AÉROPORTS DE MONTRÉAL

Montréal-Trudeau Airport Light Rail Shuttle

Workshop on Enhancing Intermodal Passenger Travel in Canada

May 31st

2012

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Aéroports de Montréal

A not-for-profit corporation

Management, operation, and development under the terms of a 60-year lease signed with Transport Canada in 1992 :

- Montréal–Pierre Elliott Trudeau International Airport (passenger)
- Montréal–Mirabel International Airport (cargo and industrial)

Mission

- **TO PROVIDE QUALITY AIRPORT SERVICES** that are safe, secure, efficient and consistent with the needs of the community;
- **TO CONTRIBUTE TO THE ECONOMIC GROWTH** of the Greater Montréal area, especially through the development of the facilities under our responsibility;
- **TO COEXIST IN HARMONY WITH THE SURROUNDING COMMUNITY,** particularly in matters of safety and environmental quality.

Financially autonomous

- No government subsidies
- Pays rent to Government of Canada and municipal taxes
- Bond platform – DBRS (A) Moody's (A1) rating

Montréal-Pierre Elliott Trudeau International Airport Overview

- More than 13 million passengers/year
  - » 12 % in transit
  - » Annual long-term growth: 3 %
- 36 airlines
- 130 destinations
- World-class corporations (Air Canada, Air Transat, Bombardier, CAE)
- 28,000 direct jobs on site
  - » 9,000 within terminal zone
- 3 % of Greater Montreal GDP
- More than $1.6 billion invested in airport infrastructures since 2000

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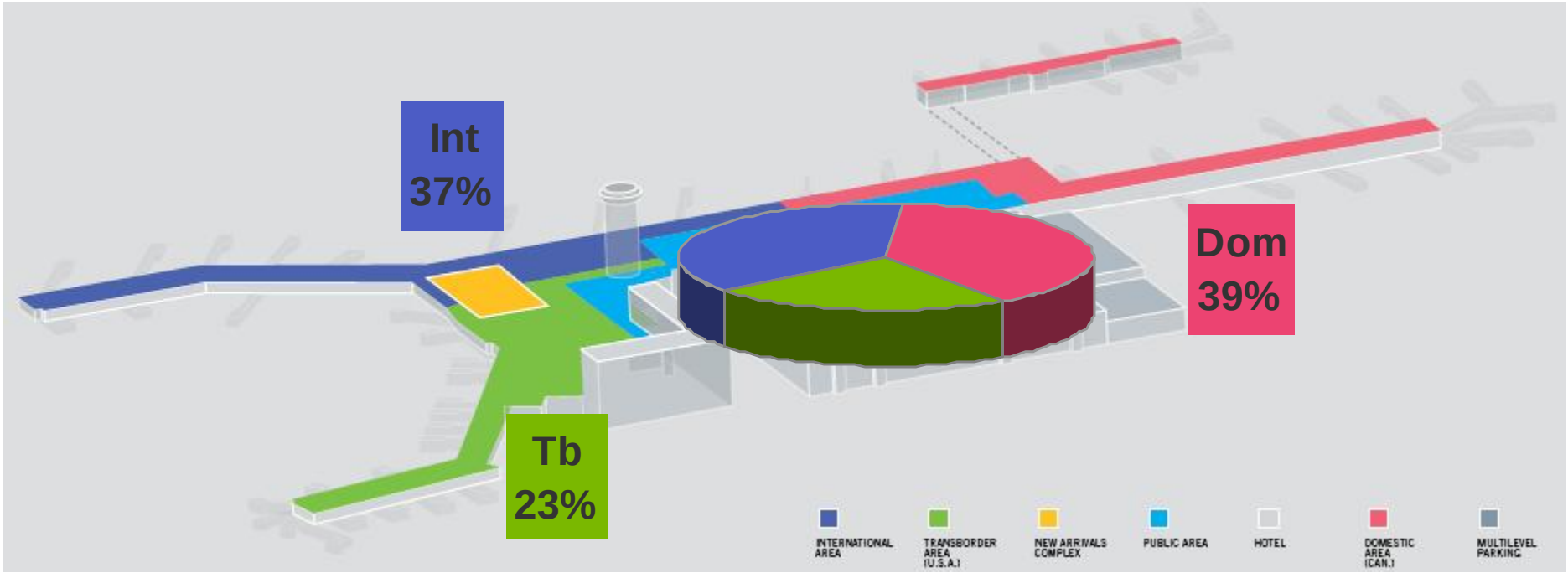
Montréal-Pierre Elliott Trudeau International Airport (continued)
Profile of clientele

- Montréal-Trudeau passengers' profile
  - » Business travelers: 42 %
  - » Visitors: 38 % ➡ European: 13 %
  - » 20 % traveling from Trudeau airport at least 5 times/year
  - » Traveling alone: 70 % // Traveling with more than one: 8 %



Montréal-Pierre Elliott Trudeau International Airport (continued)
Air passengers land origin

- Montréal-Trudeau, one of the most important journey generator on Montreal Island

- Approx. **40,000** land journeys / day
- Peak up to **46,000**

(including Trudeau terminal staff)

Montréal-Pierre Elliott Trudeau International Airport (continued)
Accessibility Issue

- Airport = air / ground intermodal mode
- Airport access time = competitiveness factor
- Good connection with transit network

  ➡ Ease of airport staffing

- Montréal–Trudeau (located in West Island)

  Accessible only by road ➡ Congestion

- Air-rail link ➡ Efficient, rapid and reliable service any time

  A must in Montréal, especially in winter

Aérotrain Historic

- Following the study of several options with Governmental partners in order to improve transit for airport users and West Islanders, the Government of Quebec granted 200 M$ for the implementation of Aérotrain, a rail link between Montreal-Trudeau Airport and Gare Centrale, using CN right-of ways.
- Negotiations with CN that followed resulted in a more complex, more expensive and riskier Project.
  - » Construction of infrastructure, its maintenance and train control would be under the exclusive responsibility of CN without any risk-taking.
  - » CN does not agree with a dedicated railway principle, compromising the service reliability on the long run.
  - » Operating and maintenance costs charged by CN are non-negotiable
  - » Electrification is complex and expensive
- CN option facing many other major issues:
  - » Federal funding below 200 M$ (PPP Canada program requirements),
  - » PPP model :
    - Mixed interest from private sector
    - Risks too high to be supported by ADM without compromising its business model
  - » Acceptability issues (exclusive service and social concerns along the railway)

Aérotrain Historic (continued)

- ADM always worked in partnership
- ADM always worked to build infrastructures benefiting to airport users and West Island users.
- It is clear that using conventional railways cannot respond to this objective
- It is now imperative to develop a different approach
  - » Elevated light rail system with bidirectionnal tracks, using electrified rolling stock
    - Ex. Canada Line in Vancouver, a success story
    - An efficient and structuring transportation mean
  - » Transit and Aérotrain services in accordance with original ADM vision
    - Extension to the West Island

Elevated Light Rail System
One infrastructure – two needs/clienteles – two services

One infrastructure

- Common infrastructure between Dorval city and Downtown (19,5 km)
- Different extension options West of Dorval station

Two needs/clienteles – Two services

- Airport service
  - » Unique pricing of $15 if the following parameters are met:
    - Express service
    - Rolling stock and schedules adapted to the needs of airport travelers carrying luggages
  - » Ridership: +/- 10 000/day
- West Island Commuter
  - » Pricing integrated to STM transit network
    - Intermediate stations
  - » Bus feeding and park-and-ride available in some stations (Fairview, Dorval and Lachine)
  - » Ridership: +/- 40 000/day

Complementary service to the current Vaudreuil-Hudson AMT commuter train line

Elevated Light Rail System (continued)
Efficient technologies

- Wide range of light rail autoguided rolling stock technologies on the market
  - » North American examples

AirTrain JFK, NEW YORK 2004

Canada Line, VANCOUVER 2010

Millenium Line, VANCOUVER 2002

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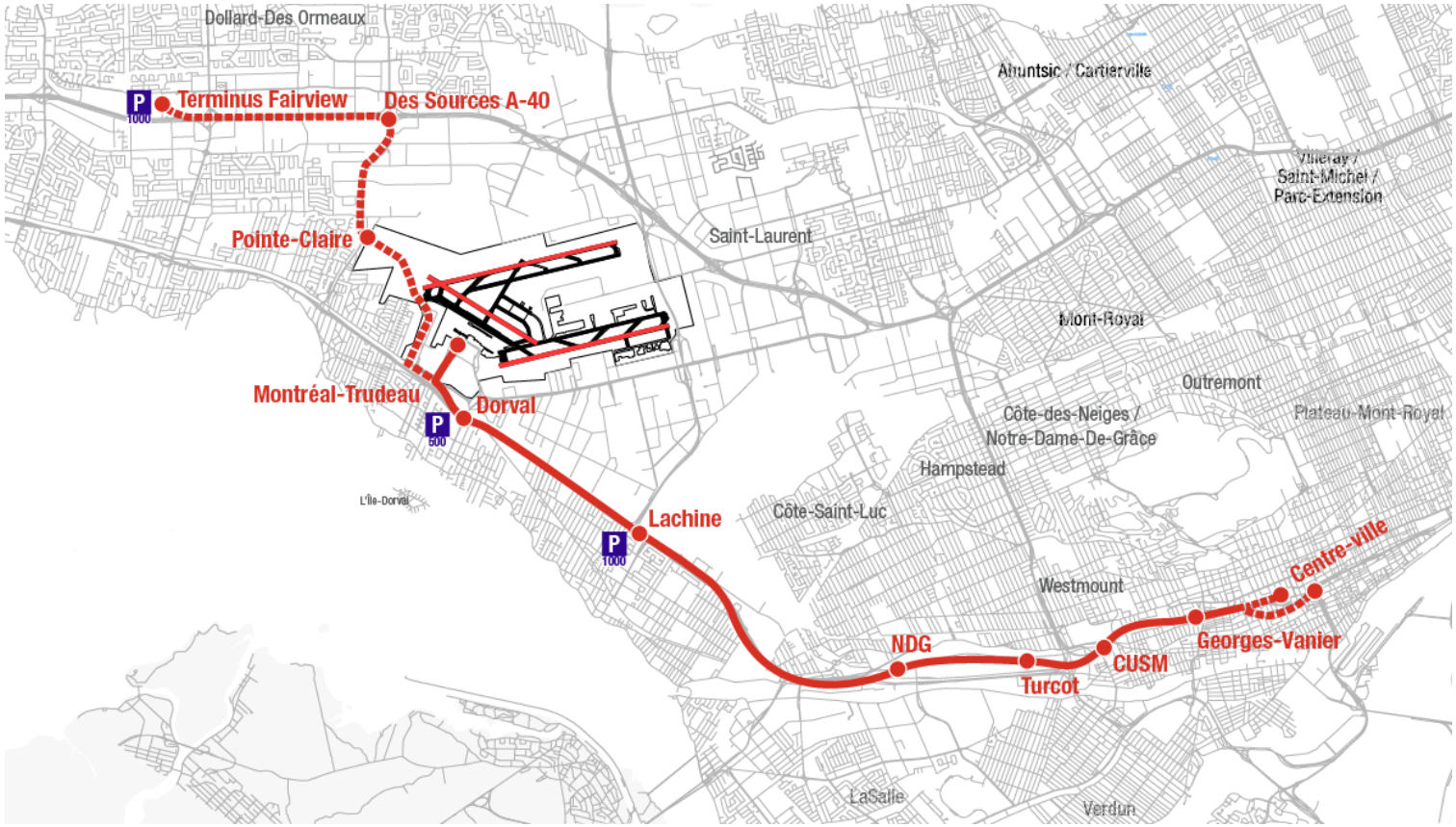
Elevated Light Rail System (continued)
Route Example



Elevated Light Rail System (continued)
Route's main features

- Bus feeding in the West Island (Fairview terminal, Dorval and Lachine)
- Park-and-ride available at these 3 stations
- Intermodal station at Dorval (AMT-STM-Aérotrain-VIA)
- Station serving CUSM
- Metro station connections at Georges-Vanier (South-West) and downtown
- Flexibility with urban configuration which minimizes the impact
- Fairview terminal in the heart of West Island
- Montréal-Trudeau station located in the heart of the Airport (already built)
- Several possible terminal stations in downtown
  - » Place Bonaventure is in the heart of downtown
    - » Close to Gare Centrale
    - » Offers the opportunity to link the Airport and the West Island with Montreal South shore (Light Rail Train on Champlain Bridge)

Elevated light rail system (continued) **Main advantages compared to freight railroad right of ways**

- Reliability
  - » Autonomy during construction and operation vs Railway operators
- Performance and benefits
  - » High level of service for West Island commuters
    - Off-peak frequency : 8-10 min.
    - Peak frequency : 3-4 min.
    - Pricing integrated to STM transit network
  - » High quality and dedicated service for airport users
    - Frequency : 10 minutes
    - Express service
    - Pricing : $ 15
  - » Available capacity for future service improvement
  - » Complementary to the current Vaudreuil-Hudson commuter train line
  - » Operating surplus of airport service will contribute to finance commuter transit system

Elevated light rail system (continued)
Main advantages compared to using freight railroad right of ways

- Funding model
  - » Low operating costs (auto-guided rolling stock)
  - » Well adapted to a PPP – private partner contribution to infrastructure costs
  - » Federal contribution (PPP Canada), Hydro-Québec and ADM in addition of Provincial Government
- Environment
  - » Electrified: Positive environmental balance
  - » Light trains, low noise emissions,
  - » Flexibility with urban configuration which minimizes the impact
- Innovative technology, give a positive image of Montreal City

Project Schedule (preliminary)

Planning

Early 2012

- » Governance structure implementation
- » Preliminary Engineering: Route studies and assessments, identification of issues and improvement solutions
- » Strategic Presentation

Definition

2012 - 2015

- » Consultations
- » Detailed Engineering
- » Environmental process (provincial and federal) / BAPE
- » Initial Business Case and Governmental approvals

Selection

2015 - 2017

- » Request for interest / Call for tenders for private partner
- » Final Business Case

Construction

2017 - 2020

- » Construction works
- » Tests and Service launch off

THIS SCHEDULE NEEDS TO BE OPTIMIZED