



**SIEMENS**  
*Ingenuity for life*



## VIA Rail New Corridor Fleet NGEC 11<sup>th</sup> Annual Meeting

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

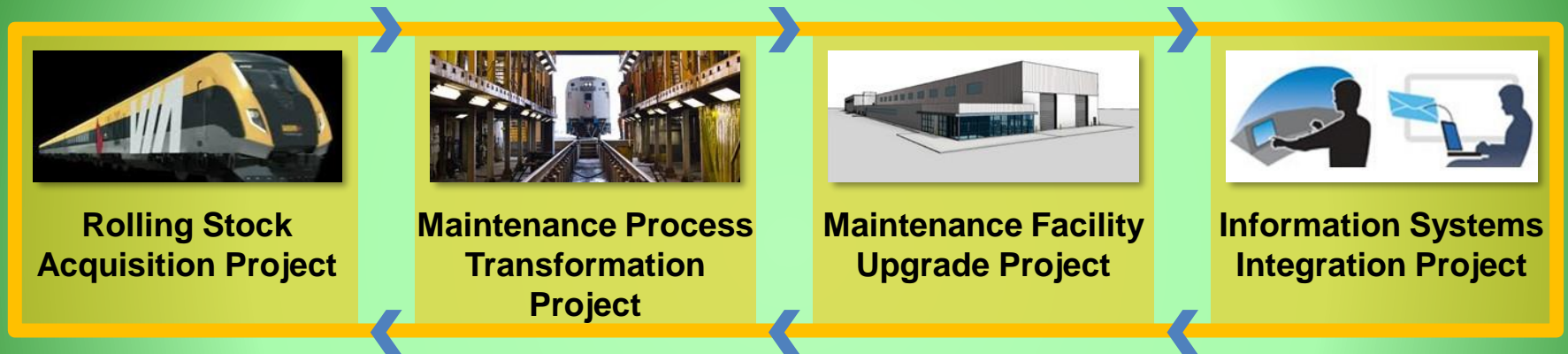
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  - Maintenance Facilities Modernization
  - Information Systems Integration
  - Maintenance Process Transformation



# 4 Critical Components

The Corridor Fleet Replacement Program includes **4 key Integrated Components**



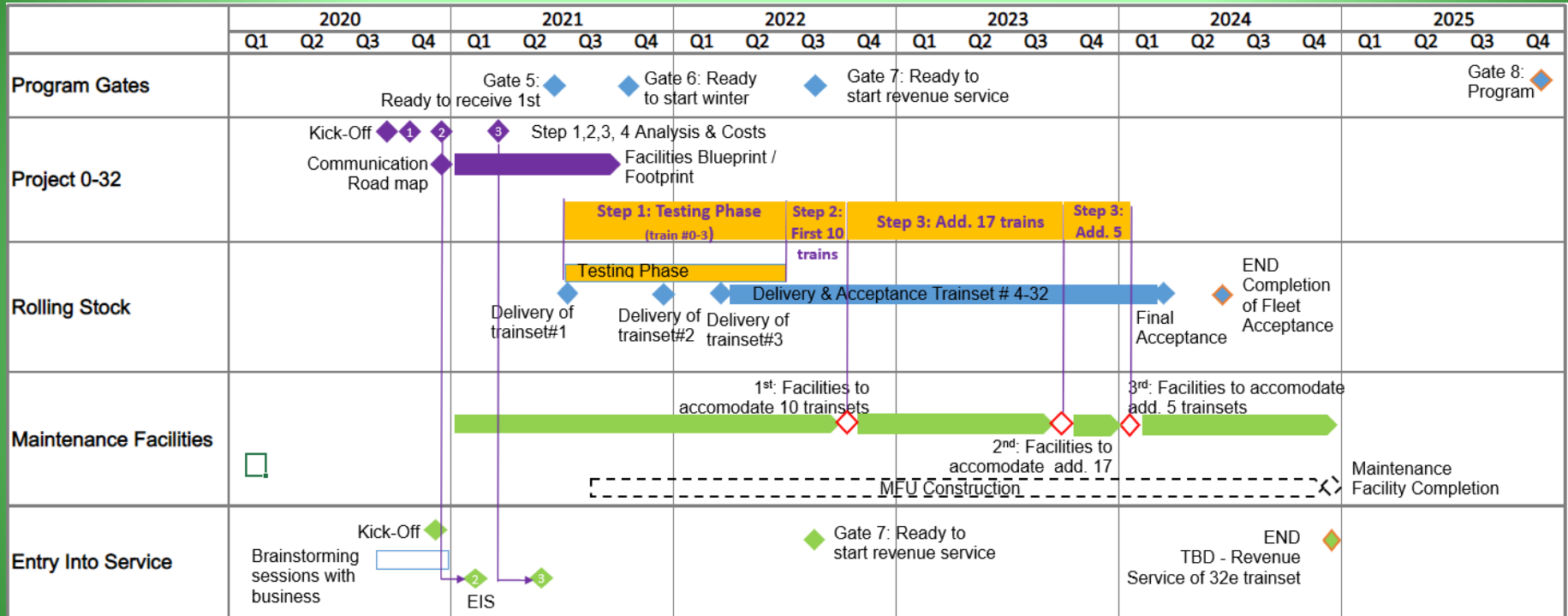
## 3 Key Activities for Success :

- Change management, training and adoption
  - Detailed planning during transitional phase [**Project 0 to 32**]
  - Entry into service planning and execution [**Entry into Service Team**]



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# Program Timeline



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# Rolling Stock Acquisition Project



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# Background

- Retirement of current fleet creates urgency for new fleet, “Off-the-shelf” solution was a priority
- Contract signed with Siemens December 11, 2018
- Cab Car only new vehicle design
- Internal consultation: LEs, On Board and Service Design representatives
- External consultation: Customers, disabled customers and associations



# Rolling Stock Project Status

- FDR 95% complete, remaining 5% in process
- Component FAI's planned to finish May, 2021
- First 2 Trains are Test Trains, may not be 100% complete at delivery
  - Focus on items critical for testing
- Corridor/Winter testing Q4 2021 – 6 months
  - Proof-of-Design, winter, simulated revenue



# Production

- Progress considering COVID is good
  - Parts shortages: workarounds, inefficiencies
- Production ramp-up has presented manufacturing and quality challenges
  - Focus point for VIA





# Rolling Stock - locomotives

- #1: 1<sup>st</sup> paint coat, operating under its own power
- #2: in final assembly, engine installed
- #3: carshell in production, fuel tank complete



# Locomotive #1



Please do not adjust your glasses.  
This white banner is real.  
**But will be disappearing soon!**



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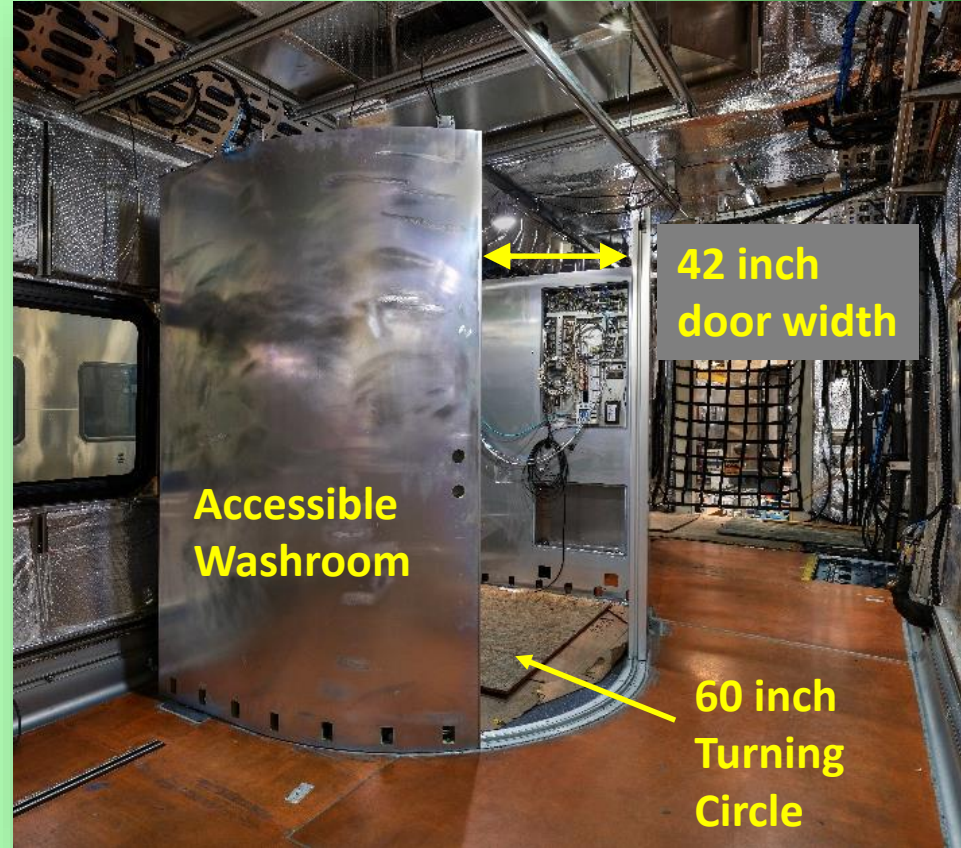
# Rolling Stock - Coaches

- 10 coach carshells complete, including 2 Cab cars
- External source for carbody subassemblies
- Dedicated production line for VIA coaches
- #11: underframe complete
- 1<sup>st</sup> Trainset: all cars in final assembly
- Cab car compression test scheduled Q2 2021

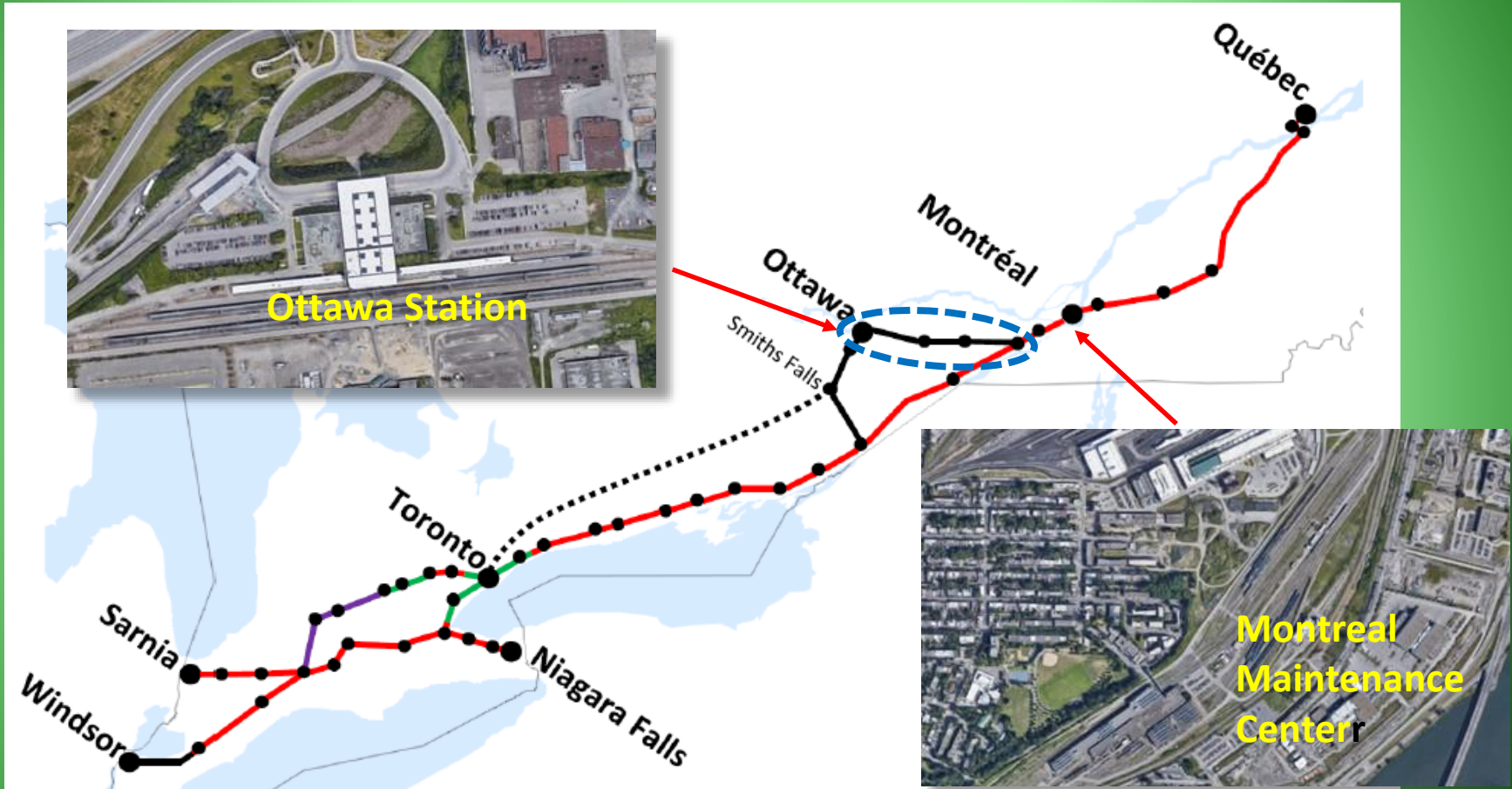




# Coach Interior



# Corridor/Winter Testing 2021/2022



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# Concurrent Projects:

Maintenance Facilities Modernization

Information Systems Integration

Maintenance Process Transformation



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# Maintenance Facilities Modernization

## Release of the Request for Proposal [RFP] for the Maintenance Facility Upgrade

- Released on November 30, 2020 after a detailed process of requirements and conceptual design assessment.
- Upgrades and state of good repair to Servicing Buildings at the Montreal and Toronto Maintenance Centers.
- New fit-for-purpose stand-alone Maintenance Building at the Montreal Maintenance Center.
- New fit-for-purpose Maintenance Building at the Toronto Maintenance Center which will replace part of the existing Maintenance Building.
- Performance based Design/Build project to align with the delivery of the fleet
- Construction expected to start at end of 2021 and last for approximately 3 years.



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# Information Systems Integration

The aim of the information systems integration stream is to ensure the seamless integration between the new technologies delivered with the new trainsets and the existing VIA IT landscape. This includes the implementation of the following:

- **Computerised Maintenance Management Information System (CMMIS):** Based on the IBM Maximo solution, the CMMIS will be the Asset Management platform for all of the VIA Rail Rolling Stock that remains following the deployment of the new Corridor fleet. It will be used to schedule and manage equipment maintenance activities throughout the equipment lifecycle. The project aims to replace multiple legacy systems and enable operational processes to be streamlined and standardised;
- **Cab Simulators:** The construction of two state of the art Locomotive Engineer training facilities in Montreal and Toronto in 2021 will include the installation of two Cab simulators for Siemens locomotives and two additional desk simulators;
- **On-Train systems Implementation and Integration:** Including a Passenger Wi-Fi and On-Board Media system and Passenger Information System (PIS) and CCTV for improved customer experience and security;



# Maintenance Process Transformation

- **Facility Modernization**
  - Influence design of the facility upgrades to accommodate new Maintenance Program
- **Master Maintenance Programs**
  - Design new processes and strategies aligned with VIA's new Operating Model
  - Configure Maintenance tasks for quicker trainset turn-around at Depot
- **Technical Support and Spares Supply Agreement (TSSSA)**
  - Alignment on Contractual Obligations
  - Deployment of Mobilization Plan (Technical Advisors, Spares parts including consumables, Data quality and collection,..)
  - Development and deployment of Governance structure to support contract; specifically, Performance Management.







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