FY2020 & FY2021–2024 Capital Program Overview

CMAP Transportation Committee
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2020 – 2024: Capital Program Funding

Funding Sources (in $Millions)

Federal Base Program	2020	2021-2024	Total
State of Good Repair (5337) / Formula (5307)	$186.7	$775.1	$961.8
Sub–Total Federal Base Program	**$186.7**	**$775.1**	**$961.8**
Supplemental			
Federal Congestion Mitigation & Air Quality (CMAQ)	0.0	0.3	0.3
2015 Federal Carryover	0.1	0.0	0.1
State Bond	205.2	872.1	1,077.3
State PAYGO	73.7	295.1	368.8
State of Illinois (IDOT)	2.0	0.0	2.0
Village of Oak Lawn Funds	1.6	0.0	1.6
RTA Innovation, Coordination, and Enhancement (ICE)	5.2	10.8	16.0
RTA State of Good Repair Bonds	0.0	130.0	130.0
Metra Farebox Capital	6.0	20.0	26.0
Sub–Total Supplemental Program	**$293.8**	**$1,328.3**	**$1,622.1**
Capital Program Total	**$480.5**	**$2,103.4**	**$2,583.9**

* *May Not Total Due to* Rounding

Metra

Major Capital Projects for 2020

Project	2020
New Rail Cars & Locomotives	$138.8 M
Locomotive & Car Rehabilitation	95.3 M
Stations & Parking	51.2 M
Yard Rehabilitation	23.2 M
Bridges	22.6 M
Total	$331.1 M

Major Capital Projects account for 68.9% of the total 2020 Capital Program.

Metra

Capital Program Overview By Asset Category

Asset Categories	2020 (in Millions)	2021-2024 (in Millions)	TOTAL
Rolling Stock	$239.3	$950.2	$1,189.5
Bridges, Track & Structures	68.7	340.2	408.9
Signal, Electrical & Communication	34.2	204.3	238.5
Facilities & Equipment	63.3	199.8	263.1
Stations & Parking	51.2	314.0	365.2
Support Activities	23.8	94.9	118.7
Total	**$480.5**	**$2,103.3**	**$2,583.9**

*Total varies due to rounding.

2020 Rolling Stock

New Car Purchase

- Request for Proposals issued in 2019 for base order of 200 with the option to buy up to 200 more

Locomotive Purchase

- 2019 Procurement to purchase 15 remanufactured Tier 3 locomotives, with an option to buy up to 27 more

Car and Locomotive Rehabilitation

- Program includes life extending rehabilitation of cars and locomotives

Alternative Fuel Locomotives

- This is a pilot for alternative fuel locomotives such as battery powered or CNG

DC to AC Conversion

- This project will convert 54 existing locomotives from DC traction propulsion to AC propulsion

Fleet Component Overhauls

- Program includes traction motors, wheel replacements, engine upgrades, etc.

2020 Bridges, Track & Structures

CREATE P2

- Project will provide engineering for the 75th Street CIP

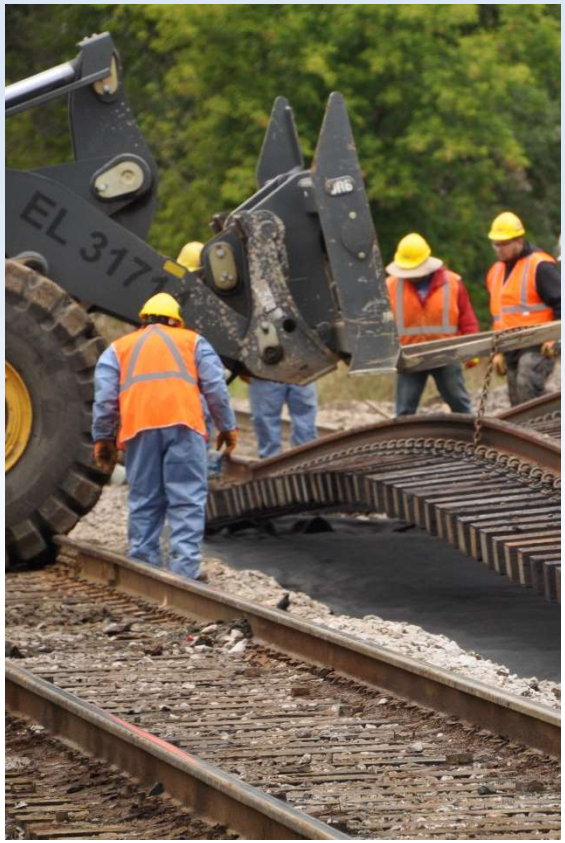
Bridge Design Funds:

- ***North Line Bridges:*** 11 bridges along the Union Pacific North Line, from Fullerton to Lincoln / Addison
- ***North Branch Chicago River Bridge / A110/56:*** Milwaukee North Line bridge over the Chicago River north of Shermer Road in Northbrook
- ***Milwaukee District Bridge A318:*** Milwaukee North Line bridge north of Rockland Road in Lake Bluff
- ***Hickory Creek Bridge:*** Rock Island line bridge in Will County
- ***Bridge 275 – Old 96th Avenue:*** Replacement of Bridge 275 on Metra's Rock Island District which spans over 96th Avenue in Mokena at milepost 27.5

CREATE EW2 Bridge Project

- Design and construction lifting a bridge between 78th Street and 79th Street on Metra's Rock Island Line

2020 Bridges, Track & Structures (cont.)



Bridge Protective Coating

- Repairs and abatement of the Dempster Avenue and Davis Street bridges on the Union Pacific North Line

Roundout Track

- Track renewal and track reconfiguration as part of the on-going Rondout interlocking project, replacing track and switches in the Rondout Interlocker on the Milwaukee North Line.

Rails, Undercutting, Surfacing

- Installation of continuous welded rail as well as the removal of all fouled track ballast

Crossings

- The renewal of rail highway grade crossings at various locations including replacement of cross ties, crossing material, and ballast, as well as the surfacing of the track

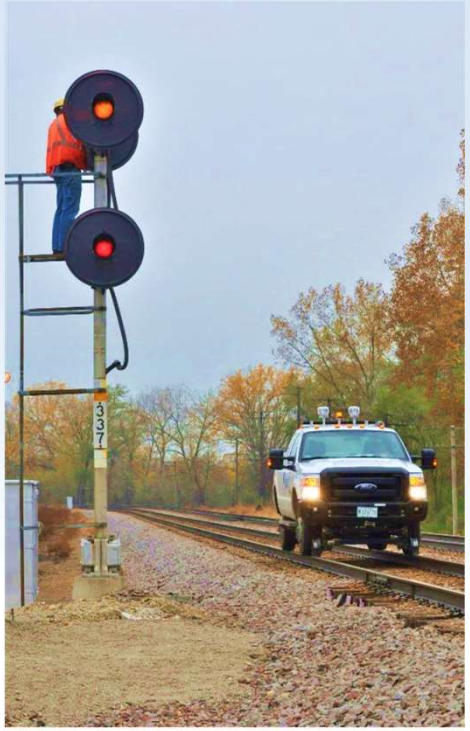
Ties & Ballast

- Replacement of cross ties, switch ties and ballast

Catenary Structures

- Rehabilitation of various catenary structures on ME

2020 Signal & Electrical



Oak Lawn Crossings

- Grade crossing signal improvements along the SouthWest Service in Oak Lawn

Traction Power Substations

- Replaces existing traction power substations along the Metra Electric

Lake Forest Crossovers

- Installation of universal crossovers on the Milwaukee North line to allow for trains to change tracks - Metra's contribution

Western Interlocking

- Funds design for Rock Island Line interlocking at Vermont & Grove in Blue Island

Rondout Interlocking

- Rebuilding of the Rondout interlocking at Rockland Road in Lake County on the Milwaukee North Line; project will add rail and switches for 2 new turnouts and add a signal control system that is PTC ready

Morgan Interlocking

- Construction of Morgan Street interlocking on Milwaukee C&M subdivision and the signal system infrastructure between Canal Street and A-2 interlocking

2020 Signal & Electrical (cont.)

Lake Street & CUS interlocking

- The modernization and upgrading of the Lake Street interlocking at the north end of the Ogilvie Transportation Center (OTC) and the interlocking on at the north and south ends of Chicago Union Station (CUS)

Signal Standards

- Design services for Centralized Train Control north of A5 on the Milwaukee District North Line

Milwaukee West Signal Project

- Joint Metra/CP project to upgrade seven signal on the Milwaukee West Line

Electrical Components at Facilities

- Design and construction funds for electrical engineering projects in yards including overhead piping, fuel line replacement, cable reels and shore power work

HVAC Replacements

- Replacement of HVAC units at Milwaukee District yards.

Communication Improvements and Video Storage

- Installation of cameras, video equipment, video back-up

2020 Facilities & Equipment

Western Avenue Yard and California Yard Expansion

- Renovate and add new tracks and space for more trains

14th Street Yard Fueling Facility

- Replacement of old underground diesel fuel storage tank with overhead, bridge mounted fueling lines

Crew Facilities

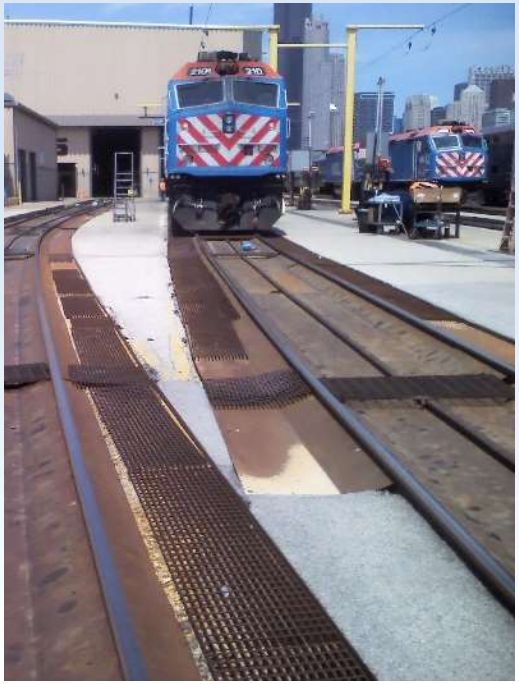
- Design and renovate crew and training facilities

Control Center

- Consolidation of police, train tracking, media and operations for more efficient communications both internally and externally

Yard improvements

- Replacing ties, crosswalks, platforms with steel grated platforms



2020 Facilities & Equipment (cont.)

Hybrid & Alternative Fuel Vehicles

- Vehicle replacement program for police and fleet vehicles

Right-of-Way Equipment, Equipment & Vehicles

- Purchase of various pieces of equipment to be utilized by Metra's Engineering and Mechanical Departments

Technology Investments

- Continues investments technology: Financial Systems, ACORN, APC, & AEDs

2020 Stations & Parking

Multiyear Systemwide Enhancements Impacting all Metra Lines:

Shelters: Adding heated shelters

Signage: Enhanced signage - track/platform identifiers, wayfinding, etc.

Elevator Replacements: Replacement of existing elevators

Platform Improvements: Upgrade to maintain accessibility

Systemwide Station Improvements: Rehabilitation includes shelters, lighting, stairs, roofs, windows, ceilings, etc.

Parking Lot Improvements: Lot renovation and collection equipment

Station Projects over $2M

- Metra Electric: 147th
- Rock Island: Auburn Park (new)
- Union Pacific North: Hubbard Woods

2020 Support Activities

Program Management

- Funds professional services fees to hire a consultant team to provide additional program management capacity

Transit Asset Management

- Consultant assistance for asset assessments and support to develop FTA-mandated Transit Asset Management (TAM) Plan

Project Development

- Funds for conceptual studies of future projects

Locally Funded Projects / Match

- Metra farebox capital funds to provide local match for grant opportunities

Infrastructure Engineering

- Design engineering and/or construction management in the areas of civil, structural, electrical, mechanical, signal, communications and environmental engineering

Locally Funded Projects/Project Match

Unanticipated Capital and Contingencies

State Funding Program 2020 - 2024

SWITCHER LOCOMOTIVE
ALTERNATIVE FUEL LOCOMOTIVES
F59 LOCOMOTIVE ENGINE UPGRADE
DC TO AC CONVERSION
LOCOMOTIVE PURCHASE
NEW GALLERY CARS PURCHASE
CREATE-P2
NORTH LINE BRIDGES (PHASED)
CREATE EW-2 BRIDGE LIFT
275-OLD 96th AVENUE
STONEY CREEK-SWS
Z14A- PULASKI AVENUE
Z14C- KEYSTONE AVENUE
GRAND AVENUE
BRIDGE REPAINTING
SMART GATES

BI-DIR SIGNAL
WESTERN AVE YARD EXPANSION
CALIFORNIA AVE YARD EXPANSION
CREW FACILITIES
RIGHT OF WAY EQUIPMENT
ELEVATOR REPLACEMENT
ELMHURST
VAN BUREN ST STATION
59th/60th ST STATION (Univ of Chicago)
AUBURN PARK NEW STATION
OLYMPIA FIELDS
87th STREET/WOODRUFF
95th STREET STATION (CSU)
147TH STREET STATION
EVANSTON DAVIS STREET
PULLMAN/111th STREET
SHELTERS

Metra