

# NEXT GENERATION EQUIPMENT COMMITTEE

## VIA RAIL'S CORRIDOR FLEET REPLACEMENT PROGRAM



FEBRUARY 22, 2019

The NGEC will provide national leadership in standardization, acquisition, financing and management of passenger rail equipment.

# AGENDA

- ▶ VIA RAIL CANADA
- ▶ VIA RAIL CORRIDOR FLEET REPLACEMENT PROGRAM

Next Generation  
Equipment Committee



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# VIA RAIL NETWORK

## LONGHAUL THE CANADIAN

TRAIN REVENUES  
87,1 M\$

PASSENGERS  
104 960

## REGIONAL SERVICES

TRAIN REVENUES  
4,4 M\$

PASSENGERS  
60 371

## LONGHAUL THE OCEAN

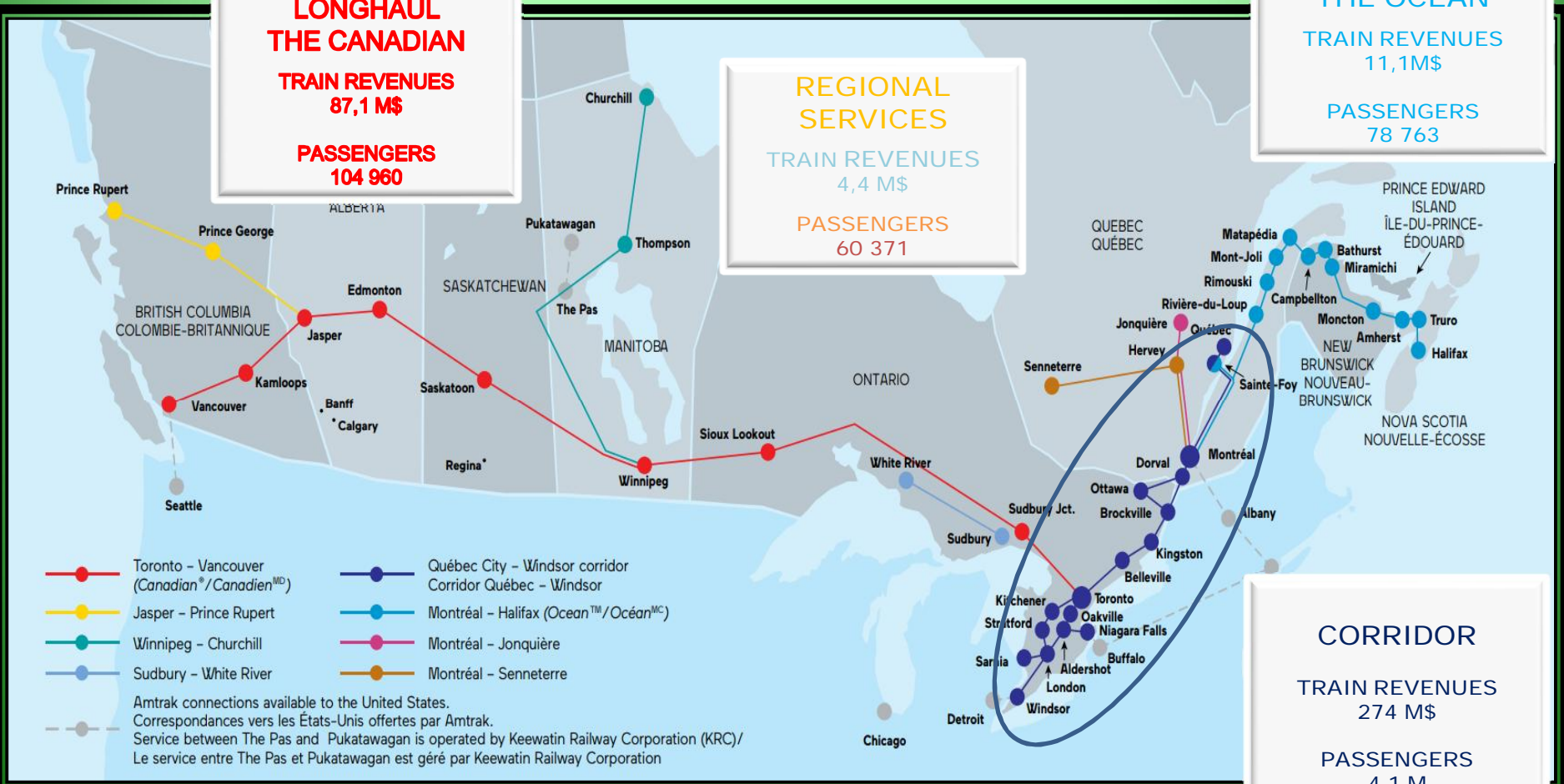
TRAIN REVENUES  
11,1M\$

PASSENGERS  
78 763

## CORRIDOR

TRAIN REVENUES  
274 M\$

PASSENGERS  
4,1 M



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★ 2017



# INTEGRATED INTERCITY OPERATOR

300M\$ ANNUAL SUBSIDY

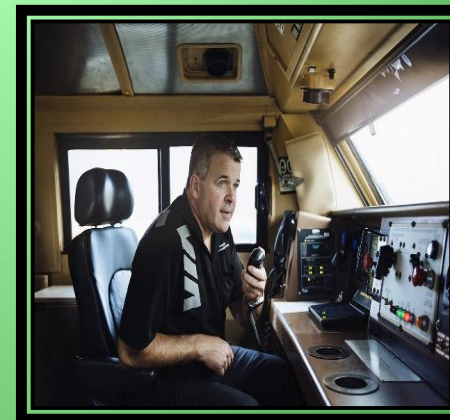
INFRASTRUCTURE



MAINTENANCE



TRAIN OPERATIONS



ON-BOARD SERVICES



STATION SERVICES



CALL CENTERS



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# VIA RAIL AT A GLANCE

## FLEET



**73**  
LOCOMOTIVES

Including two switchers (a small locomotive used to "switch" equipment around)

**428**  
TRAIN CARS

(in and out of service)

PASSENGER CARS  
SLEEPER CARS  
DINING CARS  
LOUNGE CARS  
BAGGAGE CARS



## BUILDINGS

**121**  
TRAIN STATIONS

Including 54 Heritage stations



## EMPLOYEES

**2,899**  
EMPLOYEES



## RAIL

VIA RAIL OPERATES ON A  
**12,500-KM**  
RAIL NETWORK



**97%**

of the network is owned and operated by railway partners, primarily CN and CP



**3%**

is owned and operated by VIA Rail



**4**  
MAINTENANCE CENTERS

**6**  
REGIONAL OFFICES



## PASSENGERS



**4.39**  
MILLION TRIPS  
taken by VIA Rail passengers in 2015

**1.5 BILLION**  
KILOMETRES COVERED



**1** HEAD OFFICE



## COMMUNITIES SERVED



OVER  
**400**  
COMMUNITIES SERVED  
ACROSS CANADA

Next Generation  
Equipment Committee **NGEC**

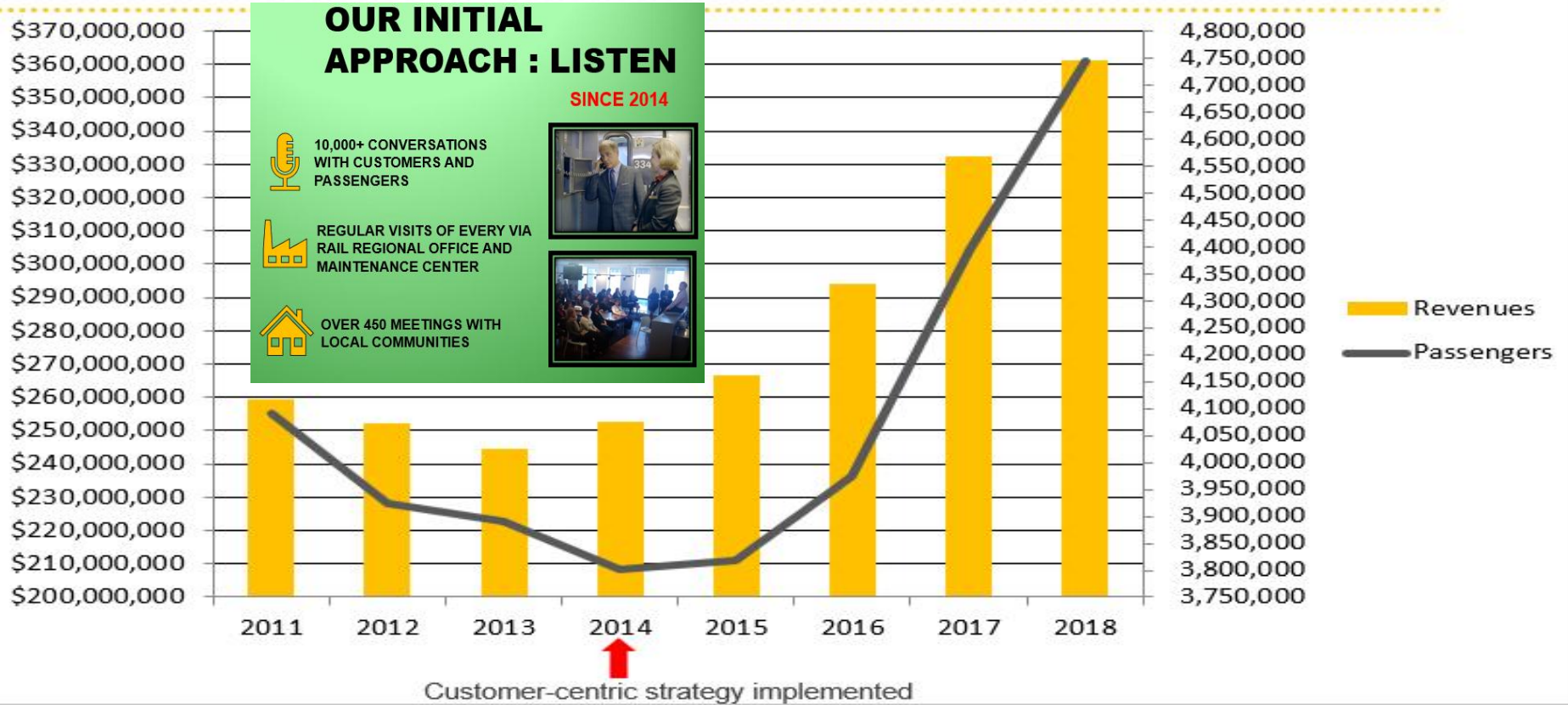


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★ 2017

# SHIFT: FOCUS ON CUSTOMERS

## 2011-2018 Revenues and Ridership



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# CURRENT FLEET PROFILE

97 LRC  
(CORRIDOR: 97)



205 HEP 1 & 2  
(CORRIDOR: 33 HEPII + 7 HEPI = 40)



106 RENAISSANCE  
(CORRIDOR: 23)



21 GE P-42  
(CORRIDOR: 21)



52 GM F-40  
(CORRIDOR: 19)



**CORRIDOR FLEET: 160 CARS & 40  
LOCOMOTIVES**

**TOTAL CAPACITY: 9120 SEATS  
SPEED: UP TO 100 MPH ON CLASS 5**



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# FLEET REPLACEMENT REQUIREMENTS



FUEL EFFICIENT BI-DIRECTIONAL TRAINSETS



RELIABLE PROVEN EQUIPMENT



TRAINSET CONFIGURATION VERSATILITY



ENVIRONMENTALLY FRIENDLY



PASSENGER COMFORT



WINTER READY



ON-TIME DELIVERY



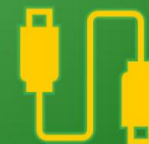
BEST VALUE

Next Generation  
Equipment Committee

NGEC

305

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OPTIONS - DIESEL OR DUAL MODE



# TECHNICAL SPECIFICATION BACKGROUND

## TRADITIONAL DECISION MAKING PROCESS

- Decide on locos/cars, single or bi-level, or DMUs, or EMUs
- Spec based on the vehicle work breakdown structure

## OUR APPROACH

- Define our needs : seat capacity, performance requirements, customer requirements and regulations and standards, and have the industry propose their standard products that best meet our needs
- Mostly performance based, some specifics where needed: Winter, Service Delivery, Interior Features, Cab, CEM

## REQUIREMENTS

- New trainsets in time to replace the corridor fleet retirement
- Transport Canada regulations require passenger rolling stock to be designed to APTA standards, or equivalent
- PRIIA S305 standards were cited in addition to APTA, thus saving time validating North American practices
- Allowance for Alternate Compliance



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# PROGRAM COMPONENTS

RFP WAS COMPOSED OF THE FOLLOWING:

- RFP (Outlines the bid requirements, process, and evaluation methodology)
- MSA (Manufacture & Supply Agreement)
- Base Trainset Technical Specifications
- 15 years TSSSA
- MRS (Maintenance Requirements Specifications)
- Interoperability Technical Specifications Summary

PROGRAM ALSO INCLUDES CMMIS & FACILITY UPGRADES



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# PROCUREMENT TIMELINE

2018

FEBRUARY

FED. BUDGET

MARCH

TREASURY BOARD APPROVAL & RFQ

JUNE

RFP

OCTOBER

PREFERRED BIDDER

DECEMBER

CONTRACT AWARD NTP

2019  
-  
2020

ENGINEERING & PRODUCTION STARTUP

2021

OCTOBER

WINTER TESTING

2022

JUNE

FIRST TRAINSET IN SERVICE

2024

Q1

LAST TRAINSET IN SERVICE

FAIRNESS MONITOR

EQUIPMENT SCOPE

MAINTENANCE SCOPE

RFQ - RFP

BID TIMELINE

CONTRACT TIMELINE

# VIDEO: NEW FLEET PROGRAM



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# VIA RAIL CORRIDOR FLEET REPLACEMENT PROGRAM SELECTED SUPPLIER

A PROVEN PLATFORM PRODUCT

## SUCCESSFUL BIDDER



- ❑ Siemens was chosen out of 3 international builders having scored highest points commercially and technically

## PRIMARY CONSIDERATIONS:

- ❑ On-time delivery
- ❑ Quality
- ❑ Price



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# SELECTED SOLUTION

## 32 BI-DIRECTIONAL TRAINSETS (9,120 PASSENGER SEATS)

- MANUFACTURER:** SIEMENS CANADA
- Cost:** \$ 989M CAD
- Selection Criteria:** On-time delivery, Quality of product and Price
- Delivery:** 2022 -2024

## BASE TRAINSETS CONSTITUTION

- Charger locomotive with streamlined nose and cab jump seat
- 2 Business cars
- 2 Economy cars
- 1 Economy cab car

## FOUR TRAINSET CONFIGURATIONS REQUIRED

- Extra short 3 cars, 176 seats
- Short 4 cars, 242 seats
- Long 5 cars, 285 seats
- Extra long 7 cars, 418 seats



Charger Locomotive

Business Class 3A

Business Class 3B

Economy Class 1B

Economy Class 1A

Economy Cab Car 4A

## KEY FEATURES

- Accommodate 3 platform heights
- Strong emphasis on universal accessibility, including 5 wheelchair spaces with on board lifts and fully accessible washroom
- At seat passenger service for both economy & business (no café cars)
- PTC ready
- Transport Canada & FRA compliant
- Options - up to 22 trainsets (Ready for addition of electric traction power)
- Maximum speed of 125 mph
- Tier IV emissions compliance
- Emphasis on severe climatic conditions and winterization requirement
- Proven equipment with reliability & availability performance commitment



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# RENDERINGS EXTERIOR



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# RENDERINGS INTERIOR



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QUESTIONS ?

