

2022 Mechanical Department Rolling Stock Update

Metra Board of Directors Update December 14, 2022

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Capital Projects & Procurements







Mechanical Department Activities

Internal Overhaul Programs

- Nippon Sharyo Coach Overhaul
- Highliner 1 EMU Overhaul
- F40PH-3 Locomotive Overhaul

Vehicle Procurements/External Overhauls

- Coach Car Procurement
- Switcher Procurement
- F40 Locomotive Conversion to All-Electric
- Remanufactured Locomotive Procurement
- All-Electric Trainset Procurement

Equipment Upgrades

- New GPS System
- Camera Systems (In-Cab & Passenger Area)





Nippon Sharyo Coach Overhaul

• Built: 2002 – 2008

Overhaul by: METRA

Location: 49th Street Car Shop

• Production Schedule: 2017 – 2025

Total Units: 302 cars

• Work Force: 95 employees

• Turnaround: 24 working days

• 3,400 man hours (craft employee)

• Cost per car: \$700K

• 183 of 302 cars completed





Highliner 1 EMU Overhaul

• Built: 2005 - 2006

Overhaul by: METRA

 Location: KYD Maintenance Facility

• Production Schedule: 2021 – 2024

Total Units: 26 cars

• Work Force: 20 employees

• Turnaround: 60 working days

• 3,500 man hours (craft employee)

• Cost per car: \$1.6M

• 4 of 26 EMU's completed

Lease cars to NICTD upon completion of program





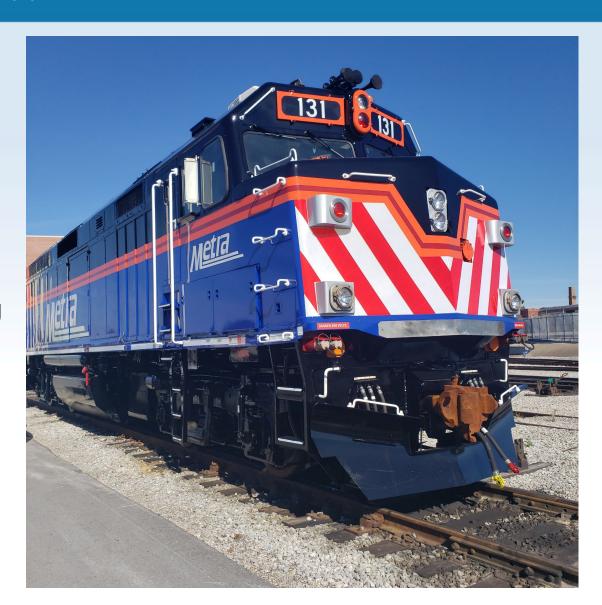




F40PH-3 Locomotive Overhaul

- Built 1977 1980
- Overhaul by: METRA
- Location: 47th Street Diesel Shop
- Production Schedule: 2020 2024
- Total Units: 18 locomotives
- Workforce: 22 employees
- Turnaround: 80 working days, including paint
- 5,500 man hours (craft employee)
- Overhaul cost per locomotive: \$1.5M
- 4 of 18 locomotives completed







Rolling Stock Procurements / 2020 and Beyond

Passenger Rail Cars

- Initial 200 car order (2021), Options for a total of 500 cars over 6 years
- Replacement of Pullman and Budd passenger cars

Switcher Locomotives

 RFP issued in 2021 to replace rest of switcher fleet with 6 Tier IV diesel switchers and one (1) all-electric switcher

F40PH Locomotive Conversion to All-Electric

- Base order of 3 locomotives, with options for 3 additional locomotives
- Progress Rail to perform conversion at shop in Patterson, GA

SD70-MACH Remanufactured Road Locomotives

- Base order of 15 locomotives with option for additional 27
- Funding: Federal and CMAQ (pending)
- Replacement of 42 Tier 0/0+ (beyond useful life cycle) F40 locomotives



All-Electric Trainsets

- Base Order of 8 Trainsets, with options for additional 8 trainsets
- RFP on Street, proposals due on December 16th



New Car Procurement – Carshell Facility Update

Project Status Updates

Carshell Facility Update: Building Weather Tight 100% Substantial Finish target Oct'22















New GPS System

- Implementation: 2020 2023
- Installed by: METRA (onboard equipment)
- Location: 49th Street Car Shop, Western Avenue Car Shop, MED 18th Street, MED KYD, BNSF 14th St. & UP Cal Ave.
- Units: 855 diesel push-pull cars &186 EMU's
- Turnaround: 4 working days per car
- Cost per car: \$19K (average)
- 199 of 1,015 cars installed









Camera Systems (In-Cab & Passenger Area)

- Implementation: 2017 2026
- Installed by: METRA
- Location: 49th Street Car Shop,
 Western Avenue Car Shop, MED 18th
 Street, MED KYD
- Units: In-Cab: 187 cab cars,186
 EMU's & 172 diesel locomotives
 Passenger Area: 485 gallery cars & 186 EMU's
- Turnaround: 4 5 working days per car
- Cost per car: In-Cab: \$30K (average)
 Passenger Area: \$30K (average)
- In-Cab: 357 of 545 vehicle completed
 Passenger Area: 32 of 671 cars
 completed







