



CAPITAL 
TRANSFORMATION
A Division of Capital Programs



RFP No 367F-19 Type 10 Supercar Update and Procurement Award

Angel Peña, *Chief of Capital Transformation*

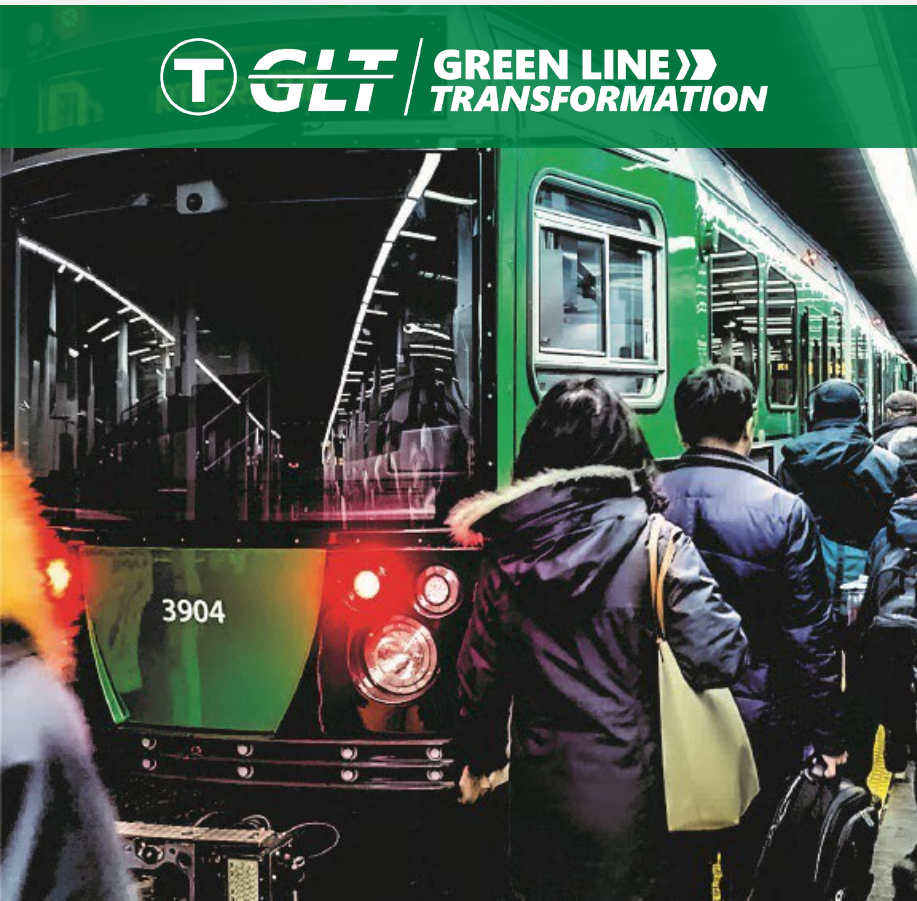
Bill Wolfgang, *Director of Vehicle Engineering*

August 31, 2022



Capital Transformation | *A Holistic Approach*

Our transformation program uses an activist management approach to holistically deliver a portfolio of projects that will measurably improve the quality of service for riders. Finding synergy and efficiency through strategic sequencing of activities and amplifying the impact of work.



Level 0

Safety & State of Good Repair (SGR)

Minimize risk of service disruptions

Level 1

Accessible Stations

New or upgraded platforms

Level 2

Legacy Car Replacement

Operate and maintain single Type 10s

Level 3



Increased Capacity

Additional vehicles and infrastructure for two-car Type 10 operation






Green Line Transformation | Laying the Foundation

Improved Safety & State of Good Repair

 **64,000 Feet**
of Track Renewal 

 **32 Units**
of Special Trackwork 

 **1 Superstructure**
Lechmere Viaduct 

 **7.4 Route Miles**
of Signal System 



 **37 Upgraded**
Intersections 

Accessible Stations

 **3 New Stations**
Accessible 

 **10+ Upgraded**
Crosswalks 

 **75% Design**
*5 more Accessible
Stations on the D Branch* 



 **15% Design**
*Achieving Accessibility
at 14 Stations across
the B & C Branch* 

Legacy Car Replacement

 **15% Design**
*Traction Power & Signal
Upgrades* 

 **Preliminary Design**
*Vehicle Maintenance
Facilities* 

 **Secure Funding**
for Required Infrastructure 

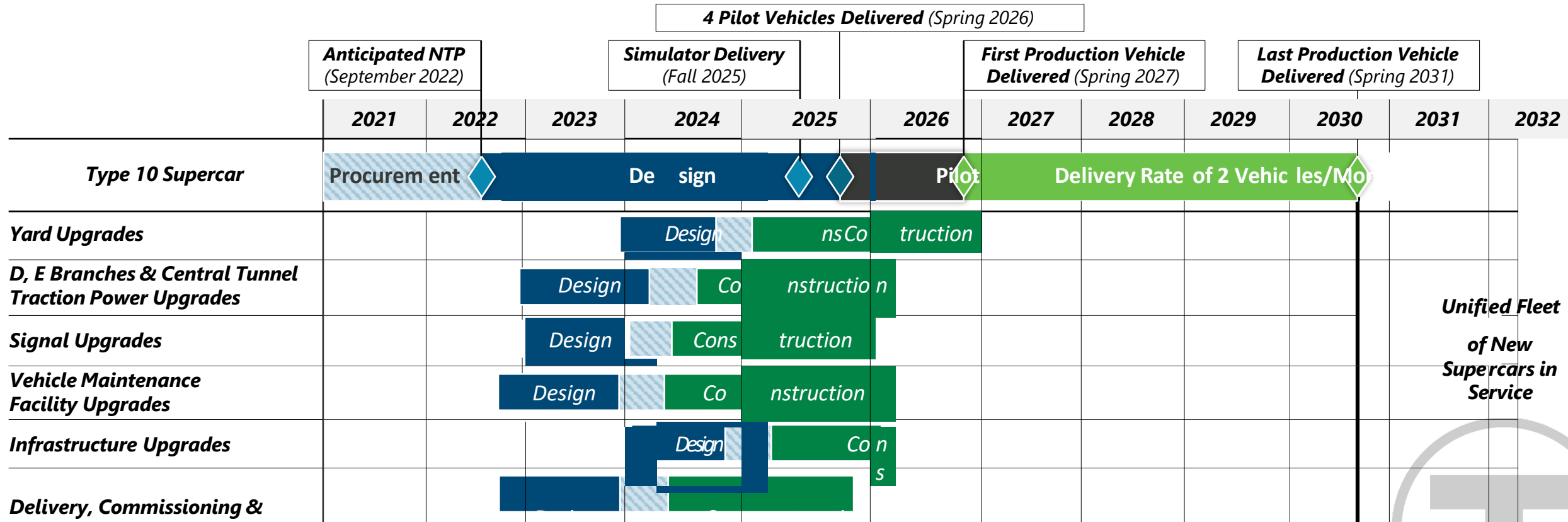
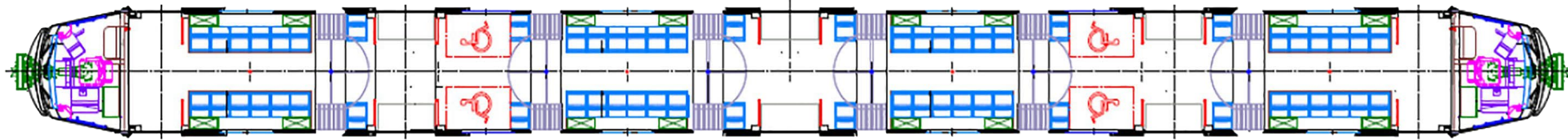
 **Procurement**
Type 10 

Increased Capacity

 **Enter Project
Development**
*with FTA for CIG Core
Capacity Grant* 

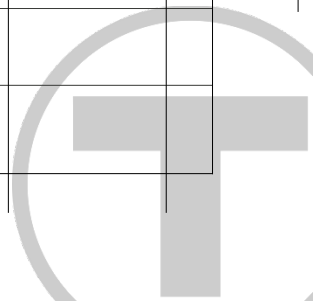


Preparing the way | Type 10 Supercar



**Unified Fleet
of New
Supercars in
Service**

Note: Projects to support Type 10 delivery and passenger service before First Production Vehicle Delivery



Type 10 Supercar Benefits



- Replace the aging Green Line Type 7 and 8 legacy fleets
- Maximizes **passenger capacity**
- Maximizes **boarding efficiency** through wide door openings
- Includes a full-width closed **operator's cab at each end**
- **Reduce required operations staff**

Accessibility Improvements

- ✓ 100% low floor in passenger area
- ✓ 32" clear aisle width throughout vehicle
- ✓ Bridge plates at all double-leaf doors
- ✓ Four priority areas for passengers using wheeled mobility devices
- ✓ Audiovisual passenger information system
- ✓ Allows for future level boarding

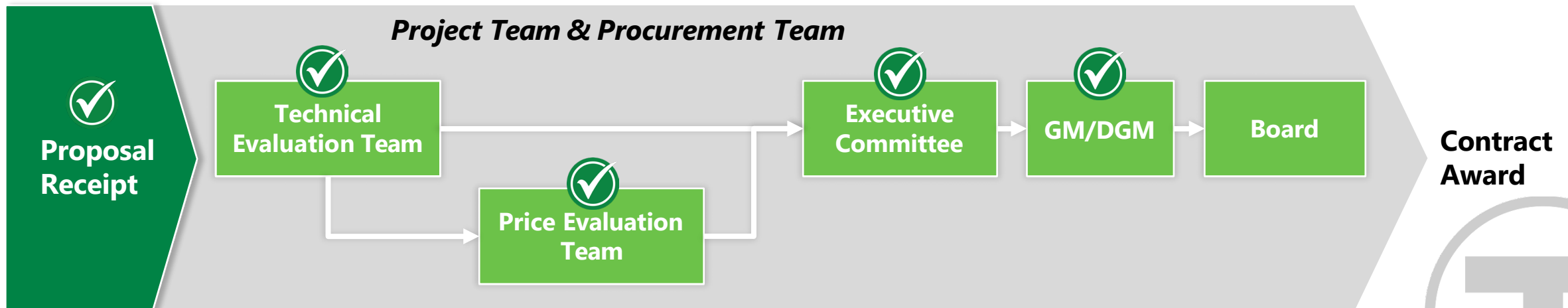
Best Value Proposal Review Process

Base Contract

- ✓ 102 new vehicles
- ✓ 2 operator training simulators
- ✓ Capital spares, manuals, test equipment, special tools, training & training aids
- ✓ 3-year full vehicle warranty services

Review process followed FTA guidelines for a best value procurement

- Carbuilder proposals were divided into two major parts:
 1. Technical Proposals, reviewed by a Technical Evaluation Team
 2. Price Proposals, independently reviewed by a Price Evaluation Team
- An Executive Committee considered both teams' evaluations to make a recommendation of the best value proposal



Recommended Award



- ✓ Following the evaluation process and negotiations, the selection committee determined that CAF USA Inc's proposal for a 7-module 100% low-floor vehicle provides the best value to the MBTA
- ✓ CAF USA Inc successfully manufactured and delivered 24 new Type 9 light rail vehicles for the MBTA's Green Line
- ✓ Lessons learned from previous Vehicle Engineering projects will be leveraged to contribute to the success of the Type 10



CAF's Capability to Deliver

- ✓ Carshell manufacturing and vehicle assembly in Elmira, NY
- ✓ Truck frame manufacturing in Spain, assembly in Elmira, NY
- ✓ 2,700-foot test track
- ✓ Fully capable climate chamber on-site to test extreme climate conditions
- ✓ 400,000 covered square feet to manufacture vehicles and store parts adequately
- ✓ 286,000 sq. ft. of assembly space

The last 3 major projects in Elmira, NY:

- Maryland: Carshell manufacturing in Spain and assembly in Elmira (26 vehicle fleet)
- Kansas: Carshell manufacturing in Spain and assembly in Elmira (6 vehicle fleet)
- Amtrak: Carshell manufacturing and assembly in Elmira (130 car fleet)



Board Vote

VOTED:

To authorize the General Manager & CEO, or his designee, to award and execute Contract No. 722-22 to **CAF USA Inc** to manufacture and deliver 102 new Light Rail Vehicles, Capital Spares, Manuals, Diagnostic Test Equipment, Special Tools, Training, Training Aids, Operator Training Simulators, a 3-year warranty, and associated materials, equipment, and services in accordance with Technical Specification VE-19-049, in a form approved by the General Counsel, for a total delivered amount **not to exceed \$810,925,658.00.**

