-4 minutes during rush hour

- Hours of operation synchronized with the STM métro system
- Rush hour frequency:
  - every **2 minutes** on the common segment
  - every **4 minutes** on the Pointe-aux-Trembles and Cégep Marie-Victorin branches
- Very competitive travel times to downtown:
  - in **25 minutes** from the Pointe-aux-Trembles station, 35 to 70% time saved;
  - in **30 minutes** from the Cégep Marie-Victorin station, 25 to 60% time saved.

MOBILITY

Ridership *(by 2044)*: 133,000 users/day and 380 million passenger-km/year

- Doubles the coverage of the métro system in Montréal's east end *(x 2.5)*
- Integrates with and offers complementary service to public transit systems:
  - Montréal Métro *(orange, green and blue lines)*
  - Commuter train *(Mascouche)*
  - SRB Pie-IX
  - Bus systems *(STM, STL, RTL, exo)*
  - REM *(Gare Centrale)*
  - Intercity trains *(Gare Centrale)*

BENEFITS FOR THE ENVIRONMENT

Reduces GHGs by 35,000 tonnes/year

- Eliminates 165 million vehicle-km per year *(by 2044)*
- Encourages modal transfer from single-occupancy vehicle to public transit
- Reduces noise pollution associated with traffic congestion
- Supports the government's strategy for transportation electrification

ECONOMIC BENEFITS

$6.3 billion towards Québec's GDP

- 60,000 direct and indirect jobs during construction
- Service to 27 million vacant square feet in Montréal's east end
- Reduction of economic losses resulting from traffic congestion *($4.2 billion/year in the Greater Montréal area)*
- Connectivity to the business, employment, health, education and entertainment districts of Montréal's east end

BACKGROUND

On the basis of the general guidelines issued by the Québec government in May of 2019, CDPQ Infra began looking at an electric public transit system to link the east end of Montréal and the CEGEP Marie-Victorin area to downtown Montréal.

The proposed solution: REM de l'Est

CDPQ Infra developed a solution for a new automated light rail system in the eastern and northeastern Montréal, namely the Réseau express métropolitain (REM) de l'Est. This new system features 32 km of new corridors dedicated to public transit, with two branches and one common segment.



Trainsets are composed of **two electric light rail cars** and are powered by a catenary system *(overhead wire)*.

REM de l'Est features **23 universally accessible stations.** Service offered **7 days/week** with the same hours of operation as the Montréal Métro.

		Driving time	By current public transport	With REM de l'Est	% of time saved compared to driving
Pointe-aux-Trembles	⟷ Downtown	40 to 80 min on average	45 to 60 min on average	**25** min.	**35** to **70%**
Cégep Marie-Victorin	⟷ Downtown	40 to 75 min on average	55 to 70 min on average	**30** min.	**25** to **60%**
Maisonneuve Park	⟷ Downtown	15 to 35 min on average	35 to 55 min on average	**10** min.	**30** to **70%**

Route

COMMON SEGMENT

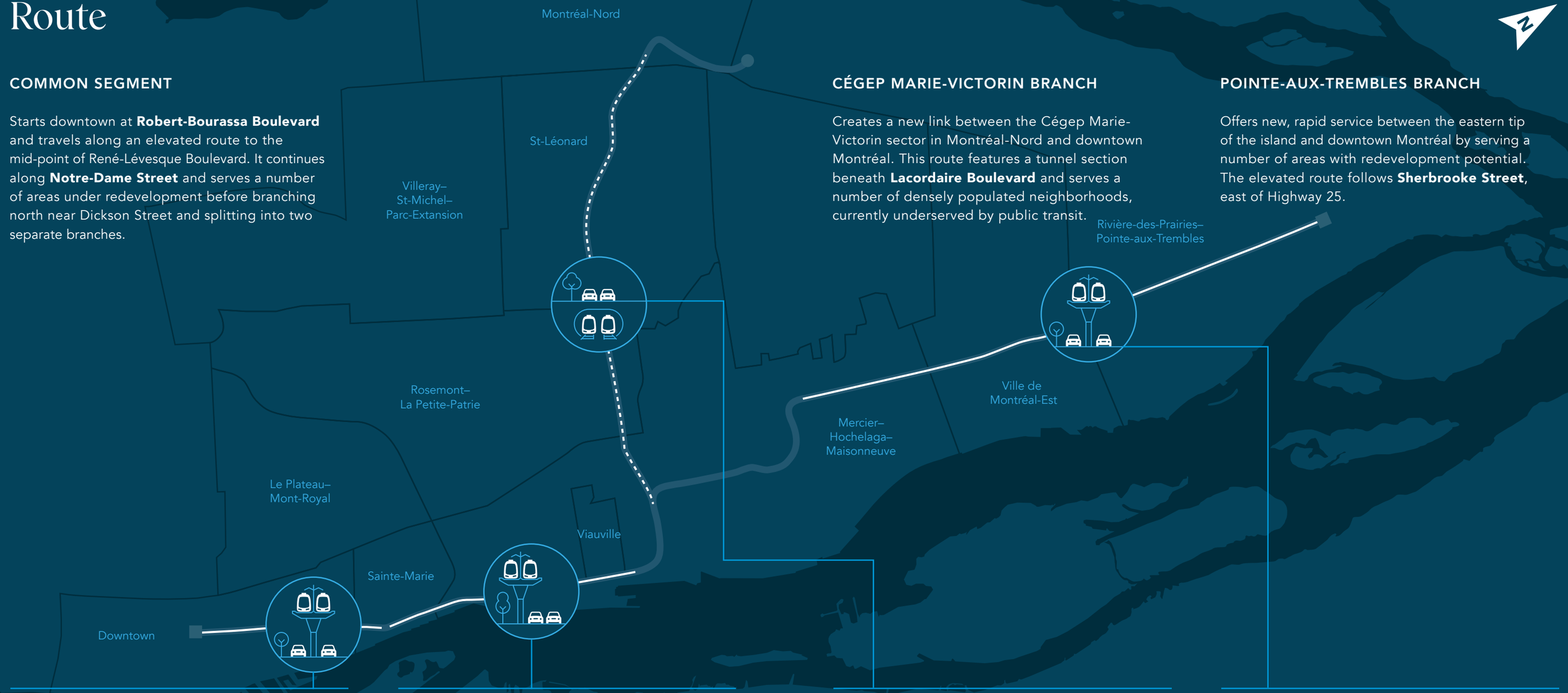
Starts downtown at **Robert-Bourassa Boulevard** and travels along an elevated route to the mid-point of René-Lévesque Boulevard. It continues along **Notre-Dame Street** and serves a number of areas under redevelopment before branching north near Dickson Street and splitting into two separate branches.

CÉGEP MARIE-VICTORIN BRANCH

Creates a new link between the Cégep Marie-Victorin sector in Montréal-Nord and downtown Montréal. This route features a tunnel section beneath **Lacordaire Boulevard** and serves a number of densely populated neighborhoods, currently underserved by public transit.

POINTE-AUX-TREMBLES BRANCH

Offers new, rapid service between the eastern tip of the island and downtown Montréal by serving a number of areas with redevelopment potential. The elevated route follows **Sherbrooke Street**, east of Highway 25.



Elevated route above the median strip on **René-Lévesque Blvd.**

- Avoids conflicts and risks with the many buried infrastructures (collectors, métro, public utilities, foundations) over several kilometres
- Offers new views of downtown and the St. Lawrence River
- Maximizes pedestrian, cyclist and vehicle traffic safety

Elevated route along the north side of **Notre-Dame East**

- Ensures harmonious coexistance with future redevelopment into an urban boulevard
- Offers new views of the banks of the St. Lawrence River as it enters the downtown area
- Maximizes pedestrian, cyclist and vehicle traffic safety

Mostly underground route along **Lacordaire Blvd.**

- Avoids expropriations required to widen the public roadway
- Ensures the system integrates better in a dense residential area comprised of low-height buildings
- Maximizes pedestrian, cyclist and vehicle traffic safety

Elevated route above the median strip on **Sherbrooke Street E.**

- Minimizes impacts on existing roadway layout
- No impact on commercial or residential entrances
- Maximizes pedestrian, cyclist and vehicle traffic safety

Frequent: departures every **2 to 4 minutes** during rush hours.



Fast: REM de l'Est saves **10 to 55 minutes** as compared to driving for users travelling downtown, representing a **25% to 70% reduction** in total travel time.



Frequent, rapid and reliable service

The REM will help structure redevelopment in the East end of Montréal, thanks to its magnitude, the sectors it covers, its connection to other networks and its environmental benefits.

For maximum reliability, safety and accessibility, stations are equipped with platform **screen doors**, **elevators** and **escalators**. **WiFi** will also be available across the entire network.



A DRIVER OF ECONOMIC DEVELOPMENT

In terms of economic benefits, REM de l'Est will create 60,000 jobs during the construction period and contribute $6.3 billion to Quebec's GDP. The new system serves Montréal's main employment hub *(downtown)*, as well as employment hubs in the east such as the Port of Montreal, the Olympic Stadium district, the future Hôpital Maisonneuve-Rosemont innovation zone and many industrial parks. In making these employment hubs easily accessible by public transit, REM de l'Est will help increase the attractiveness of the area's businesses and organizations and help retain employment in the sector.

In terms of land development, the new system will cross 27 million square feet of vacant land along the St. Lawrence River, in both the Pointe-de-l'Île industrial sector and the Assomption Sud – Longue Pointe sector. REM de l'Est will thus serve as a lever in the Quebec government's efforts to decontaminate brownfields – the first step in bringing to fruition its vision of a valley of innovation along the St. Lawrence River.

The significant time savings for users that REM de l'Est provides will increase productivity and help reduce economic losses associated with traffic congestion. *(In 2018, these losses were estimated at $4.2 billion/year in the Greater Montréal area.)*

SIGNIFICANT ENVIRONMENTAL BENEFITS

The marked improvement in travel times with REM de l'Est will facilitate a modal shift from single-occupancy vehicles to public transit. Estimated ridership is 380 million passenger-km per year *(by 2044)*. This modal shift offers a number of other benefits, including:

Reduction of approximately 35,000 tonnes/year in GHG emissions

Ultimate elimination of 165 million vehicle-km per year *(by 2044)*

Decrease in noise pollution associated with traffic congestion

Since it is entirely electric, REM de l'Est is also fully aligned with the government's strategy for transportation electrification.

Lastly, the project will help improve the overall environmental record of Montréal's east end through increased use of public transit as well as the leverage effect for the effort to decontaminate vacant lots in the east end.



A PROJECT THAT FULFILS STAKEHOLDERS' PRIORITIES

Significantly improving public transit services in numerous strategic sectors in the east fulfils the priorities that local stakeholders have articulated.

Meetings with municipalities, transit companies, economic and environmental groups and user representatives will be organized to discuss the project and look at opportunities for optimization.

Public events such as open houses will also be used to reach the public.

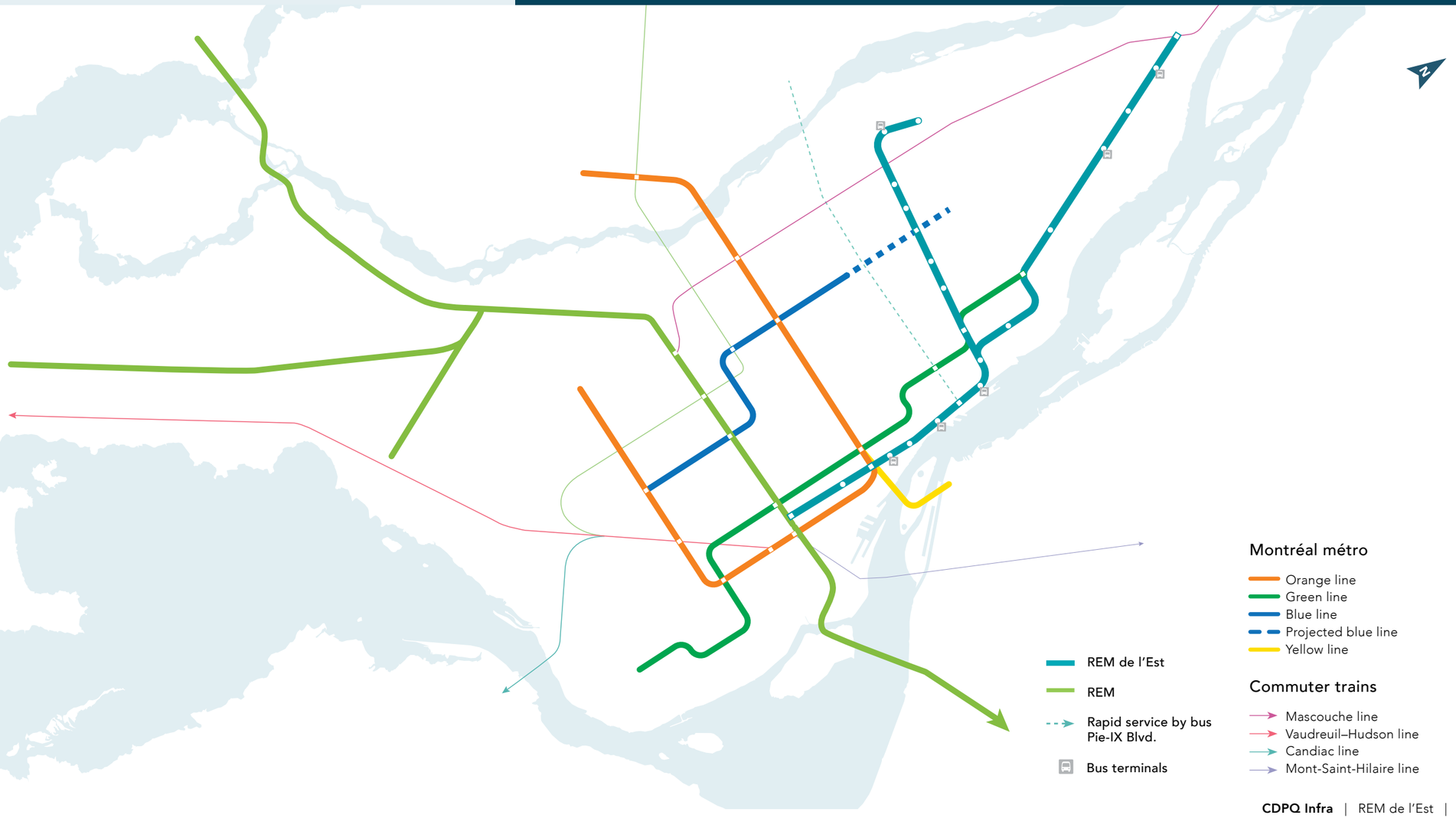


Nearly **100 km** of automated light rail will ultimately be rolled out in the Greater Montréal area with REM and REM de l'Est.

An intermodal and connected network

In addition to more than doubling the area covered by the métro system in Montréal's east end, REM de l'Est will offer connections to all metropolitan public transit systems *(Montréal Métro, commuter trains, SRB Pie-IX, REM, buses)*, thereby maximizing intermodality and fluidity of travel.

This will free up capacity for the Montréal Métro particularly on the eastern branch of the orange line thanks to a new north-south service on the island of Montréal, as well as on the métro's green and blue line.



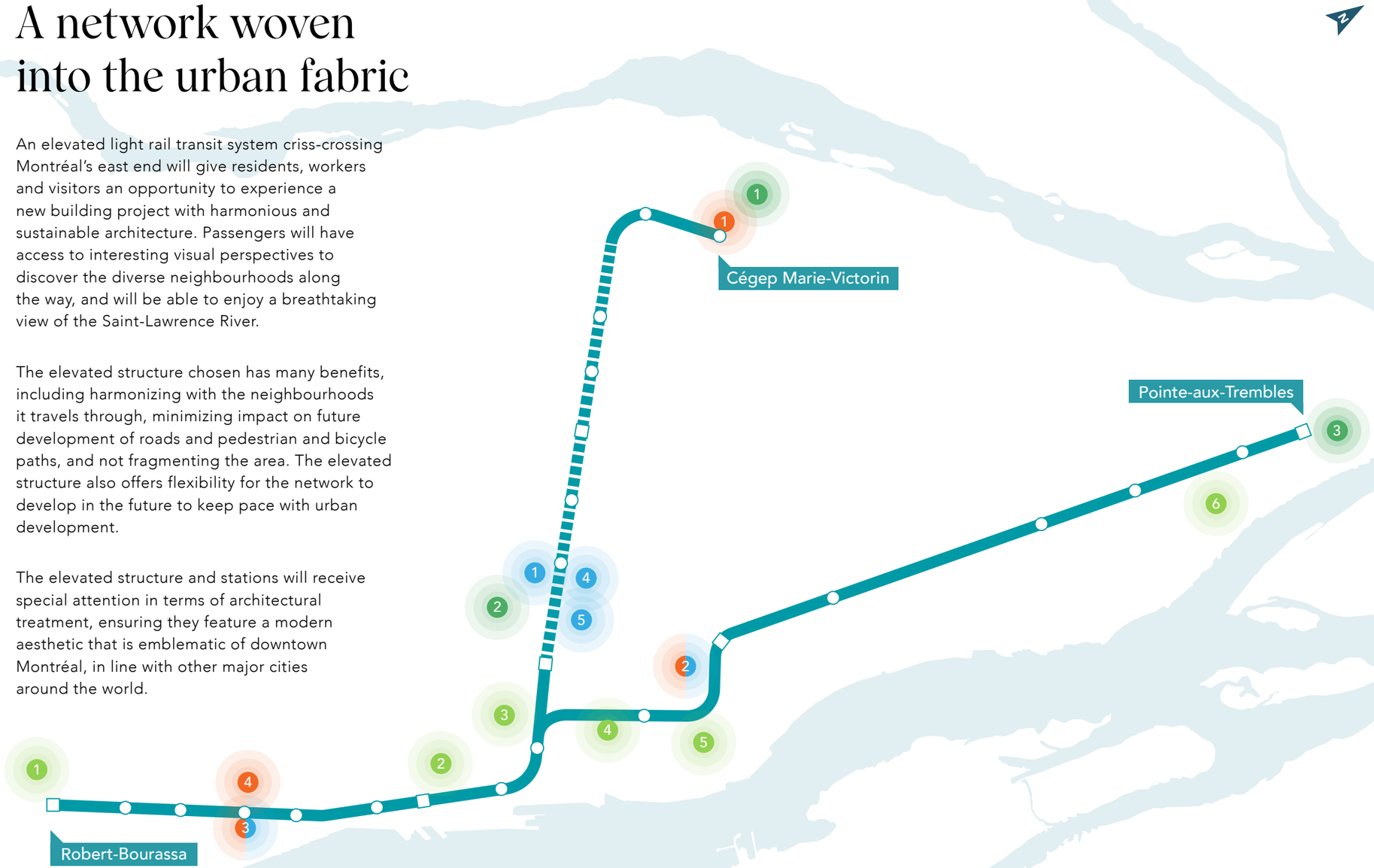


A network woven into the urban fabric

An elevated light rail transit system criss-crossing Montréal's east end will give residents, workers and visitors an opportunity to experience a new building project with harmonious and sustainable architecture. Passengers will have access to interesting visual perspectives to discover the diverse neighbourhoods along the way, and will be able to enjoy a breathtaking view of the Saint-Lawrence River.

The elevated structure chosen has many benefits, including harmonizing with the neighbourhoods it travels through, minimizing impact on future development of roads and pedestrian and bicycle paths, and not fragmenting the area. The elevated structure also offers flexibility for the network to develop in the future to keep pace with urban development.

The elevated structure and stations will receive special attention in terms of architectural treatment, ensuring they feature a modern aesthetic that is emblematic of downtown Montréal, in line with other major cities around the world.



The new network will also make it possible to create new travel routes between major attractions in the east end such as Maisonneuve Park and Parc-nature de la Pointe-aux-Prairies, recognized health institutions such as the CHUM, the Montreal Heart Institute, Hôpital Louis-Hyppolite-Lafontaine, Hôpital Maisonneuve-Rosemont and knowledge institutions such as Cégep Marie-Victorin and UQÀM. This new service will help improve the daily lives of citizens

Green spaces

1 Ruisseau-de-Montigny nature park
2 Maisonneuve Park
3 Pointe-aux-Prairies Nature Park

Hospitals

1 Institut de cardiologie
2 Louis-Hippolyte-Lafontaine
3 CHUM
4 Santa Cabrini
5 Maisonneuve-Rosemont

Employment hubs

1 Downtown Montréal
2 Industrial-port areas
3 Olympic Stadium sector
4 Assomption South sector
5 Longue-Pointe
6 Pointe-de-l'Île sector

Knowledge hubs

1 Cégep Marie-Victorin
2 Institut de santé mentale de Montréal
3 CHUM
4 UQAM

Supporting the redevelopment of Notre-Dame East

Four REM de l'Est stations will serve Notre-Dame East, from René-Lévesque Boulevard to Dickson Street, thus contributing to its revitalization. Since the elevated structure has such a small footprint, in terms of both its pillars and its stations, the space required for any future development on Notre-Dame Street as a green and dynamic urban boulevard will be available.

Elevated light rail infrastructure will also maintain direct access to the riverbanks and enhance the urban environment.

Responsibility for redevelopment of Notre-Dame East will lie with municipal and government authorities.



Project costs are estimated at approximately **$10 billion** *(nominal value)*. REM de l'Est is the **largest public transit project** ever carried out in Quebec.



*For reference only
REM de l'Est station on Notre-Dame East