



**Massachusetts Bay
Transportation Authority**

Hyundai Rotem Bi-Level Coach Option Procurement

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Overview

The MBTA's Chief Operating Officer, Ryan Coholan, together with Railroad Operations, has identified an immediate need to purchase additional Bi-Level Coaches in order to maintain our ability to service increasing ridership numbers.

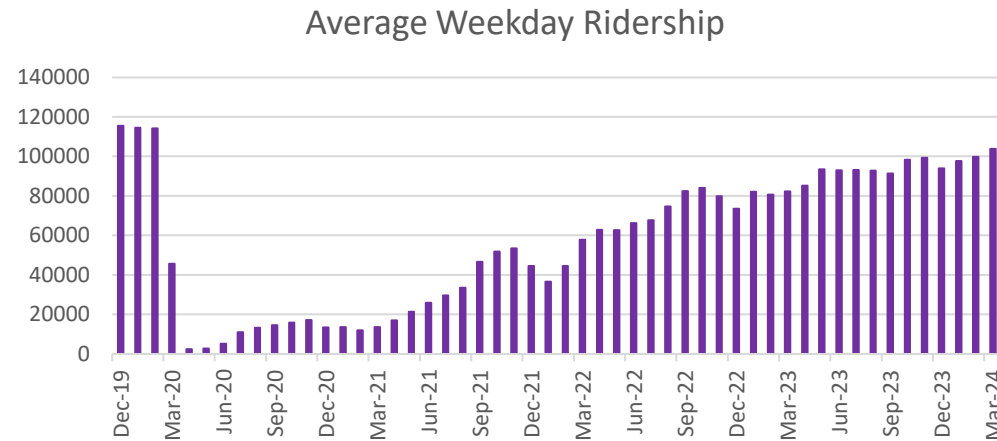
- **260 single-level coaches** were scheduled for retirement.
 - After completion of the current 83 Bi-Level coach procurement, 173 single level coaches remain (all over 35 years old).
- **80 more Bi-Level coaches** would be needed for full replacement.



Ridership

Commuter Rail ridership continues to return to pre-pandemic levels, leading all modes in average weekday ridership numbers.

Mode	Mar-19	Mar-24	Percent
Subway	686,060	347,820	51%
Bus	384,997	307,452	80%
Commuter Rail	121,569	103,768	85%
The RIDE	6,057	3,909	65%
Ferry	4,736	3,373	71%



All values taken from MBTA Ridership Dashboard: <https://www.mbta.com/performance-metrics/ridership-the-t>



Current 83 Coach Procurement



Current Project Overview:

- 72 fully assembled coaches delivered
 - 52 conditionally accepted (in service)
 - 20 in testing
- 4 awaiting shipment from Port of Entry
- Final 7 Coaches will ship in May (4) and June (3)
- All 83 Coaches will be in-service by end of 2024

Budget:

- Total Funding: \$345,686,459
- Expended-to-date: \$257,621,122
- No additional funding required for this portion of the contract

(Note: \$13M from project funds for Wareham facility upgrades)



Current 83 Coach Procurement



Upgrades over single level coaches:

- Motorized Doors
 - Requirement FRA 49 CFR 238
 - Obstruction Detection
 - Traction Control Interlock
 - Door Status displayed to operator
- FRA required emergency egress improvements
- Improved Passenger amenities
 - LED lighting
 - Tables with power/USB outlets
 - ADA compliant restrooms w/ "hands-free" faucet
 - Non-slip flooring



Summary

Seeking approval by the MBTA Board of Directors for:

- Exercising 41 coaches of the 80 car option for additional Commuter Rail Bi-Level Coaches from Hyundai Rotem on Contract No. FC-712.
- Fully Funded – \$203M available in CIPs P1152 and P0652, enough for 41 BTCs (\$4.1M each).
- Manufactured in the same South Korean facility as the current order.
- Deliveries beginning 24 months from Notice of Award (NOA).
- Cars will be shipped from South Korea fully assembled and ready for commissioning.
- Final testing and acceptance will be performed on MBTA property.



Hyundai-Rotem 41 BTC Bi-Level Coaches

Benefits of exercising the option on the current contract:

- Saves 4+ years of design time/costs compared to finding a new car builder.
- Hyundai Rotem has committed to 47% Buy America content.
- No additional design qualification testing required.
- No additional operating or maintenance training required.
- Increased fleet standardization.
- Oldest coaches will be retired.



Total Project Budget

The proposed total project budget is **\$203,440,485** with the following line items:

Line Item	Budget
Material Procurement (includes Capital Spares)	\$175,793,035
Professional Services	\$7,065,366
Force Account	\$3,028,014
Project Administration	\$3,532,683
Indirect Costs	\$4,373,798
Unallocated Contingency (material & project)	\$9,647,589

An estimated amount of \$240M would be required to exercise the option for the remaining 39 coaches (19 BTC's & 20 CTC's, option expires 12/09/2024). This would enable the retirement of ALL the remaining single level coaches.



Request of the MBTA Board of Directors

Vehicle Engineering requests that the MBTA Board of Directors authorize the General Manager/CEO of the Massachusetts Bay Transportation Authority to award and exercise Forty-One (41) of the Eighty (80) Options on Formal Contract FC-712 to Hyundai Rotem USA Corporation to manufacture, furnish, and deliver additional Commuter Rail Bi-Level Blind Trailer Coaches for a total delivered amount not to exceed \$175,793,035 and to execute any necessary or ancillary documents in the name of and on behalf of the MBTA to effectuate this Agreement.

