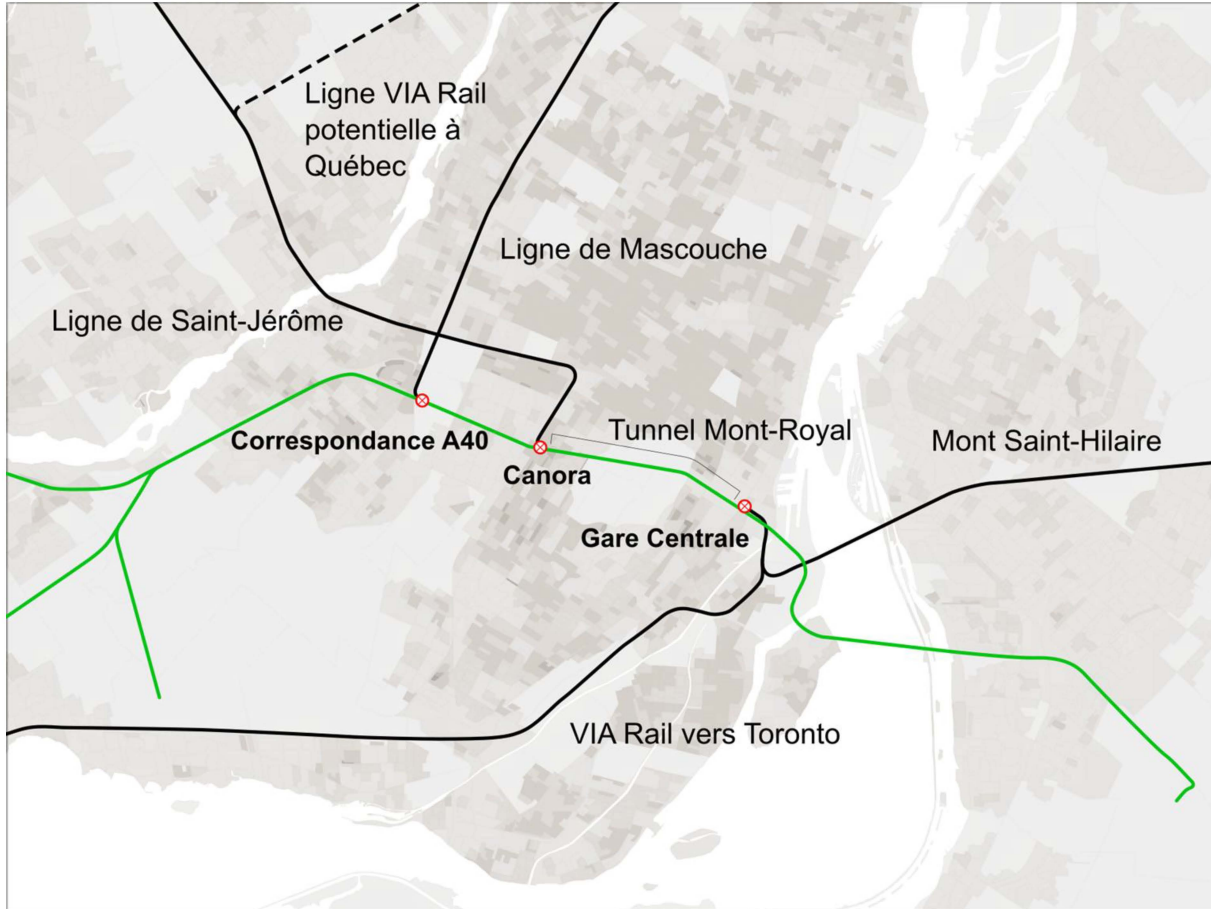
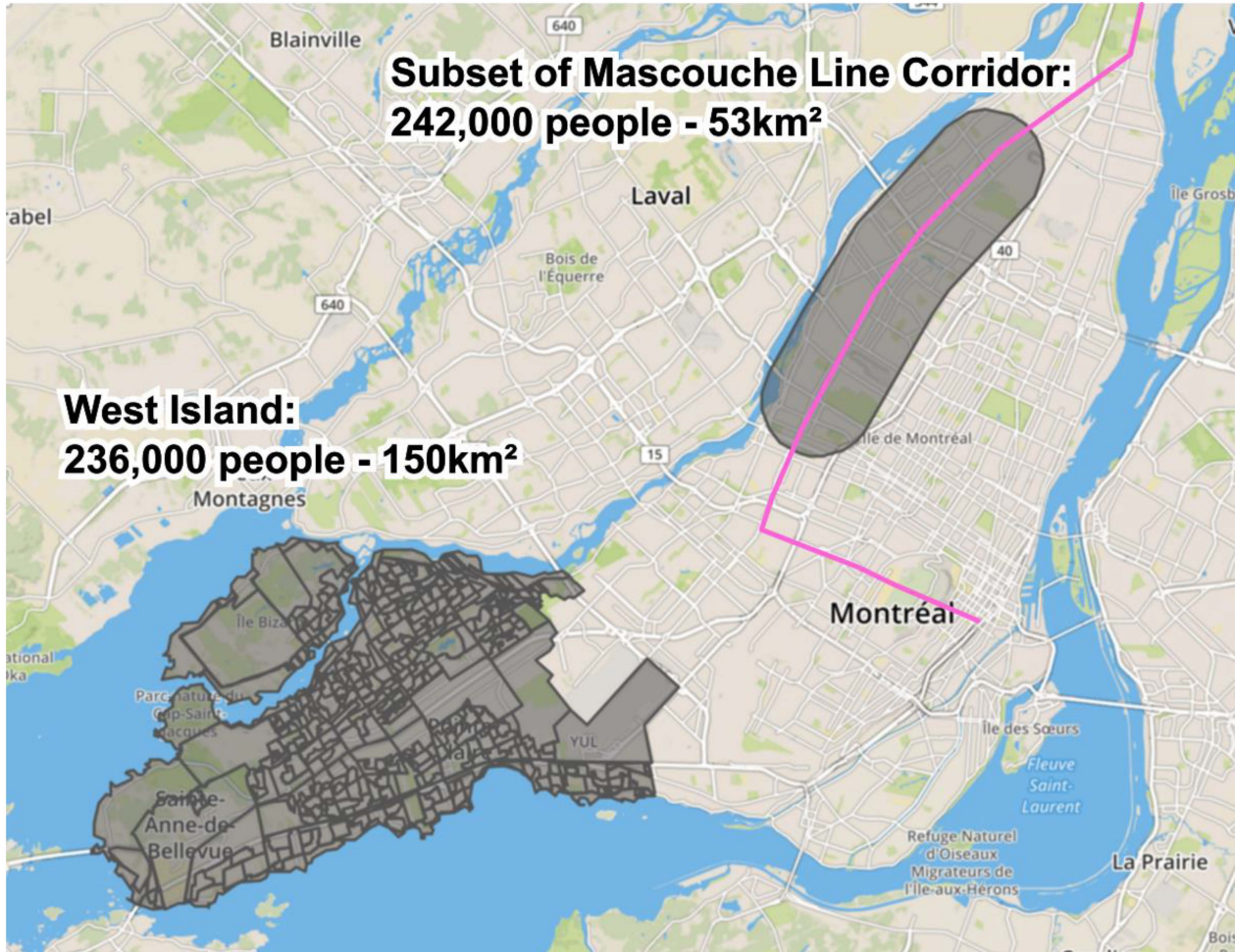


PRESENTATION

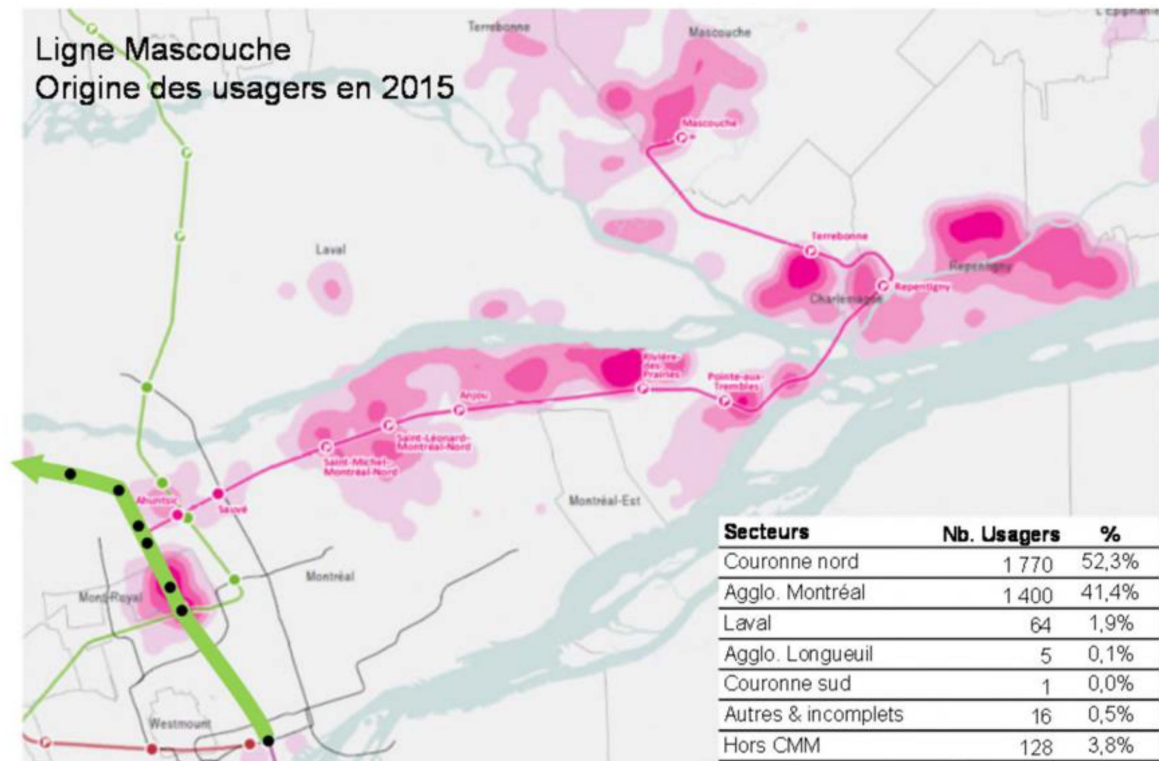
For the BAPE hearings on the “Réseau électrique métropolitain” (REM) Proposed by the Caisse de Dépôt et Placements du Québec: Issues & Potential Solutions

*by
Anton Dubrau*

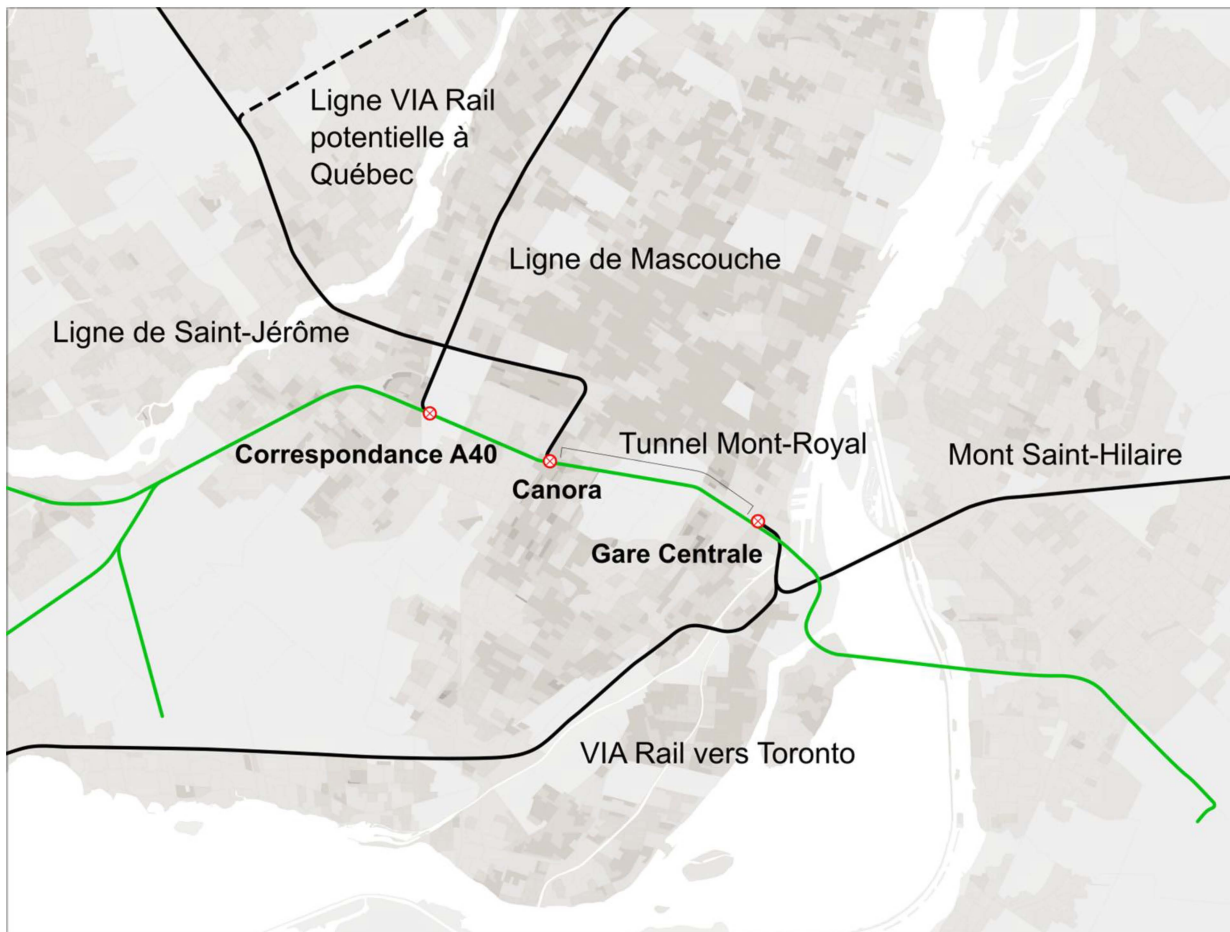




Carte 12 : Origine des usagers de la ligne Mascouche, 2015

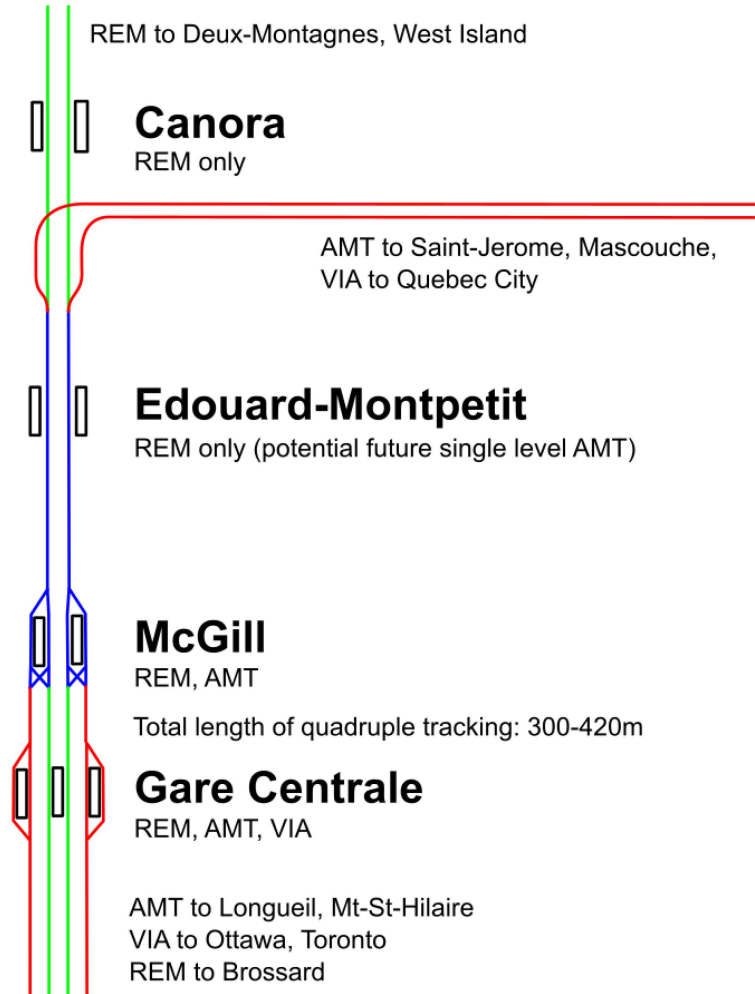


Source : AMT. Traitement CMM, 2015

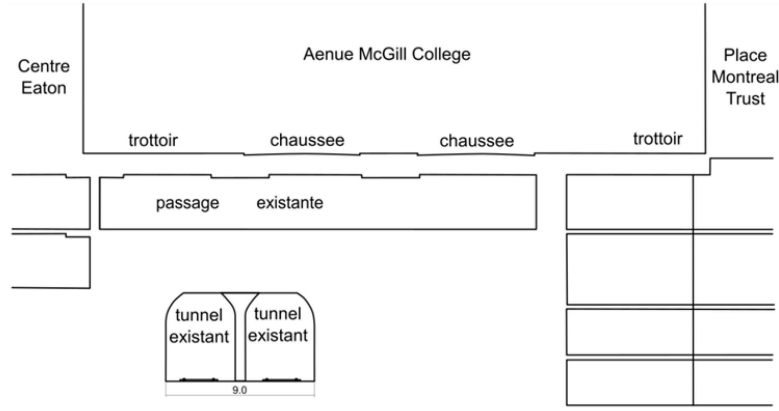


**REM, AMT, VIA
Shared System
Mont-Royal Tunnel
Potential Track Layout**

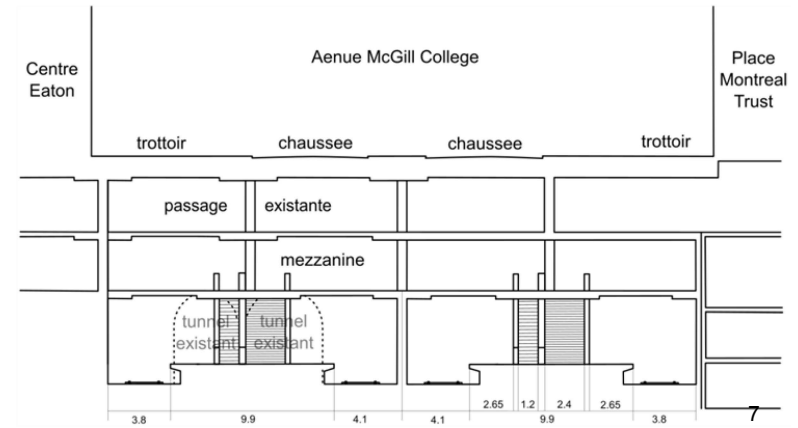
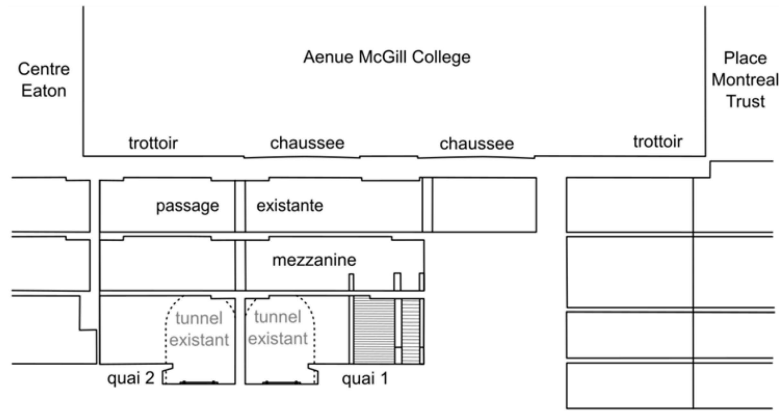
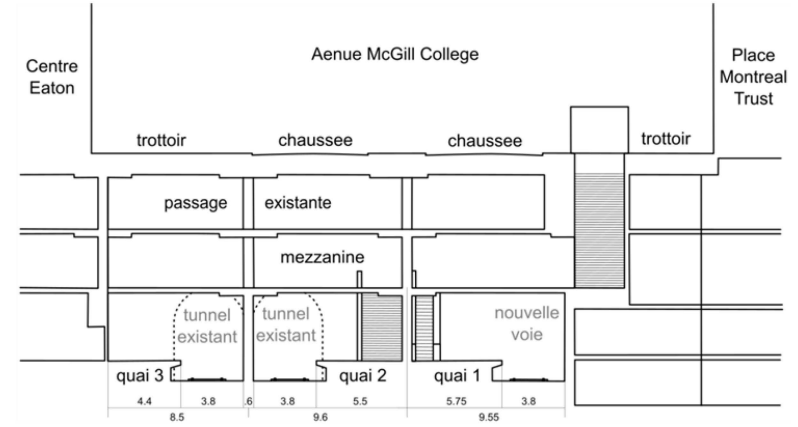
- Shared track
- AMT, VIA track
- REM track



Mont-Royal Tunnel Today

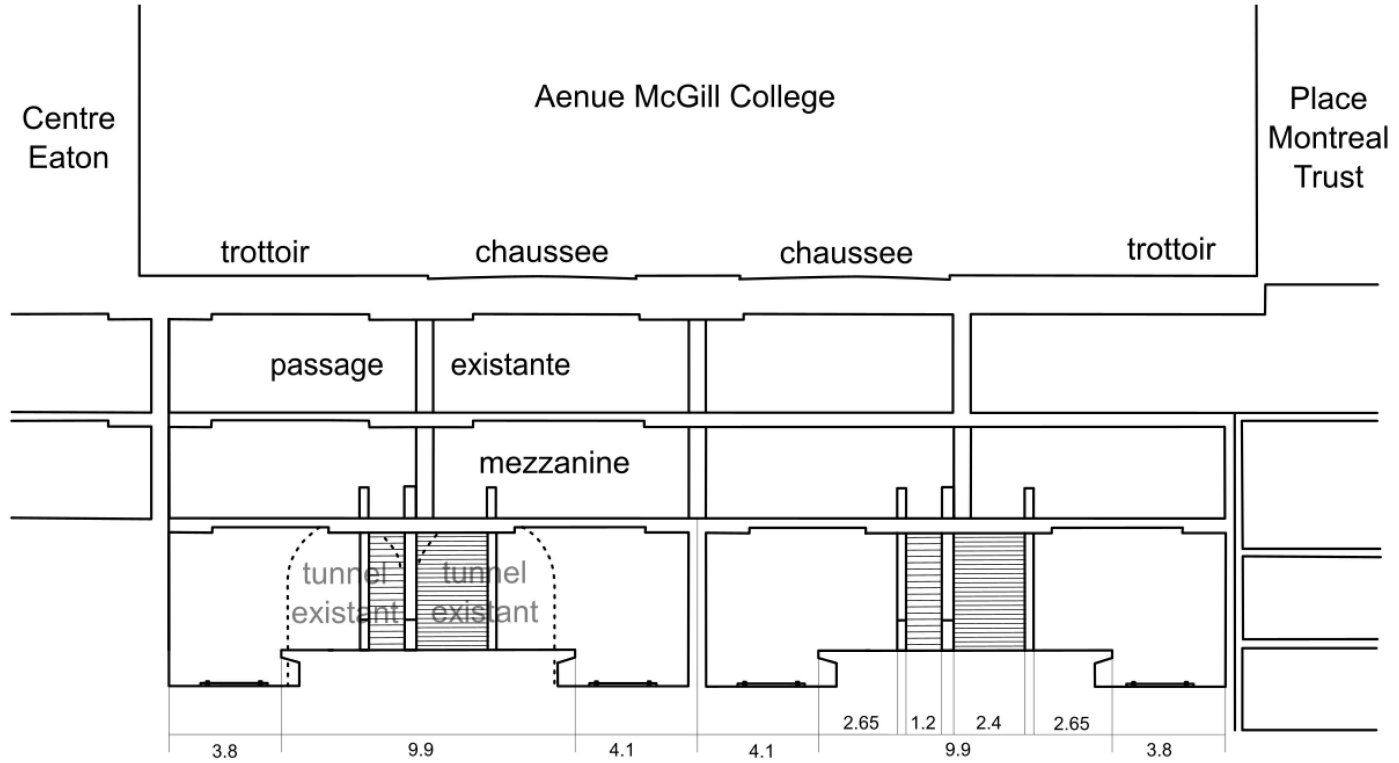


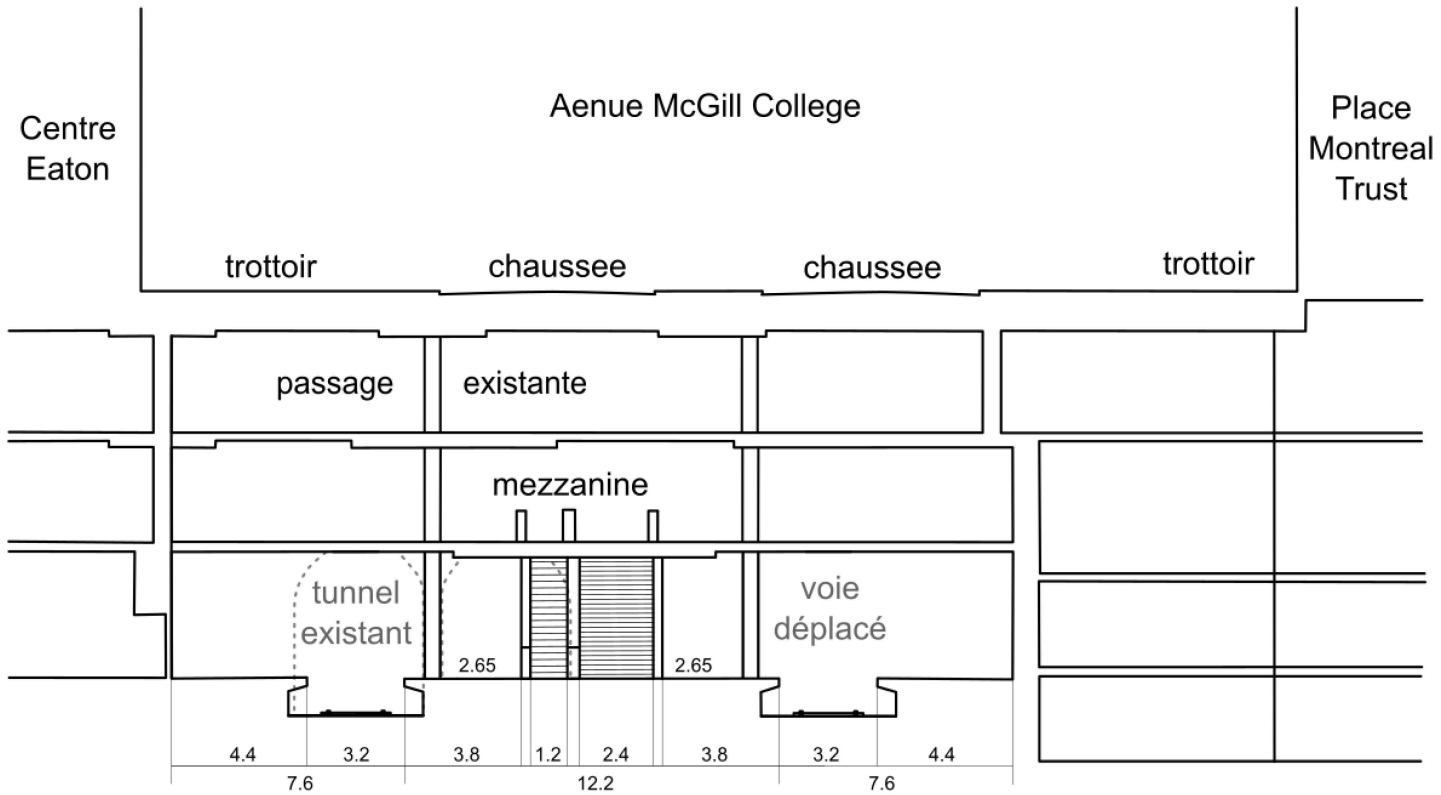
2007 AMT Study



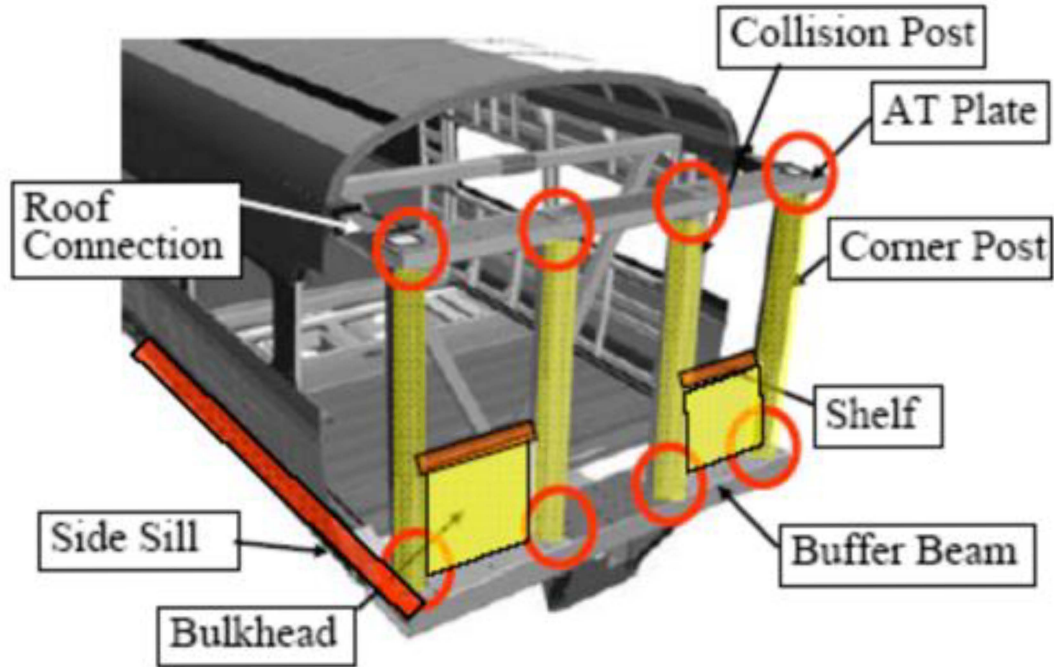
REM - Assumed Layout

Shared System Proposal - 4 Tracks





Mixing Light and Heavy Rail

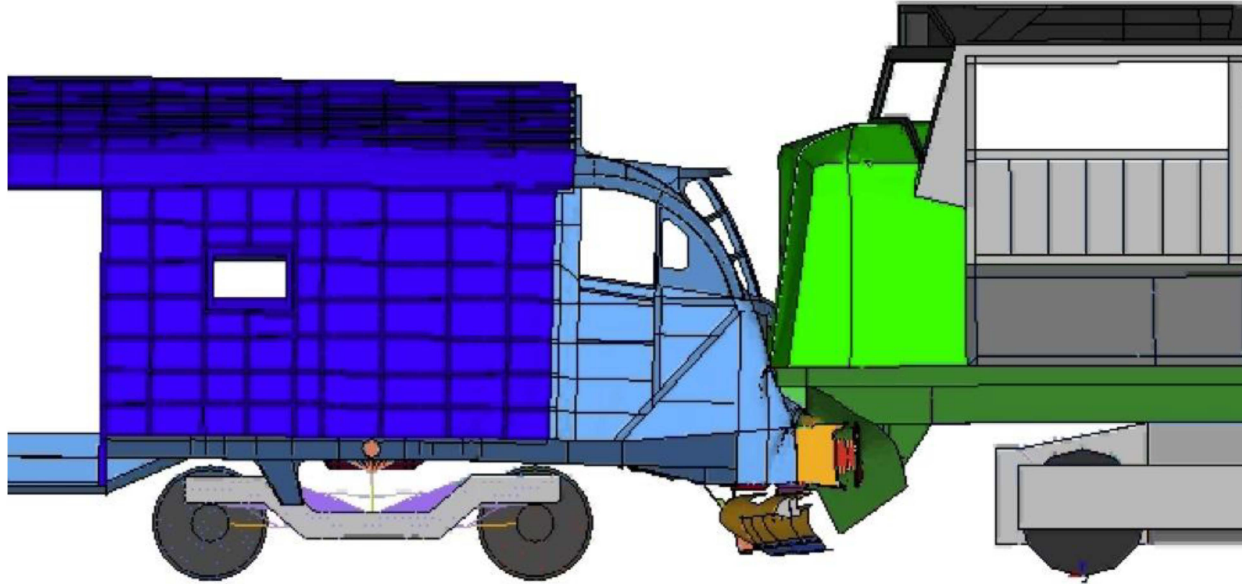


The North American design approach to rail safety.

2001 O-Train Canada

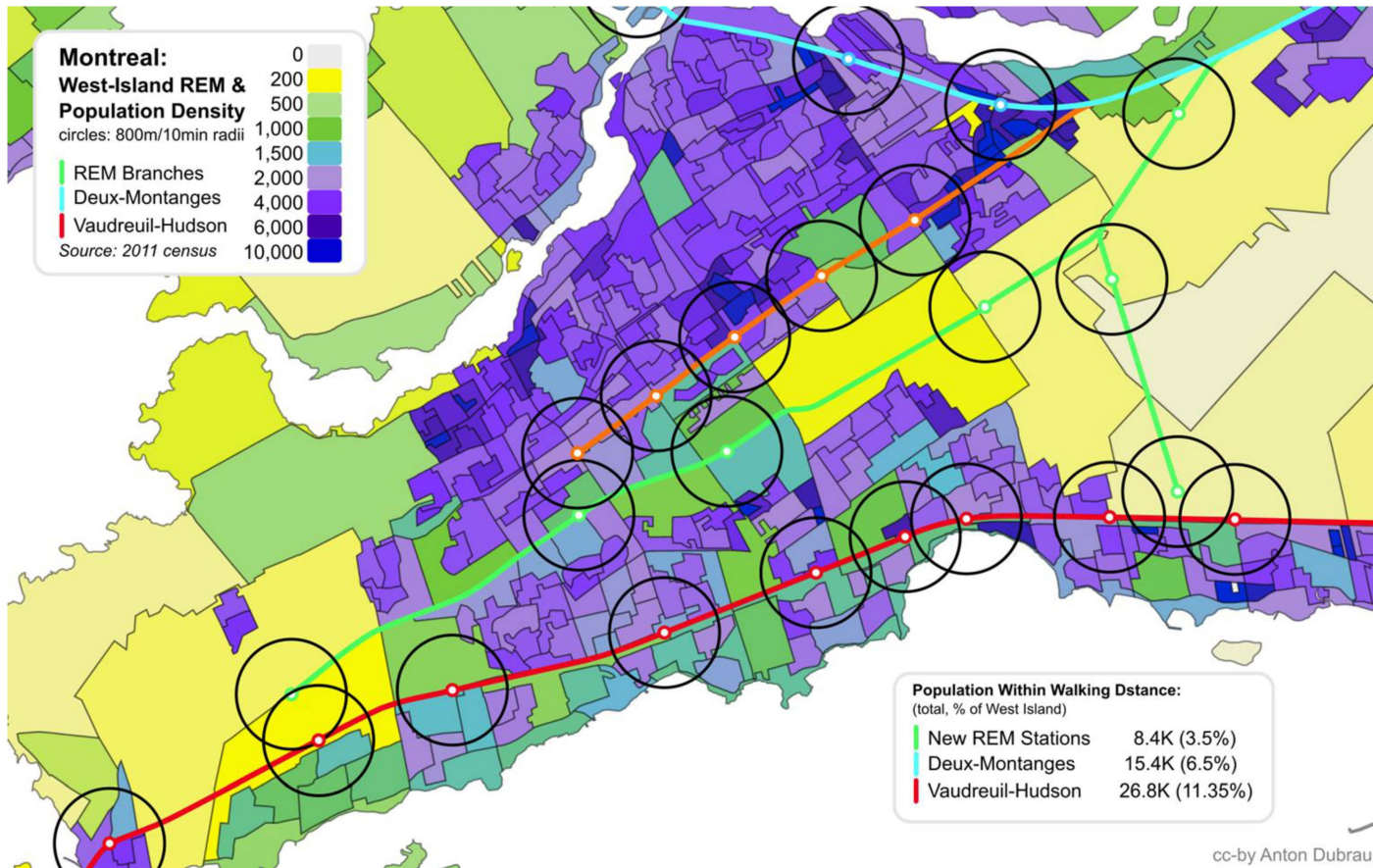


2010 Caltrain, California



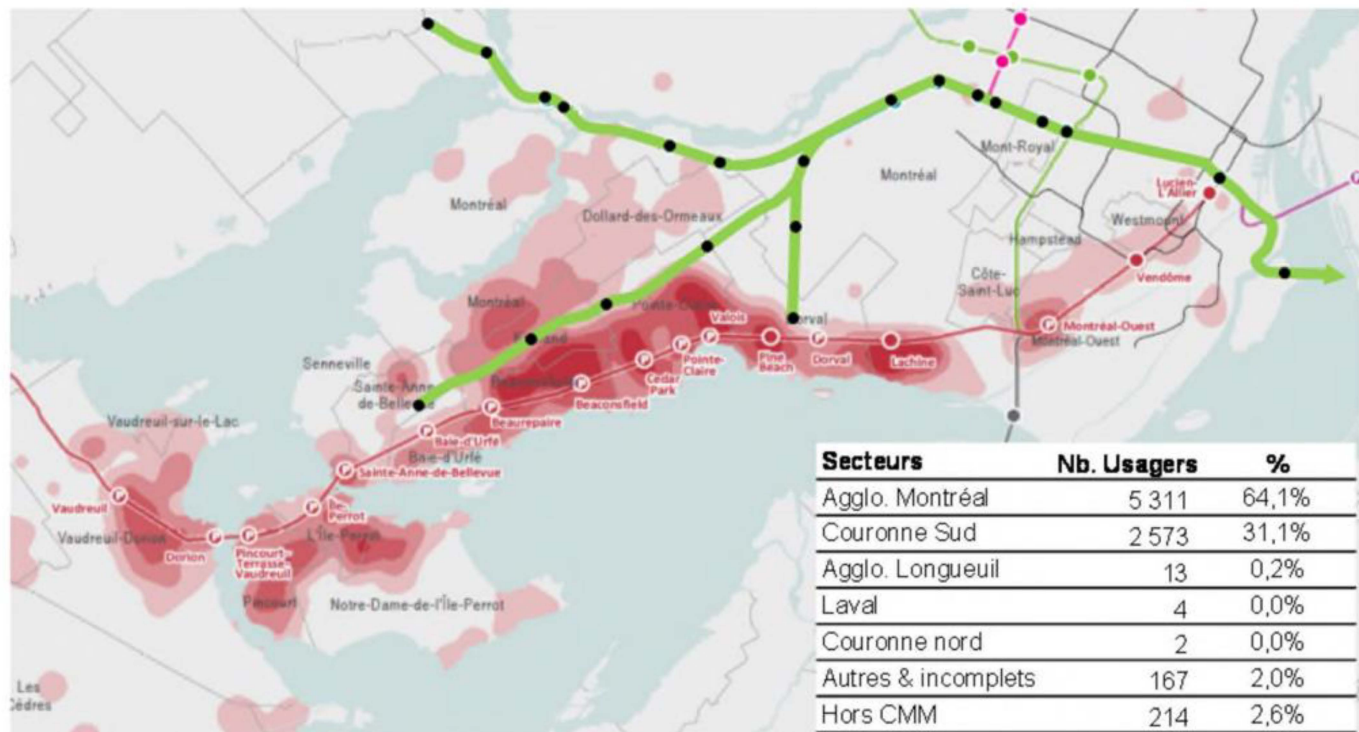
Deformed configuration of the EMU-to-Deformable Locomotive Collision

Caltrain: Simulations proving the safety of Crash-Energy-Management, in order to receive a waiver from heavy rail regulations

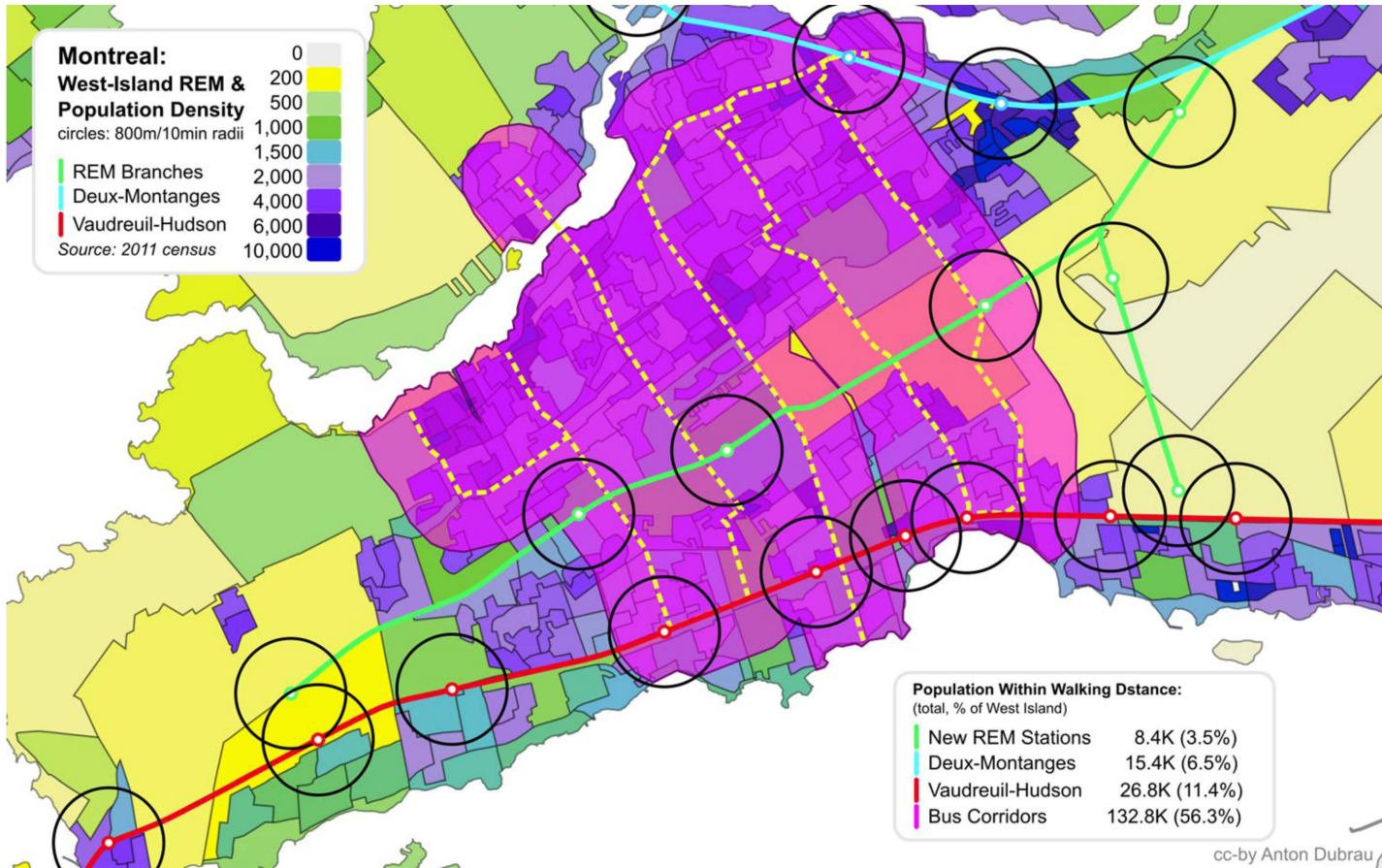


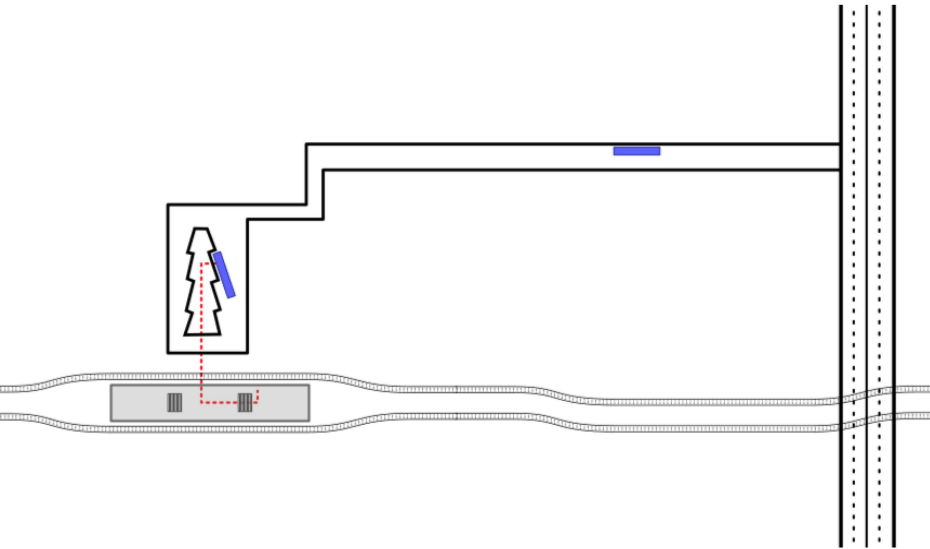
cc-by Anton Dubrau

Carte 11 : Origine des usagers de la ligne Vaudreuil-Hudson, 2015

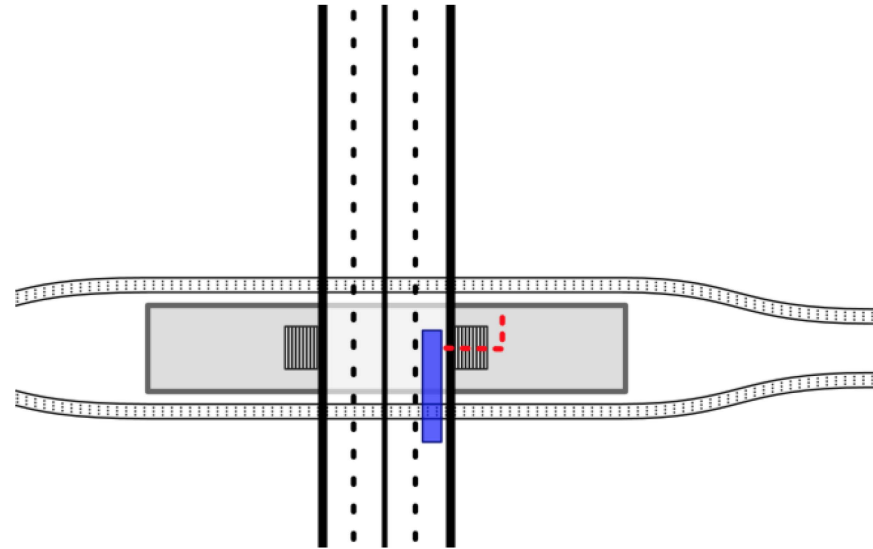


Source : AMT. Traitement CMM, 2015

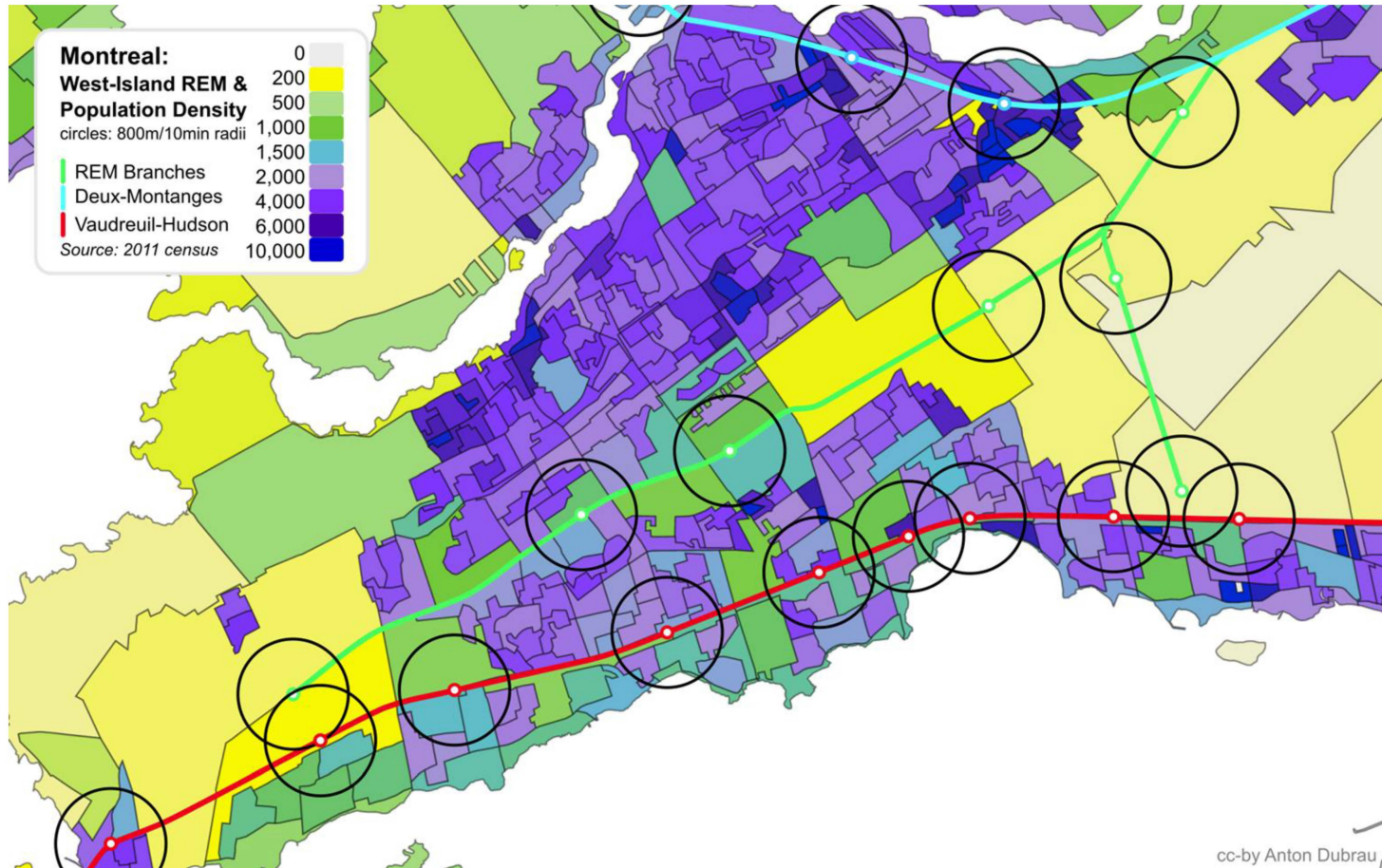




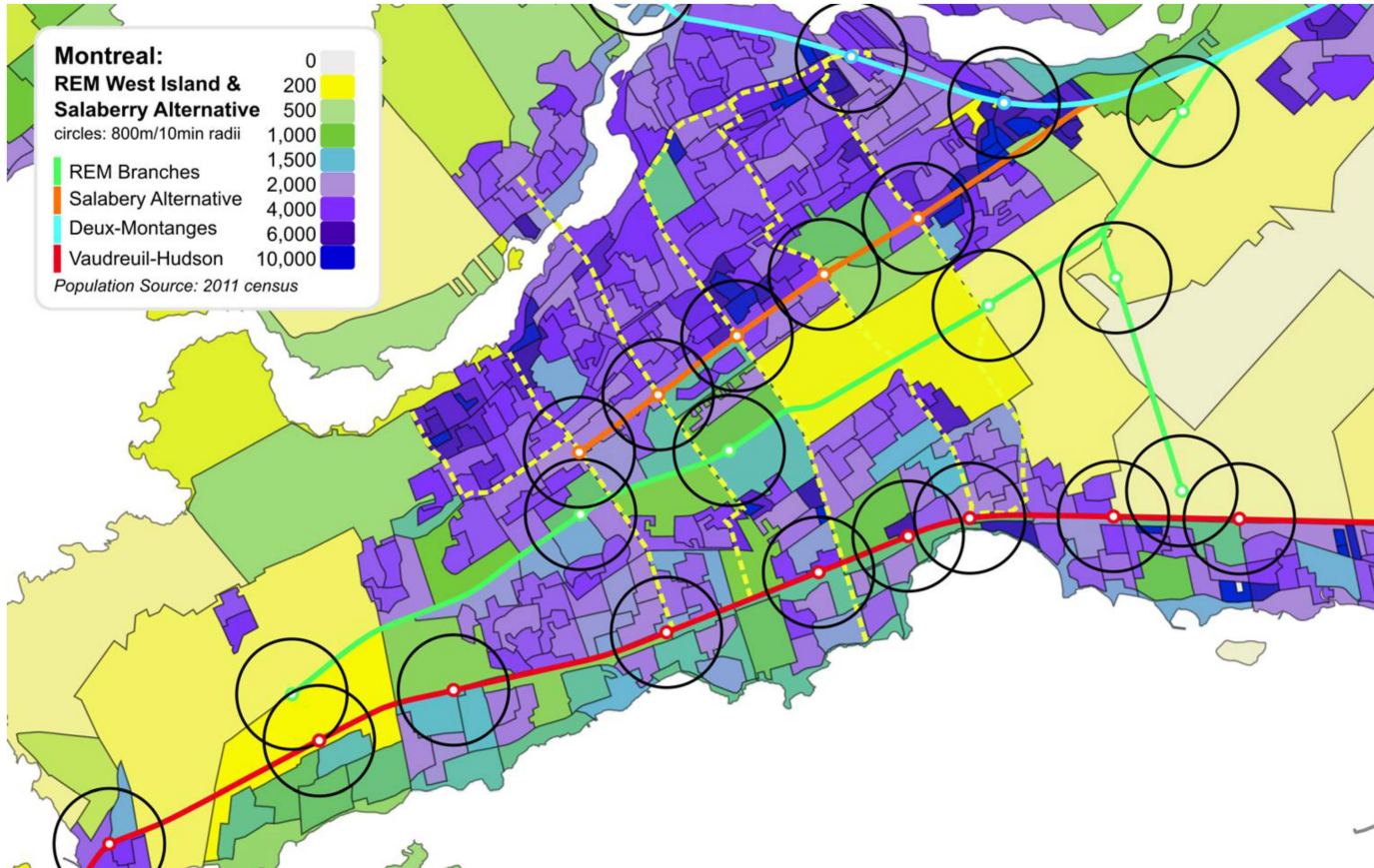
Hub-and-spoke system using termini



Rectangular grid with direct bus-train transfer

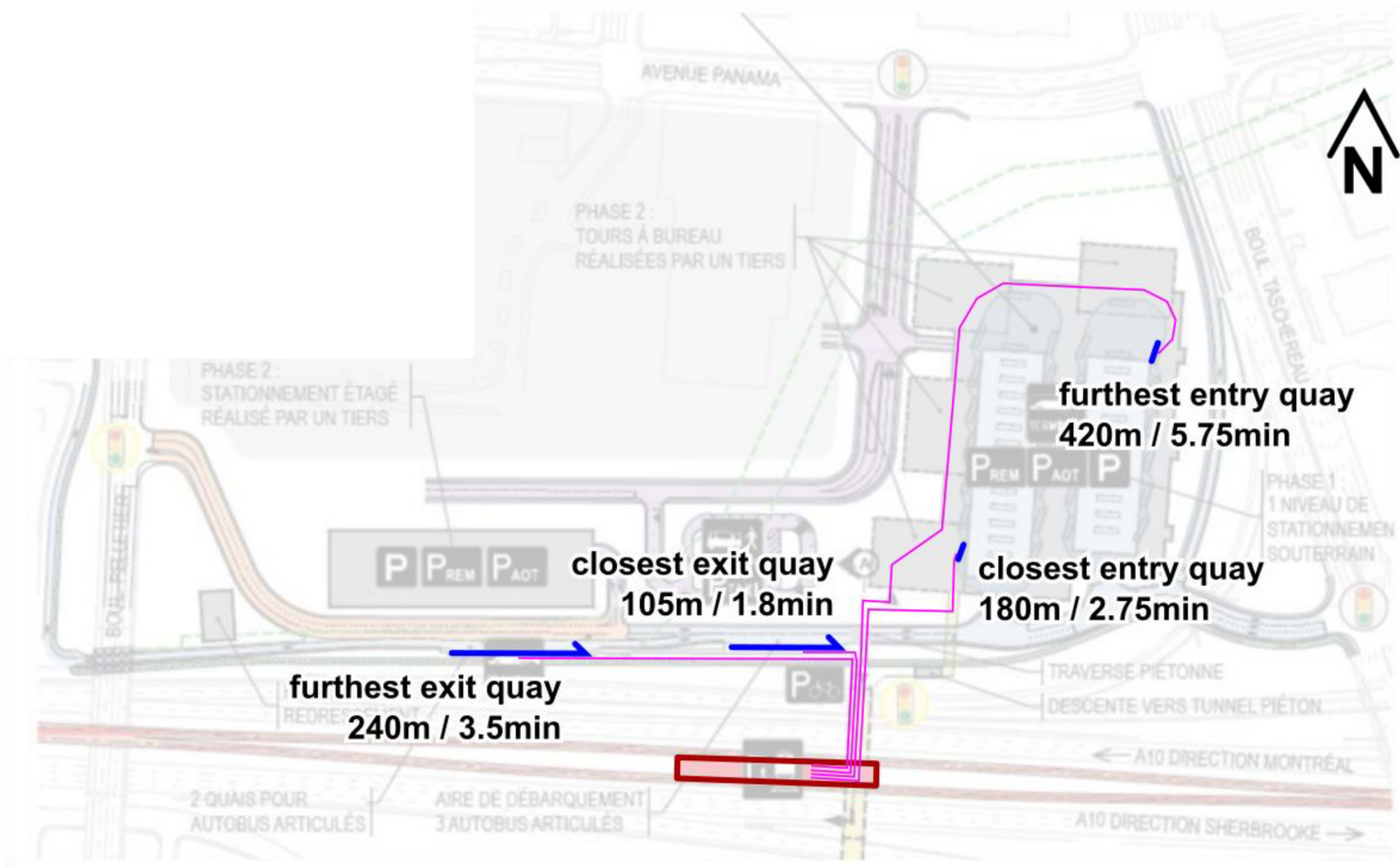


Salaberry Alternative



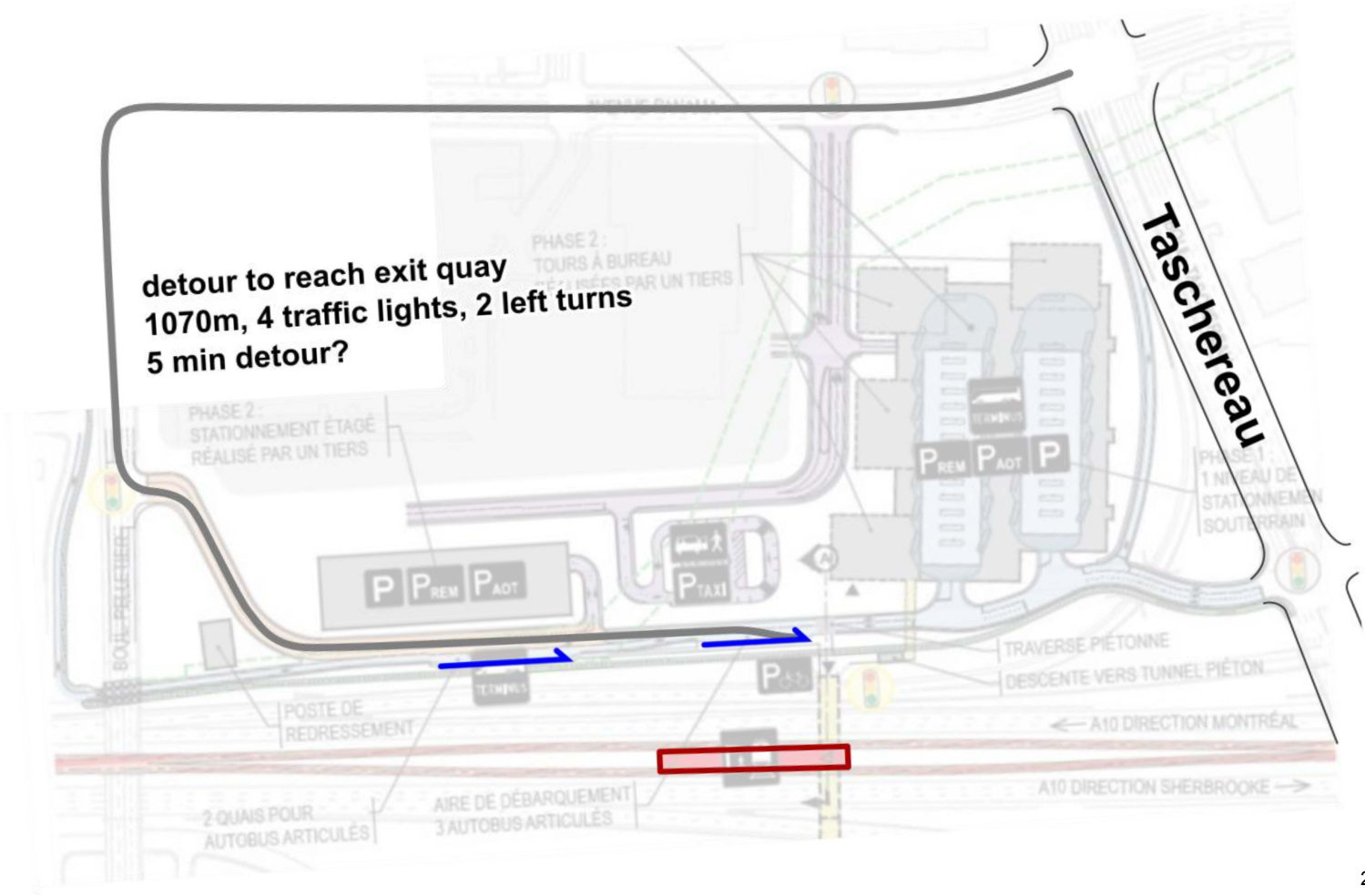


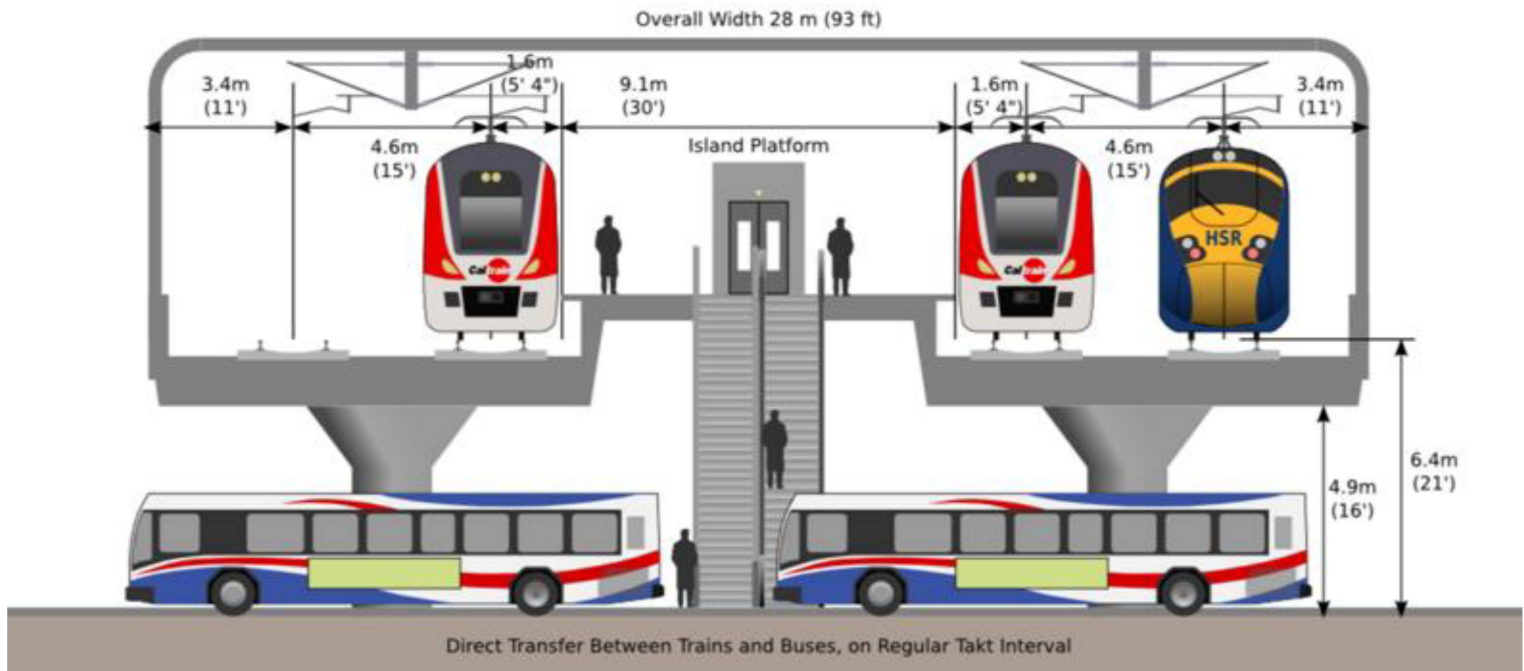
St-Jean/Salaberry - Many opportunities for densification along corridor that is already densifying. (source: google)

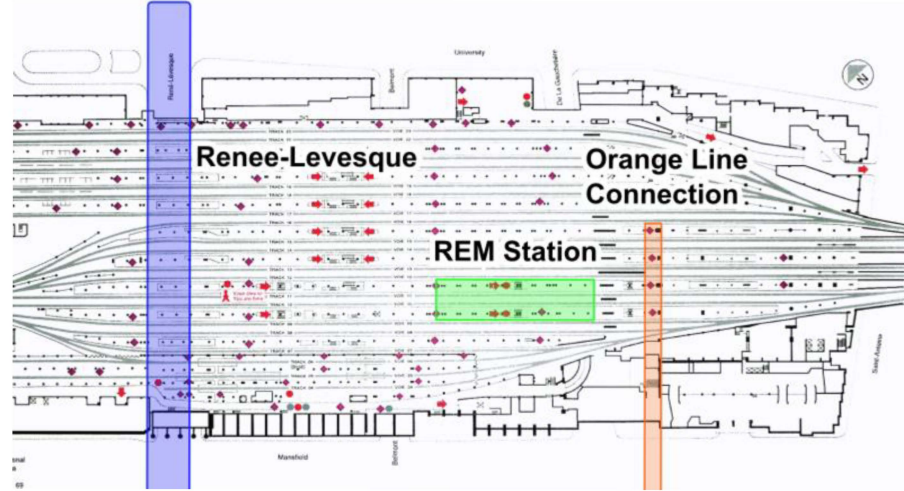


Assuming 80m/minute & 30s for stairs, ignoring traffic light delay

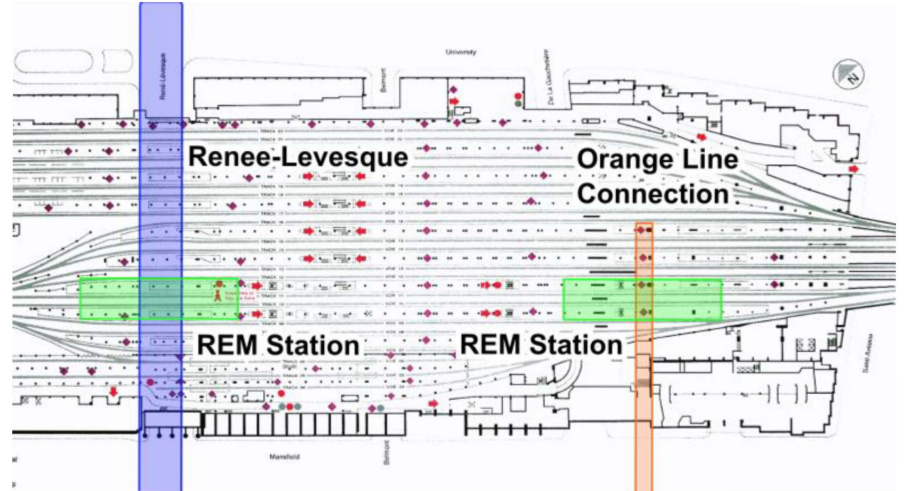
**detour to reach exit quay
1070m, 4 traffic lights, 2 left turns
5 min detour?**



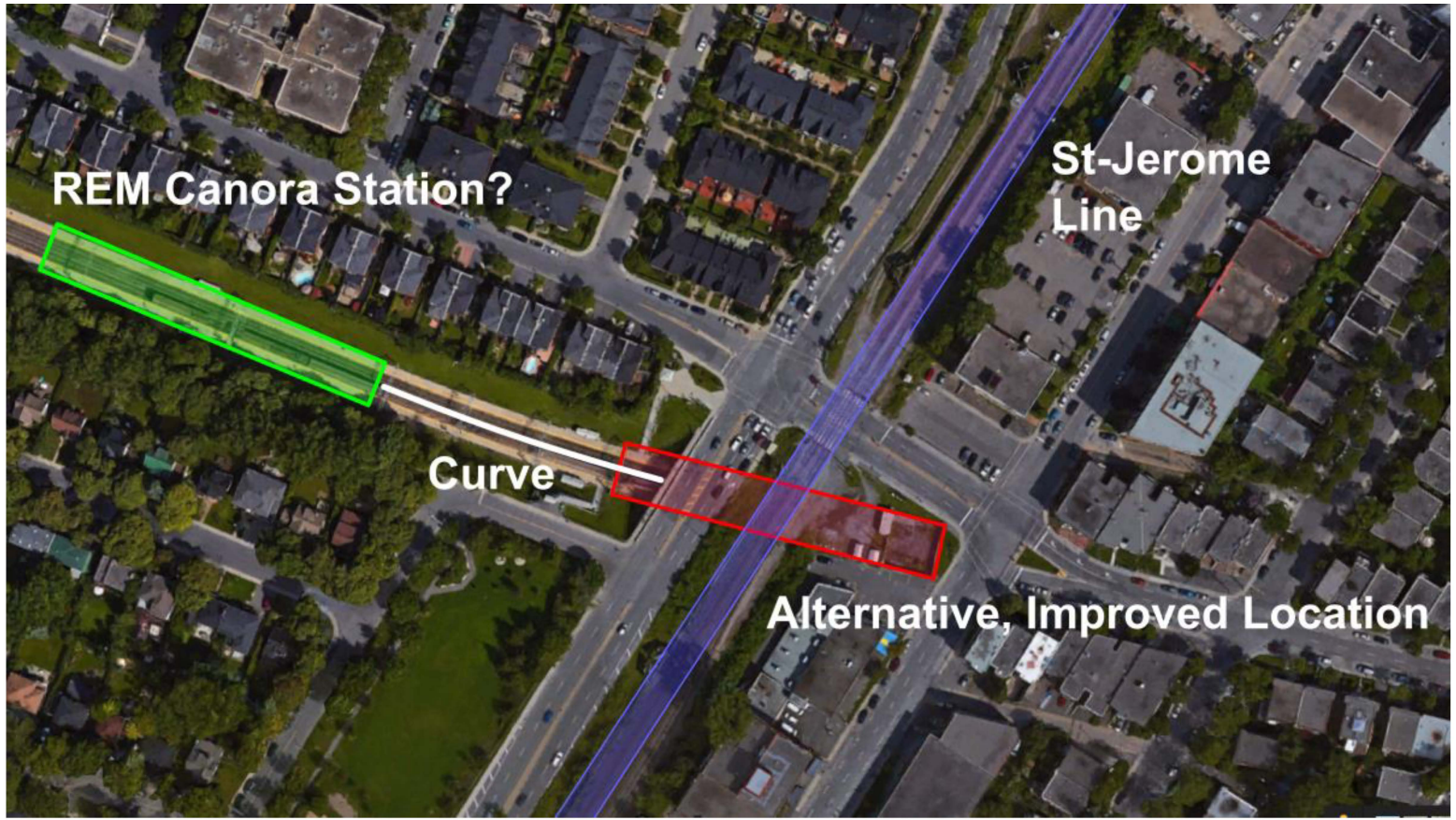




REM as Proposed



Alternative with 2 Gare Centrale Stations



Distance vs Population for Canora Station Options

