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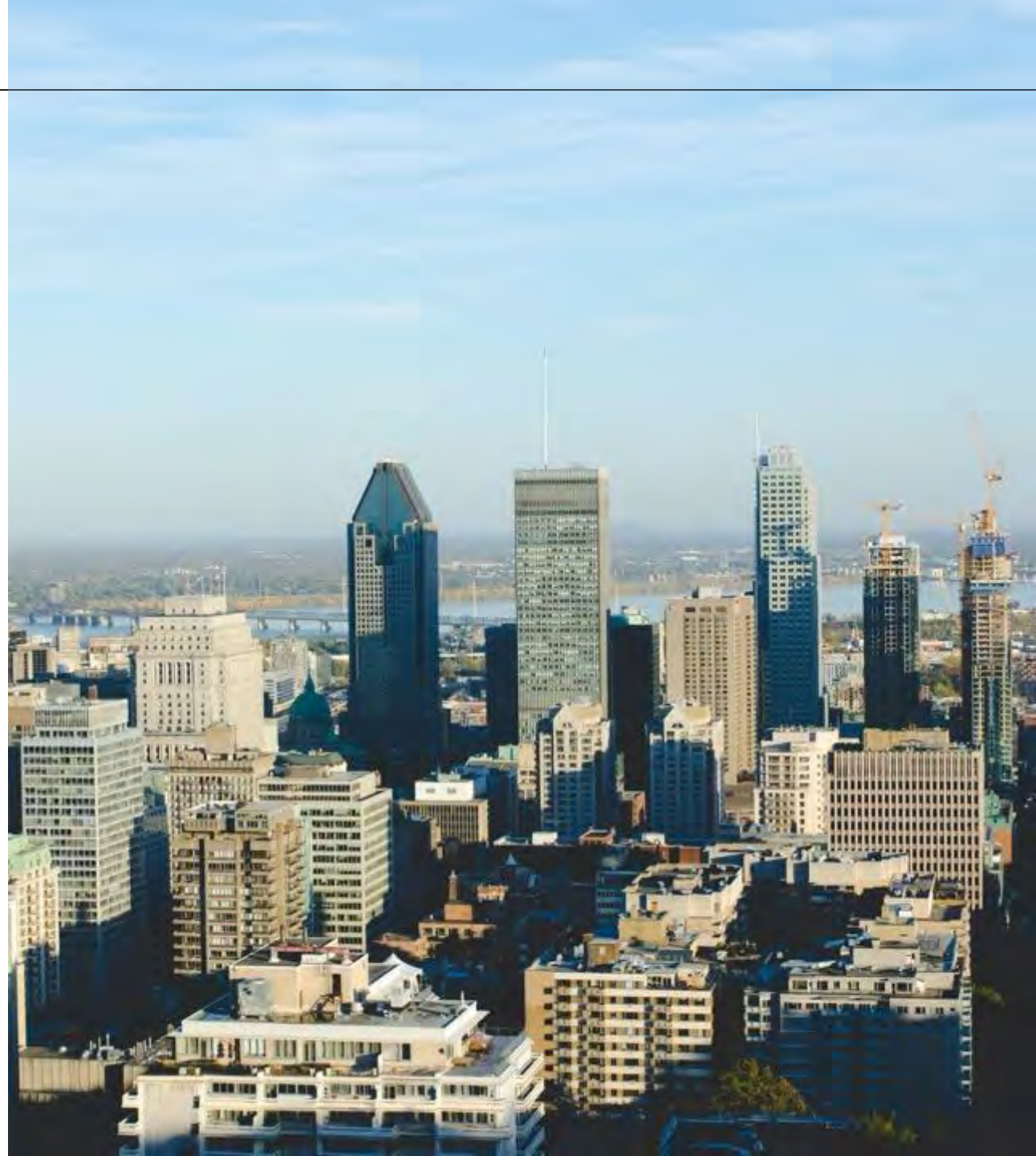
Analysis of ARTM report on the REM de l'Est



FEBRUARY 2022

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Main findings

1 Consistency with ARTM strategic plan

2 Analysis tools and methodology gap

3 REM de l'Est modal transfer

4 Needs for transit in eastern Montréal

5 Understanding of the solution

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Consistency with ARTM strategic plan

1

Close harmonization with the ARTM

→ In giving CDPQ Infra a very specific study mandate based on the major orientations for the identified corridors, the government is responding to **the priorities of the PIDTC (public transit development initiatives plan)**.

→ The REM de l'Est is a **response aimed at creating a structuring network** in the eastern and northeastern areas of Montréal and is perfectly consistent with the mandate given.

September 2021: filing of the ARTM's strategic development plan (SDP).

→ Connecting eastern and northeastern Montréal with downtown via a structuring project is one of the **priorities of the SDP**.

→ **An operational committee** was formed with the Québec government, the ARTM and CDPQ Infra. This committee has been meeting regularly since September 2019 to discuss major orientations.

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Analysis tools and methodology gap

2

Modern tools and modelling used by CDPQ Infra

	ARTM	CDPQ Infra
Modal transfer estimate tool	Uses the MADIGAS analysis model, designed in 1990, which takes only public transit trips into account, excluding road transportation	Uses **more recent** tools (Quetzal (Systra), RM20 (Steer)), that take MADIGAS data into account + travel time from the Ministère des transports' MOTREM model
Peak period considered	Takes only the morning peak period into account (PPAM)	Considers the PPAM **+ the afternoon peak period** **+ 24-hr modelling**
Reference data	Based on the initial information from the reference project proposed in December 2020: route, location of stations, speed, frequency…	**Continuously adapted** in light of changes made to the project: route, location of stations, speed, frequency…

	ARTM	CDPQ Infra
Preference analysis	Not done	**Field surveys**, known as stated preference surveys, of the transit-using public to improve the accuracy of the modal choice model
Peer review	Conducted in-house	**Studies completed and cross-checked externally** by specialist firms
Data used	Origin-Destination Survey (OD) 2013	**2018 OD Survey** **+ Projections from the 2013 OD survey**

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REM de l’Est modal transfer

Modal transfer underestimated by 300%

ARTM	CDPQ Infra
" The project will lead to only a modest number of new public transit users" That is, 5.6%	CDPQ Infra uses more data in its analysis and all types of travel. The result is an estimated modal transfer of 17%. A **17% modal transfer rate is highly significant** for a new transit network, especially since we must bear in mind that other public transit users will see an improvement in their service quality and a stronger likelihood to remain with public transit rather than driving. Preliminary data – CDPQ Infra studies: **7,850 in the PPAM (17% total boardings)** That is, **6,000** PPAM users (13% total boardings) + **1,850** bimodal users in the PPAM

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Needs for transit in eastern Montréal

4

Relieving pressure on networks for growing needs in the East

ARTM

"In peak periods, 94% of REM de l'Est ridership will simply be taken from existing services, particularly the green line of the métro and the Mascouche train"

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The **green line is approaching saturation point**, particularly at the Berri-UQAM intermodal station. **Finding confirmed by the ARTM.**

- The introduction of Azur trains on the green line should allow the STM to increase capacity from 19,000 passengers per hour to over 21,000. The REM de l'Est offers an additional net potential of 13,000 passengers per hour towards downtown, **providing both networks with residual capacity for many years**.
- The REM de l'Est will reduce **pressure on the green line** during the PPAM, lowering ridership by 11% (15,000/120,000 users) on this line, allowing to better meet future needs, including the advent of the SRB-IX rapid bus service.

The estimated ridership of the REM de l'Est is a result of its attractiveness to users who want frequent, reliable, fast service, and direct journeys without transfers.

The REM de l'Est is an **answer to present and future travel needs** in eastern Montréal.

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Understanding of the solution

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63,000 users to be carried into downtown Montréal

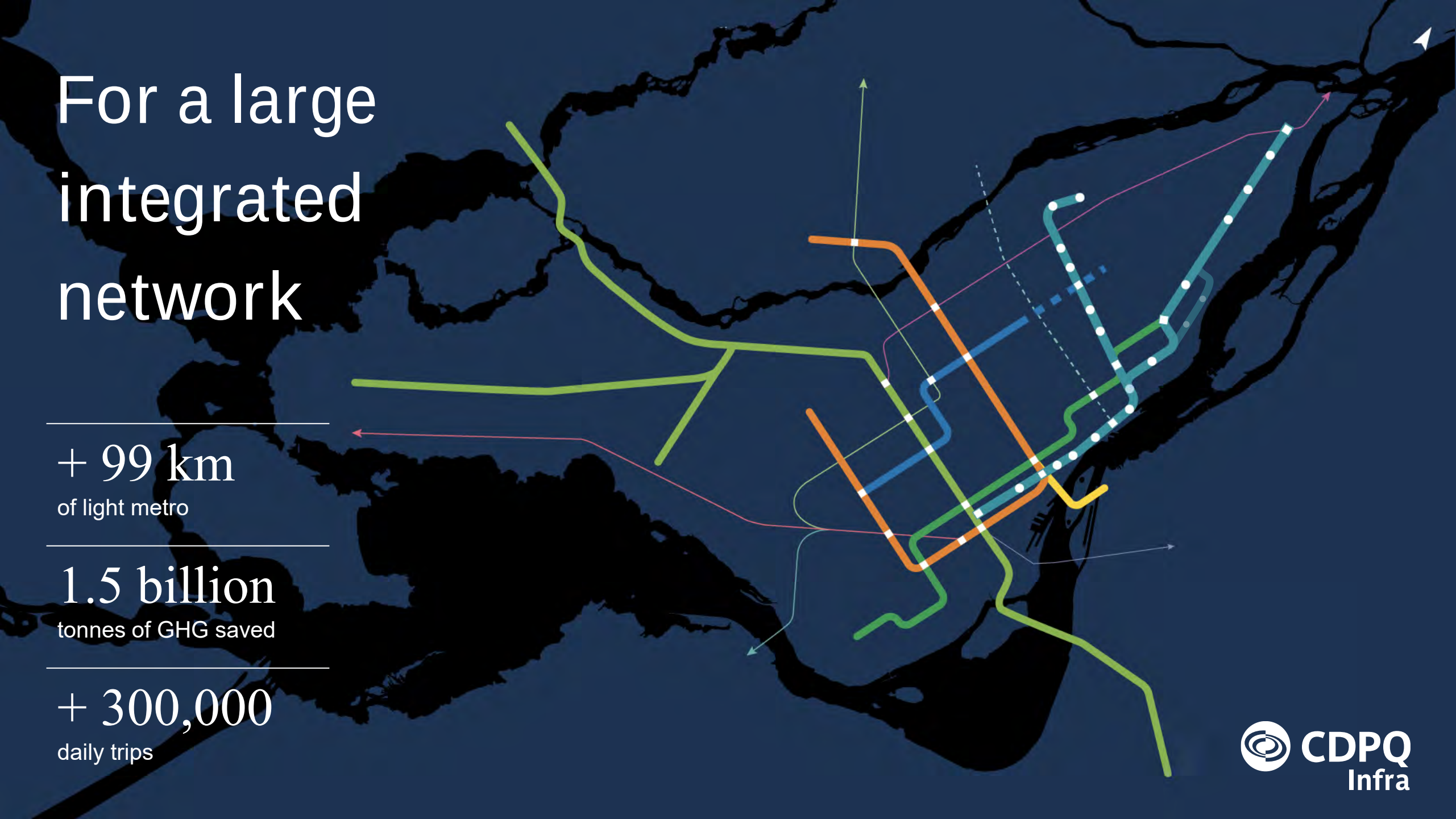
ARTM	CDPQ Infra
"Only 12% of trips in areas served by the project are destined for downtown"	A light metro transit network is designed to provide increased frequency and numerous destinations, not exclusively a connection to downtown. The proposed solution is in line with major qualitative post-pandemic trends: • Off-peak travel • Several destinations other than downtown • Crowding factor **Close to 40% (63,000 users)** of travel needs in eastern Montréal are destined for downtown (12%) and central Montréal (27%), and the REM de l'Est answers this need. 75% of REM de l'Est ridership goes to downtown and central Montréal.

Importance of offering an attractive solution

A REMINDER OF THE OBJECTIVES TARGETED BY THE REM DE L'EST

	By car	Using existing public transit	Using the REM de l'Est	% time savings compared to driving
Pointe-aux-Trembles ↔ downtown	40 to 80 minutes on average	45 to 60 minutes on average	25 MINUTES	35 to 70%
Maisonneuve Park ↔ downtown	15 to 35 minutes on average	35 to 55 minutes on average	10 MINUTES	30 to 70%
Cégep Marie-Victorin ↔ downtown	40 to 75 minutes on average	55 to 70 minutes on average	30 MINUTES	25 to 60%

For a large integrated network



+ 99 km
of light metro

1.5 billion
tonnes of GHG saved

+ 300,000
daily trips

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