

LIGHT RAIL FLEET EXPANSION & REPLACEMENT

Well into SFMTA's multi-year light rail vehicle replacement and expansion procurement, over 100 new vehicles (LRV4) have been delivered – improving fleet availability and reliability. We are focusing ongoing efforts on LRV4 vehicle performance, accelerated retirements of Breda cars, and warranty transition.

LRV4 PROGRAM ON SCHEDULE AND IN BUDGET

LRV4 Phase 1: completed 2020

- 68 expansion vehicles now in service

LRV4 Phase 2: through 2025

- 34 of 151 replacement vehicles as of December 2022

Ongoing: strong partnership with Siemens continues – deliveries through 2025; warranty support through 2030



CONTINUED ENHANCEMENTS

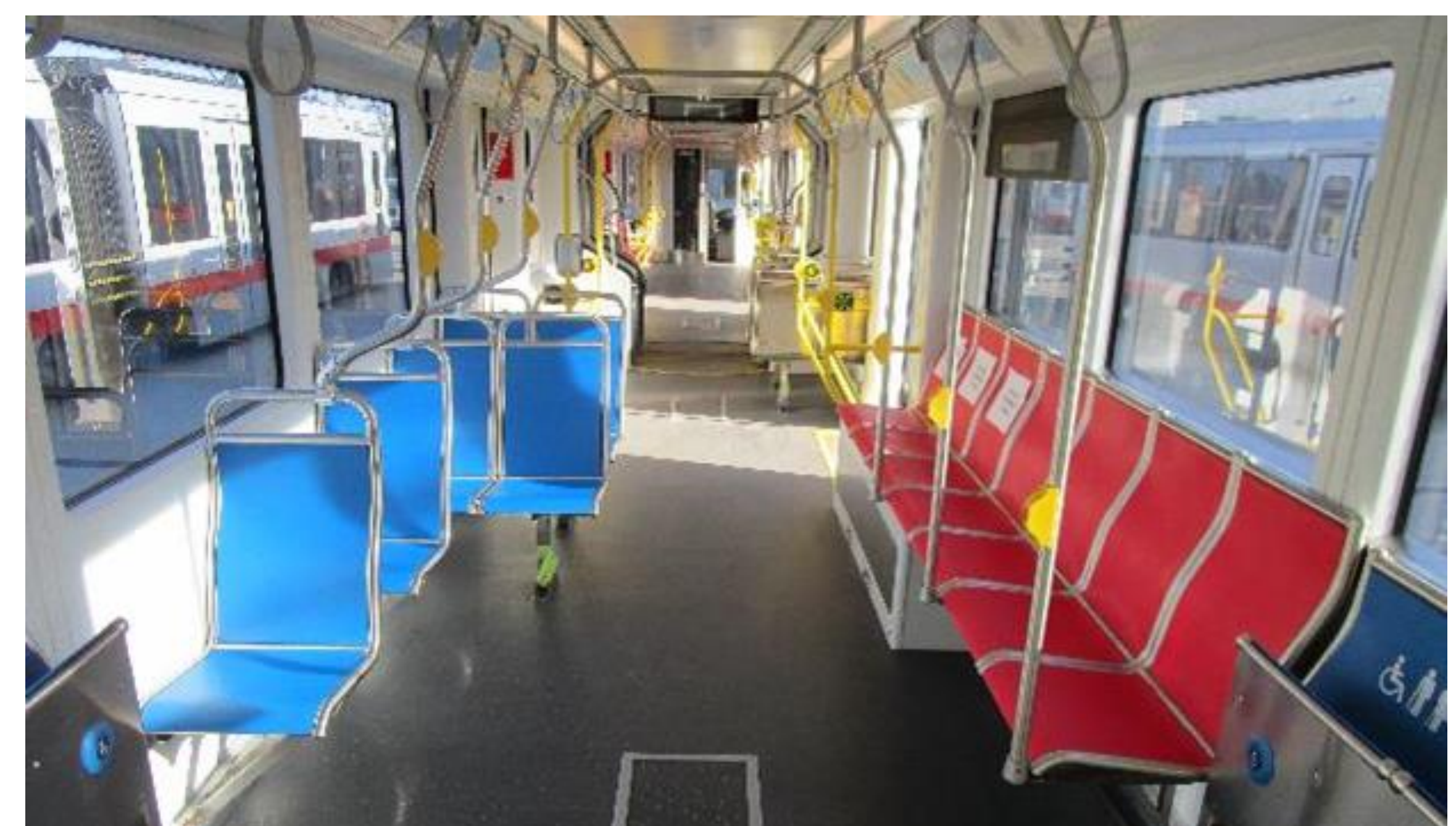
In partnership with Siemens, we are continuing to improve reliability and meet rider/operator needs

- **Updated interiors:** based on rider feedback including new forward-facing seats
- **Larger side-view monitors** based on operator feedback
- **Solving maintenance issues with brakes and steps** to meet reliability requirements

LRV4s are **4x** more reliable on average than Breda cars. But, more work is underway to meet SFMTA's reliability requirements. SFMTA staff work diligently with Siemens and subcontractors to stabilize performance of accepted vehicles. They also ensure newly manufactured vehicles meet all performance standards.



New Larger Side-View Monitors Mean Increased Visibility



Updated Interior with Forward-Facing Seats

NEXT STEPS

Breda Retirements: We have already retired 40 cars and are phasing out remaining vehicles through 2024. We are also strategically cancelling Breda equipment upgrade campaigns to reduce unnecessary investment.

Expansion Option: To purchase additional LRV4 rail vehicles after 2025

Facility Needs: Railyards are nearing capacity at 219 vehicles in 2025, requiring expansion to be considered in the Facilities Program.

Long-term Fleet Management: Prepare for transition out of warranty – maintenance staffing levels, parts availability, etc.



Mean Distance Between Failure (2022)

