



# Rail Inspection Vehicle (RIV)

Sole Source Procurement with MERMEC for RIV Performance Package & Software Upgrade

June 12, 2025 | BART Board of Directors Meeting



# RIV Overview

- Automated track inspection tool vital to BART's reliability
- Identifies track geometry anomalies with high accuracy, which reduces incidents, cuts costs, and improves service
- Enhances rider experience through smoother ride, efficient maintenance, reliable system



Hayward Yard (May 2023)

# Systems & Functionality

Heavy Diesel,  
Self-Propelled  
Vehicle

GPS,  
RFID Tag,  
Wheel Encoder

Laser  
Optics

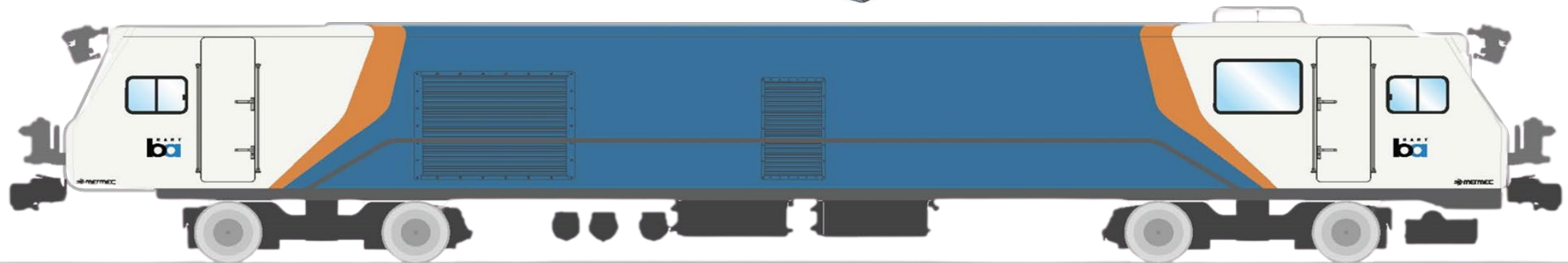
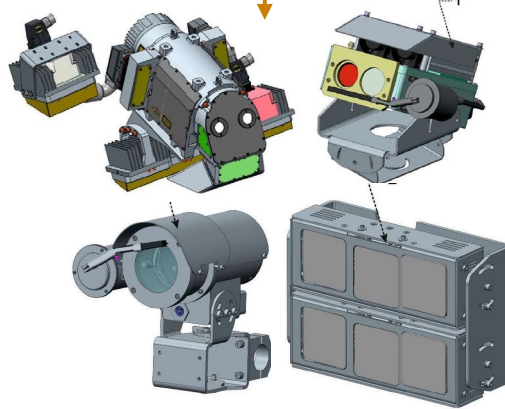
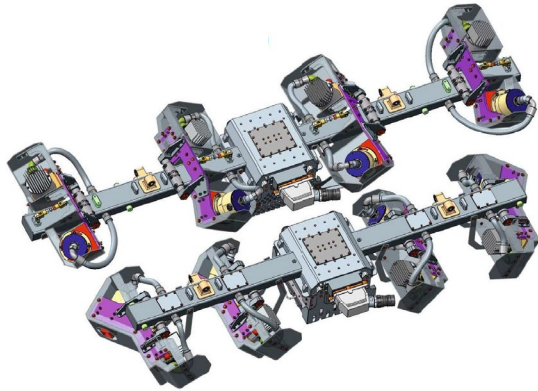
Cameras,  
Lights

Hardware,  
Software,  
AI

Track  
Geometry

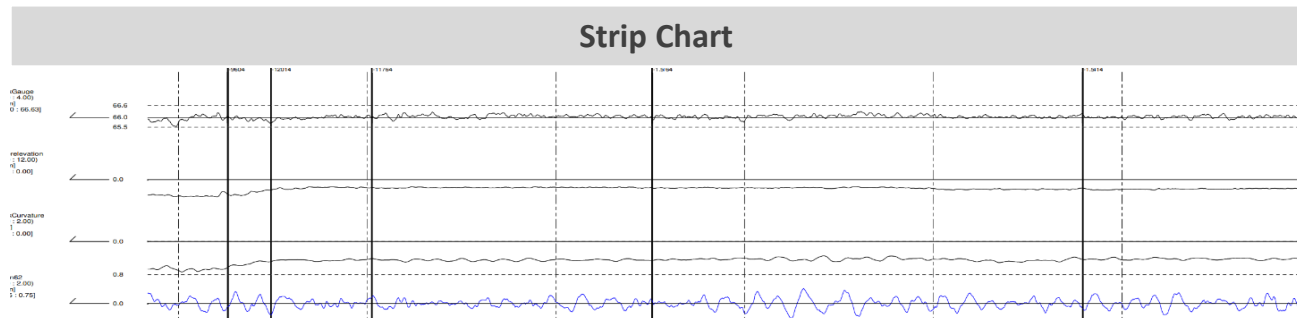
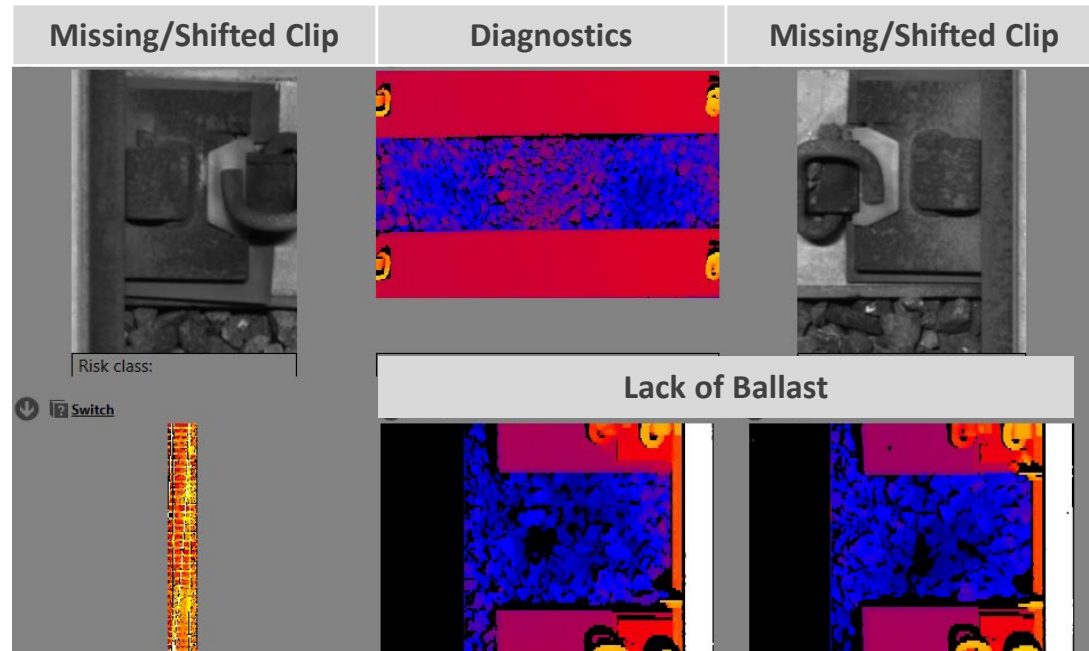
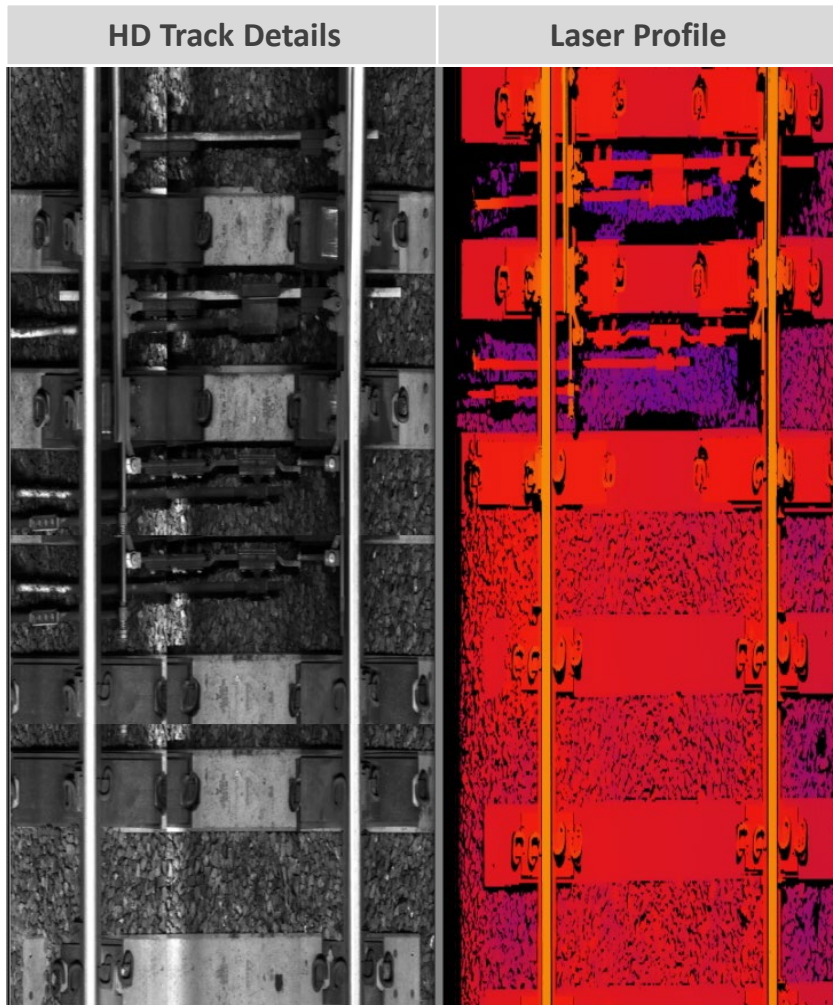
Rail Wear &  
Corrugation

Wayside Conditions  
& Clearances  
(3<sup>rd</sup> Rail, Tunnel,  
Vegetation)



# Sample Data

*The RIV improves safety & quality of track inspection, saves time, and reduces cost.*



# Procurement



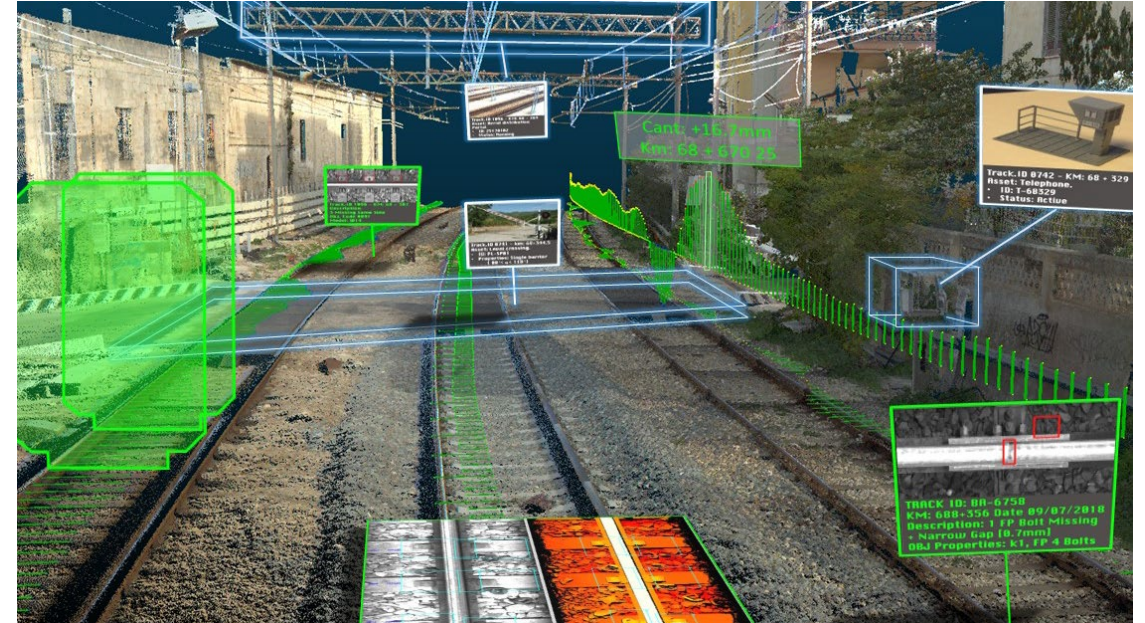
PM, Tech Support  
Spare Parts



Software  
Upgrade



Training



- RIV's optimal functionality & reliability
  - Efficient data analytics
  - Maximo integration
  - Trend & forecast maintenance & replacement
- Safety and proactive asset management

# Recommendations to the Board

- Authorization, in accordance with Public Contract Code Section 20227, for the General Manager to:
  - Enter into direct negotiation with MERMEC for the purchase of the RIV Performance Package and the RAMSYS/RailStudio Software Upgrade
  - Execute an agreement (sole source contract)
  - Exercise three (3) one-year options to extend the agreement duration, for a total amount not to exceed \$8M, including applicable sales tax.

*Two-Thirds Votes Required.*



# Thank You

