



## **The Montréal metro: a reflection of our employees and our customers**

MetroRail

Yves Devin, *Fellow CRIA*

CEO

Société de transport de Montréal  
(STM)

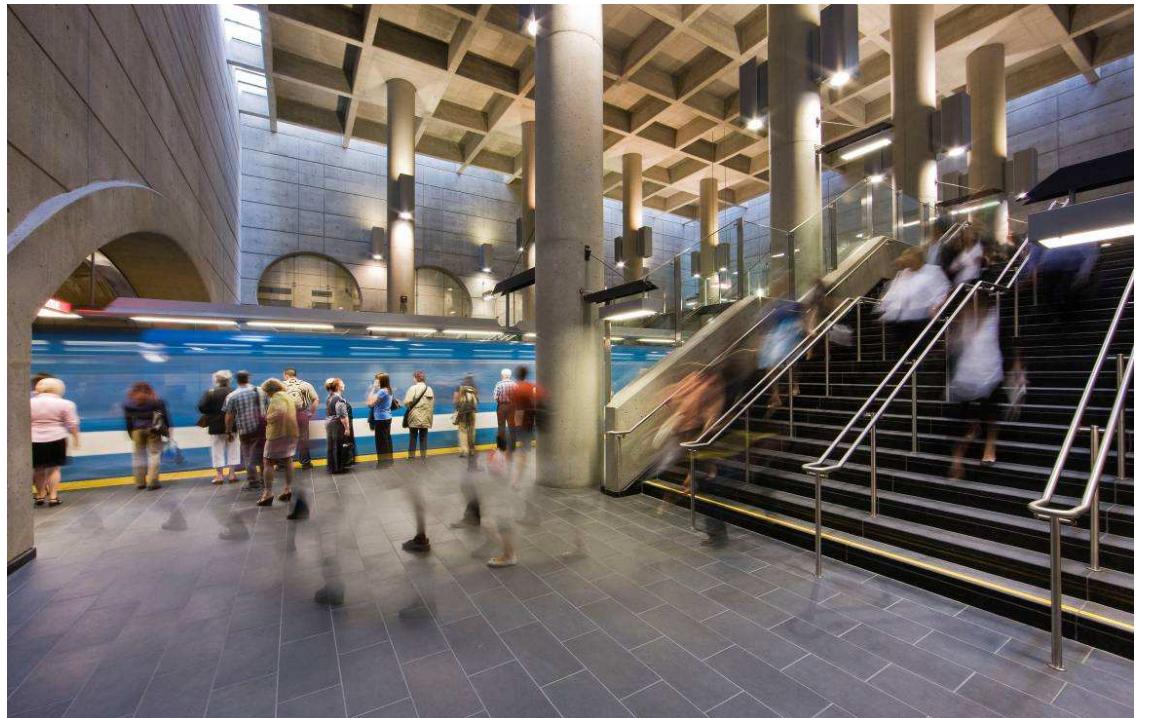
March 28, 2012

MOUVEMENT COLLECTIF



# The STM metro

- Inaugurated in 1966
- 900 000 passenger rides each day
- 68 stations
- 71 km of tunnels
- Pneumatic tires



# STM metro cars



- **MR-63**
  - Canadian Vickers
  - 333 cars
  - 46 years old
  - mdbf: 200 000 km-car

- **MR-73**
  - Bombardier
  - 423 cars
  - 34 years old
  - mdbf: 450 000 km-car





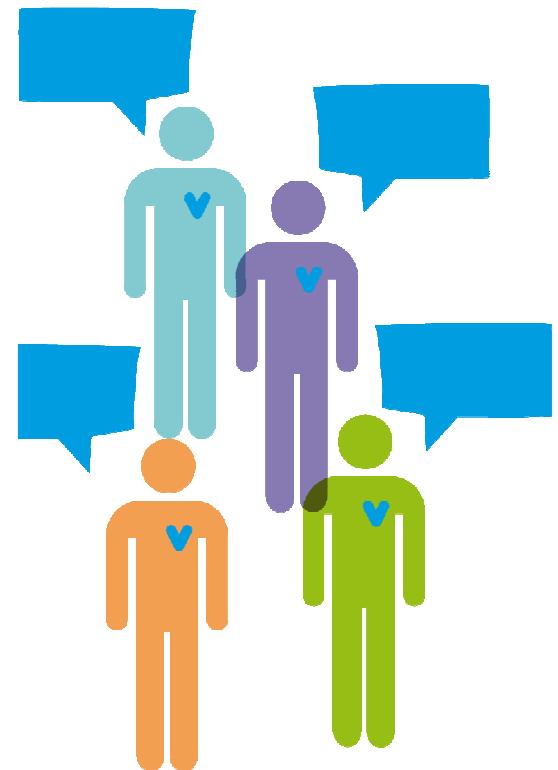
## Context

- Replacing the metro's cars is one of the biggest projects in the STM's history
- Legal and political battle over the tendering process
- Delivery of the new MPM-10 métro cars will have a major impact on employees, transit users, Montrealers and the general public

# MPM-10

# The stakes

- Getting employees to subscribe and commit to the project by involving them in the process
- Managing customer expectations
- Sharing a feeling of pride at playing an active part
- Paying attention to public opinion, the guiding principle throughout the process





# Objectives

- Engage people and give them a feeling of pride about the project
- The STM wants to listen to its employees and customers
- Promote universal access
- Enhance our public image and gain sympathy in public opinion, as well as our visibility by using the project as leverage

# The new train dreamed up by Operations

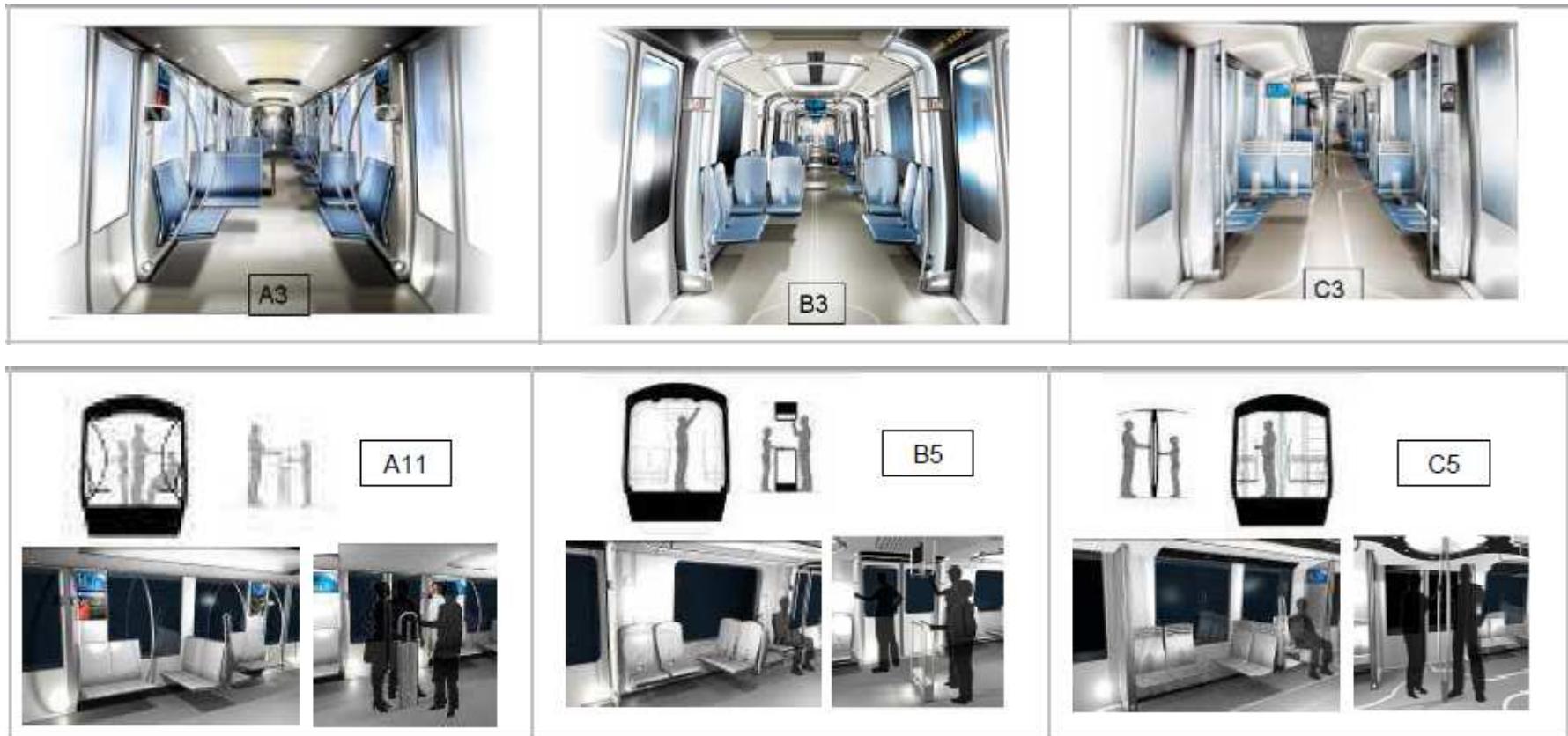


# Public consultation about the train's new look



- 10 focus groups
- employees
- customers

# Public consultation about the train's interior



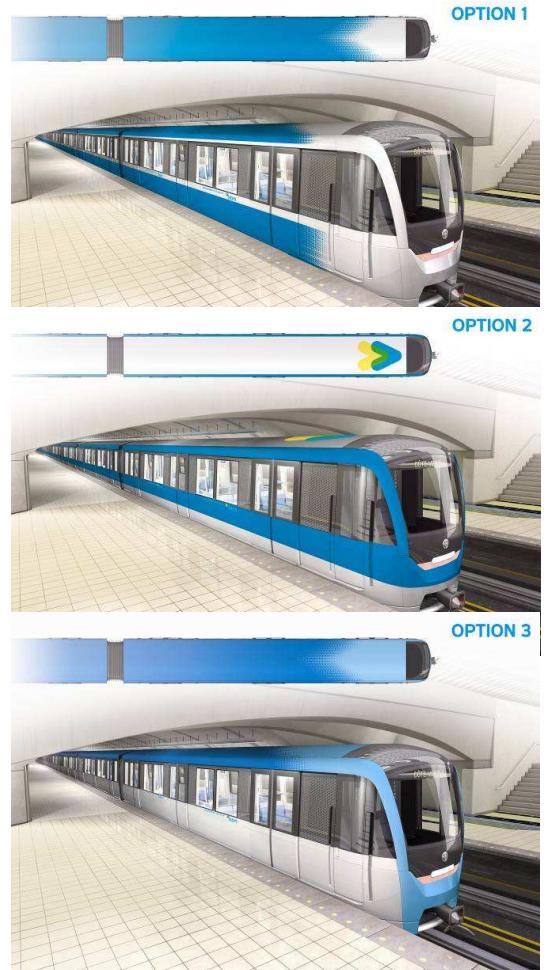


# The winner!



# Public consultation about the train's exterior colours

- Among employees, initially, and afterwards, among customers and the public
- Three options
- 30 000 people took part
- Option 1 was chosen





# The final choice



# A name for the new metro cars



The screenshot shows the STM website's homepage. At the top, there's a navigation bar with links for 'Accueil', 'À propos', 'Projets d'avenir', and 'FAQ'. Below the navigation is a search bar with a placeholder 'Recherche' and a 'ok' button. A banner on the right side of the header reads 'CHAQUE PASSAGER COMpte POUR LA PLANÈTE' with a small graphic of a person and a plus sign. The main content area features a large image of a blue and yellow 'V' logo. Below it, text reads '28 mars 2011' and 'CONSULTATION PUBLIQUE DU 28 MARS AU 11 AVRIL'. To the left, there's a section titled 'ET SI ON TROUVAIT UN NOM AUX PROCHAINES VOITURES DE MÉTRO...' with a call to action 'VOUS AVEZ UNE IDÉE? ...!' and a link 'Proposez-la en cliquant ici.' A blue double arrow button is at the bottom right of this section. On the right side of the main content area, there's a sidebar with a Facebook-like interface showing a profile for 'STM - Mouvement collectif sur Facebook' with 12,103 likes, and a list of names: Joëlle, Tatia, Marjorie, Boris, Catherine, Fergou, Maelaine, Etienne, Roxane, and Guillaume.

- Among employees, initially, and afterwards, among customers and the general public
- 6 000 suggestions
- A second consultation held in March 2012 with five finalist names

# Seats and supports

- Four-day public consultation among customers and employees inside Berri-UQAM station
- Volunteer basis
- Being tested:
  - 3 types of standard seats
  - 3 types of fold-down seats
  - 2 types of back supports
- 1798 questionnaires filled out

## SIÈGES DES PROCHAINES VOITURES DE MÉTRO FAITES VOTRE CHOIX!

La STM invite la clientèle à lui faire part de ses préférences parmi les options de sièges proposées pour les prochaines voitures de métro qui seront mises en service à partir de 2014.

POUR CHAQUE SÉRIE DE SIÈGES, PRENEZ LE TEMPS DE VOUS ASSEOIR QUELQUES MINUTES COMME SI VOUS ÊTEZ DANS UNE VOITURE DE MÉTRO DANS LE CADRE DE VOS DÉPLACEMENTS.

Considérez les aspects suivants liés au confort d'un siège : ➤ le confort du dossier ➤ la position du dos ➤ la hauteur du siège

AVEZ-VOUS ESSAYÉ CES SIÈGES ? <input type="checkbox"/> OUI <input type="checkbox"/> NON	QUEL MODÈLE PRÉFÉREZ-VOUS ? (INDIQUEZ UN SEUL CHOIX)
	<input type="checkbox"/> H <input type="checkbox"/> O <input type="checkbox"/> B
POURQUOI ?	
AVEZ-VOUS ESSAYÉ CES SIÈGES ? <input type="checkbox"/> OUI <input type="checkbox"/> NON	QUEL MODÈLE PRÉFÉREZ-VOUS ? (INDIQUEZ UN SEUL CHOIX)
	<input type="checkbox"/> J <input type="checkbox"/> T <input type="checkbox"/> E
POURQUOI ?	
AVEZ-VOUS ESSAYÉ CES APPUIS ? <input type="checkbox"/> OUI <input type="checkbox"/> NON	QUEL MODÈLE PRÉFÉREZ-VOUS ? (INDIQUEZ UN SEUL CHOIX)
	<input type="checkbox"/> K <input type="checkbox"/> Y
POURQUOI ?	

Au cours d'une semaine typique, environ combien de déplacements faites-vous en autobus ou métro de la STM?  
(Veuillez noter qu'un aller-retour compte pour deux déplacements) :

Votre âge : \_\_\_\_\_ Vous êtes :  Un homme  Une femme

SVP REMETTRE LE QUESTIONNAIRE À  
UN MEMBRE DU PERSONNEL DE LA STM  
MERCI DE VOTRE PARTICIPATION !

MOUVEMENT COLLECTIF 

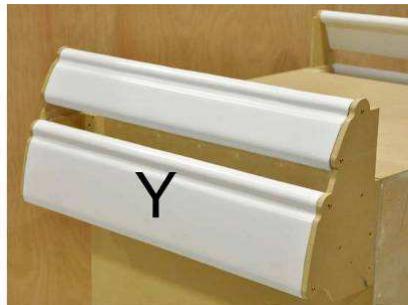
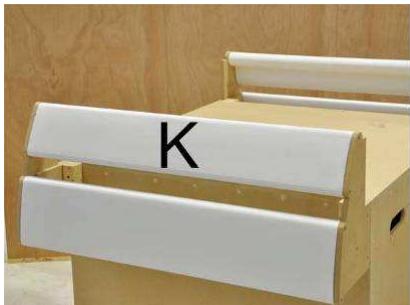


# Seats



# Outcome

- The seat and fold-down seat types providing the most comfortable back rest were chosen
- Back supports were appreciated, but none was singled out as a favourite



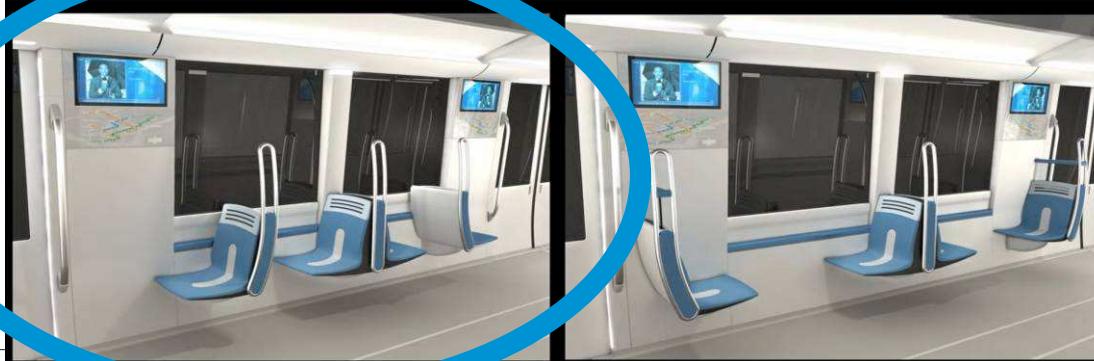


# Interior layout of cars

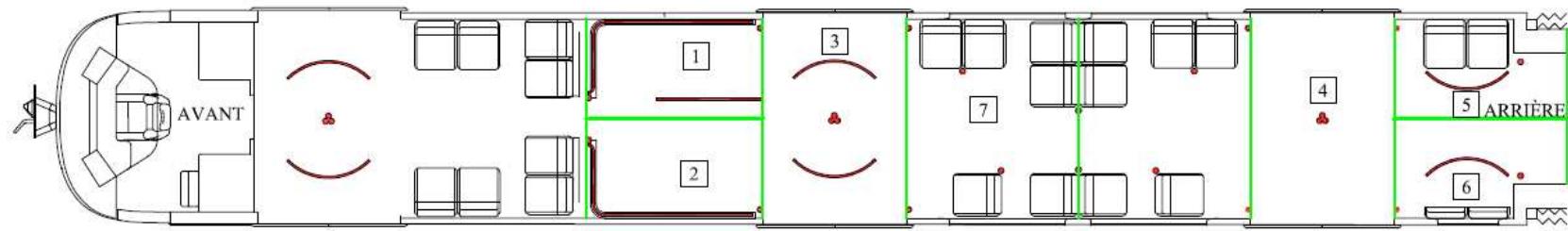
- Consultation among groups of customers and employees
  - Seat arrangement
  - Support bars (height and positioning)
- Testing with the use of a full scale model
- Interior space divided into seven zones
- Layout varies according to the zone

# Chosen seat arrangement

- 87% of participants want to see a « theatre » seating arrangement for single seats
- On a scale of 10, the « theatre » configuration got an average score of 8.3 compared with 4.2 for the « face-to-face » seating arrangement



# Preference for back supports



- The master plan had to be modified
- Dedicated spaces: lowering the two support bars to 1.95 m
- Extremities: lowering the two support bars to 1.83 m
- Entryways: removing ceiling-mounted support bars
- Central areas: adding two support bars at 1.95 m

# Consultations about the interior layout



# Chosen interior layout



MPM10 - Vue Générale

MPM10-111203-01

©LAB33

MOUVEMENT COLLECTIF

stm

# Chosen interior layout



# Operator's cab



- Operators sit on the design committee
- A scale model of the cab was available to all operators for viewing and commenting

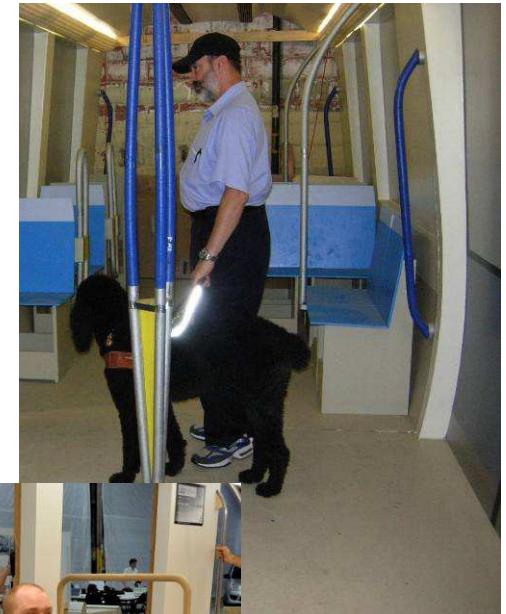




## Promote universal access

- Work group initiated by the disabled community and composed of representatives with functional limitations
- Recommendations translated into 31 technical parameters by the project bureau
- Trials with customers using mobility aids (bridging the gap between platform and threshold)
- Public consultations about the train's exterior colour scheme with groups representing people with visual and intellectual disabilities

# Promoting universal access



# Lessons learned

- Every aspect of the train cannot be designed in public
  - When options are presented to the public, we must be able to live with their choices
  - Necessary to provide a framework for the process
- The involvement of employees and customers has not delayed the process, on the contrary !
- The involvement of people created quite a stir around the project
- After all, it's their metro!





THANK YOU  
FOR CHOOSING  
**PUBLIC  
TRANSIT**