

# Connecting TAM & Performance Management

December 7, 2022



**TRANSIT  
ASSET  
MANAGEMENT**

**Kevin Olinger**, New Mexico Department of Transportation  
**Tina Ignat**, Metra



U.S. Department of Transportation  
Federal Transit Administration

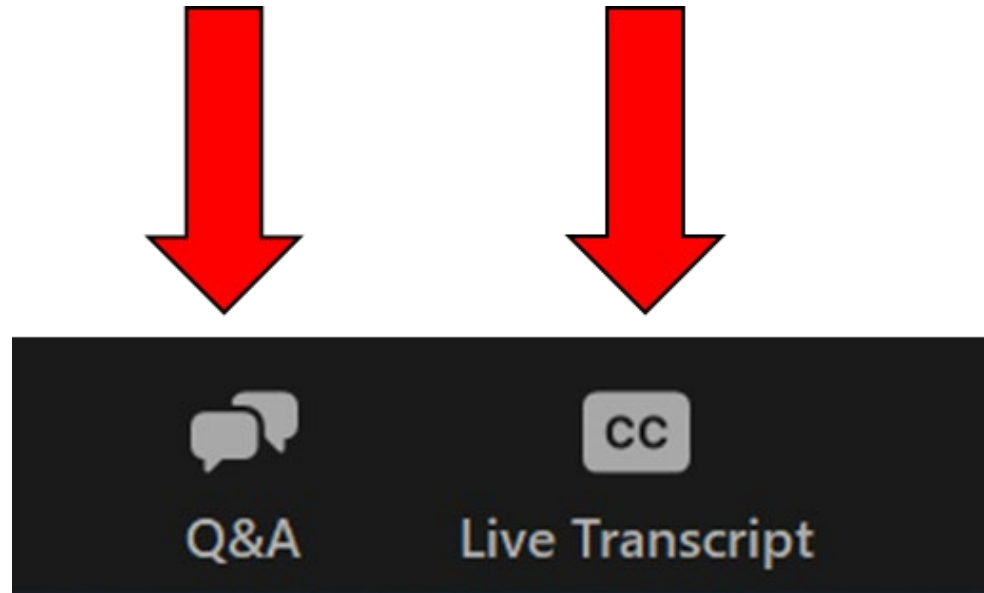
# Presentation Materials

- Available now at [www.transit.dot.gov/TAM](http://www.transit.dot.gov/TAM)
  - Select “TAM Events” in the sidebar and navigate to “Webinar Materials”



# Zoom Functionality

- Use Q&A pod to submit questions for presenters
- Closed Captioning available by clicking “Live Transcript” and then selecting “Show Subtitle”



# TAM Updates

- Now accepting applications for:
  - [TAM Best Practices Review](#), December 23 deadline
    - Apply online and send required documentation to Sarah Skeen at [Sarah.Skeen@dot.gov](mailto:Sarah.Skeen@dot.gov)
  - [TAM Peer Working Group](#), December 28 deadline
- Save the date for the 2023 TAM Roundtable
  - Sunday, July 9, 2023, in Boston, MA





# Speakers



**Kevin Olinger**  
Transit Bureau Chief  
New Mexico Department of  
Transportation



**Tina Ignat**  
TAM Program Manager  
Metra

# December TAM Webinar on Performance Management

Kevin E. Olinger  
Transit Bureau Chief  
New Mexico DOT  
December 7, 2022

# About New Mexico

NMDOT

- 5<sup>th</sup> largest state geographically
- 3<sup>rd</sup> highest poverty rate
- 3<sup>rd</sup> lowest population density rate
- Diversity of climate and topographic conditions (extreme heat and cold, desert, prairie, and mountains)
- As a result, we procure vehicles with options above standard technical specifications and need them to last beyond default Useful Life Benchmarks.

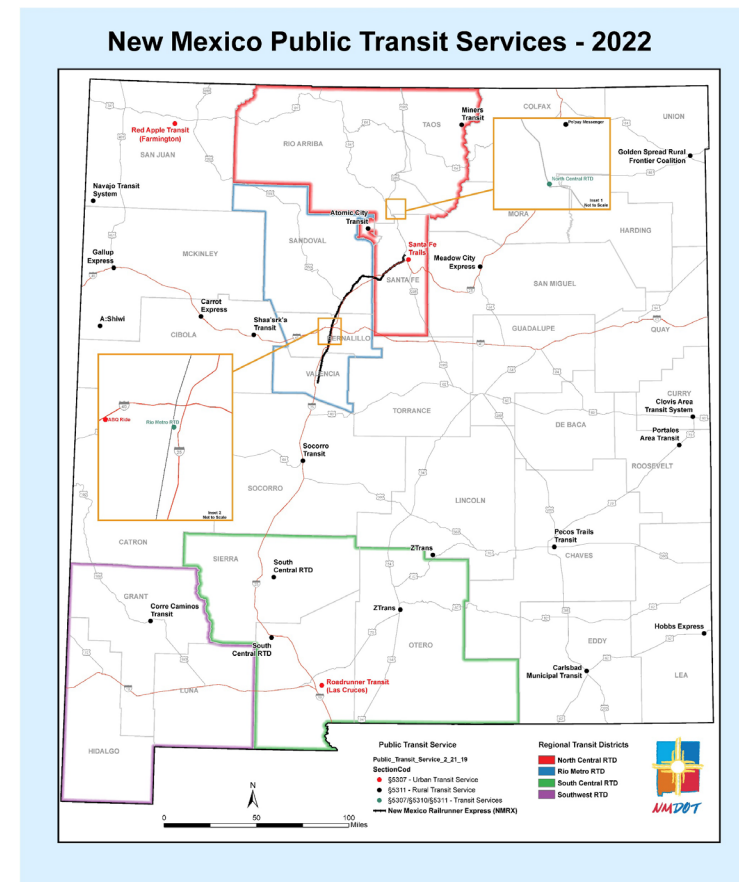




# Rural Public Transportation in New Mexico

NMDOT

- 21 subrecipients
- Serving 29 of 33 counties
- About 1.5 million passenger trips in 2018 (last pre-COVID year)
- In Federal FY 2022:
  - 933,000 trips
  - 4.7 million vehicle revenue miles
  - Average 5 miles per trip



# NMDOT Role in TAM Planning

NMDOT

- Group Tier II Plan sponsor
- Includes 18 of 21 subrecipients
- 450+ revenue vehicles
- Used the TAMPLATE for the first time this year





# Key Data Needs and Sources

NMDOT

- Useful Life Benchmarks
  - NM State Management Plan
  - NTD
- Vehicle Inventory
  - NM electronic grants management system
  - NTD



# Useful Life Benchmarks

## NMDOT State Management Plan

Category	Typical Characteristics		Minimum Life	
	Approx. GVW	Average Cost	Years	Miles
Heavy-Duty Large Bus	33,000 to 40,000	\$325,000 to over \$600,000	15	625,000
Heavy-Duty Small Bus	26,000 to 33,000	\$200,000 to \$325,000	13	455,000
Medium-Duty and Purpose-Built Bus	16,000 to 26,000	\$75,000 to \$175,000	10	285,000
Light-Duty Mid-Sized Bus	10,000 to 16,000	\$50,000 to \$65,000	8	240,000
Light-Duty Small Bus, Cutaways, and Modified Van	6,000 to 14,000	\$30,000 to \$40,000	7	175,000

## National Transit Database

Vehicle Type	Default ULB (in years)
AB Articulated bus	14
AG Automated guideway vehicle	31
AO Automobile	8
BR Over-the-road bus	14
BU Bus	14
CC Cable car	112
CU Cutaway bus	10
DB Double decker bus	14
FB Ferryboat	42
HR Heavy rail passenger car	31
IP Inclined plane vehicle	56
LR Light rail vehicle	31
MO Monorail vehicle	31
MV Minivan	8
RL Commuter rail locomotive	39
RP Commuter rail passenger coach	39
RS Commuter rail self-propelled passenger car	39
SB School bus	14
Steel wheel vehicles	25
SR Streetcar	31
SV Sport utility vehicle	8
TB Trolleybus	13
Trucks and other rubber tire vehicles	14
TR Aerial tramway	12
VN Van	8
VT Vintage trolley	58



# Vehicle Inventory

NMDOT

- Two slightly different databases (NTD and our electronic grants management system)
- Records do not match one-to-one
  - NTD assigns one RVI ID to all vehicles in the same fleet
- Fields common to both databases are missing information
  - RVI ID
  - Agency ID





# Translating to NTD

NMDOT

- Step 1: Reconcile vehicle inventory data using manufacture year, make/model, seating capacity
- Step 2: Use vehicle inventory data to reconcile vehicle types and ULBs based on GVWR and original purchase price
- Step 3: Update NTD vehicle inventory at time of annual reporting



# NTD Narrative Report

- Your ULBs, especially if different from NTD defaults
  - Mileage and/or different vehicle ages
- Your performance results based on your own ULBs
  - Likely will not match NTD outputs
- Any policies regarding investment priorities
  - Subjective vehicle condition assessments
  - Revenue vehicles have priority over facilities
- Any external factors that might affect your ability to replace or maintain assets
  - Cutaway bus delivery lag times, price increases





## Contact Information

Kevin E. Olinger

[Kevin.Olinger@dot.nm.gov](mailto:Kevin.Olinger@dot.nm.gov)

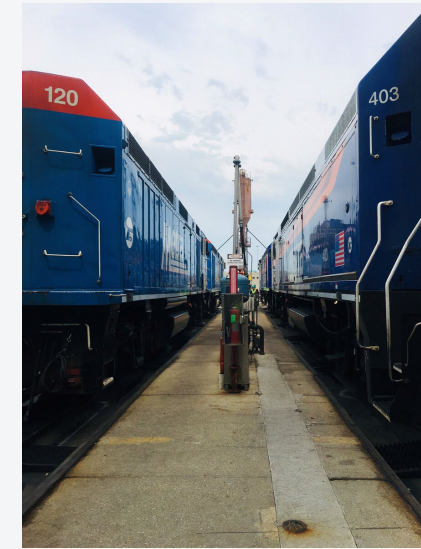
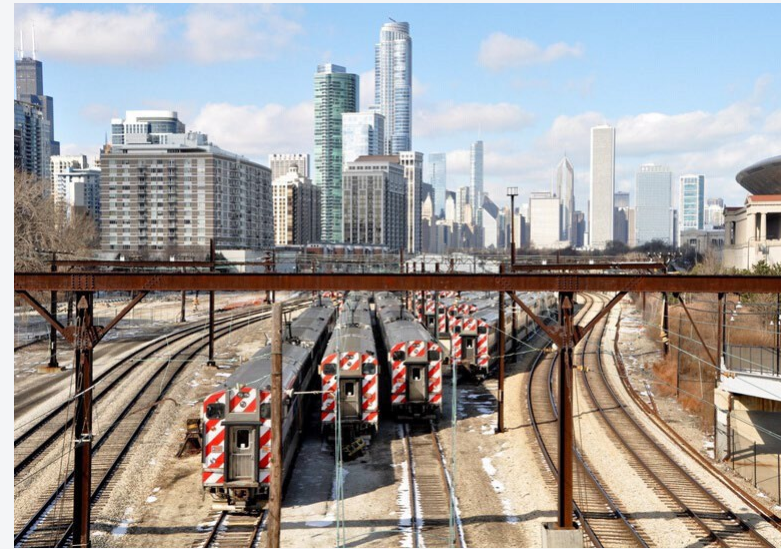
(505) 469-3595



## TAM

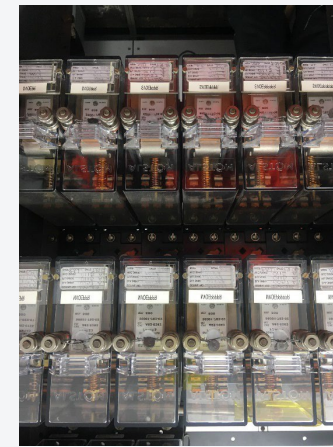
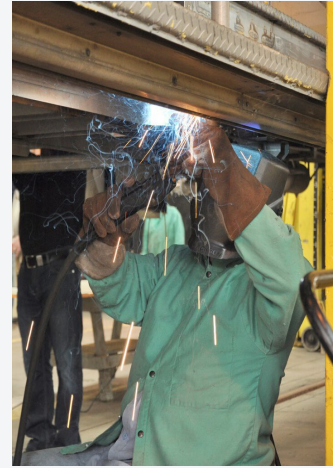
Performance targets and their connection  
to Fleet Management practices

Presented by Tina Ignat  
Manager, TAM Program  
Metra Commuter Rail | Chicago





# What to Expect



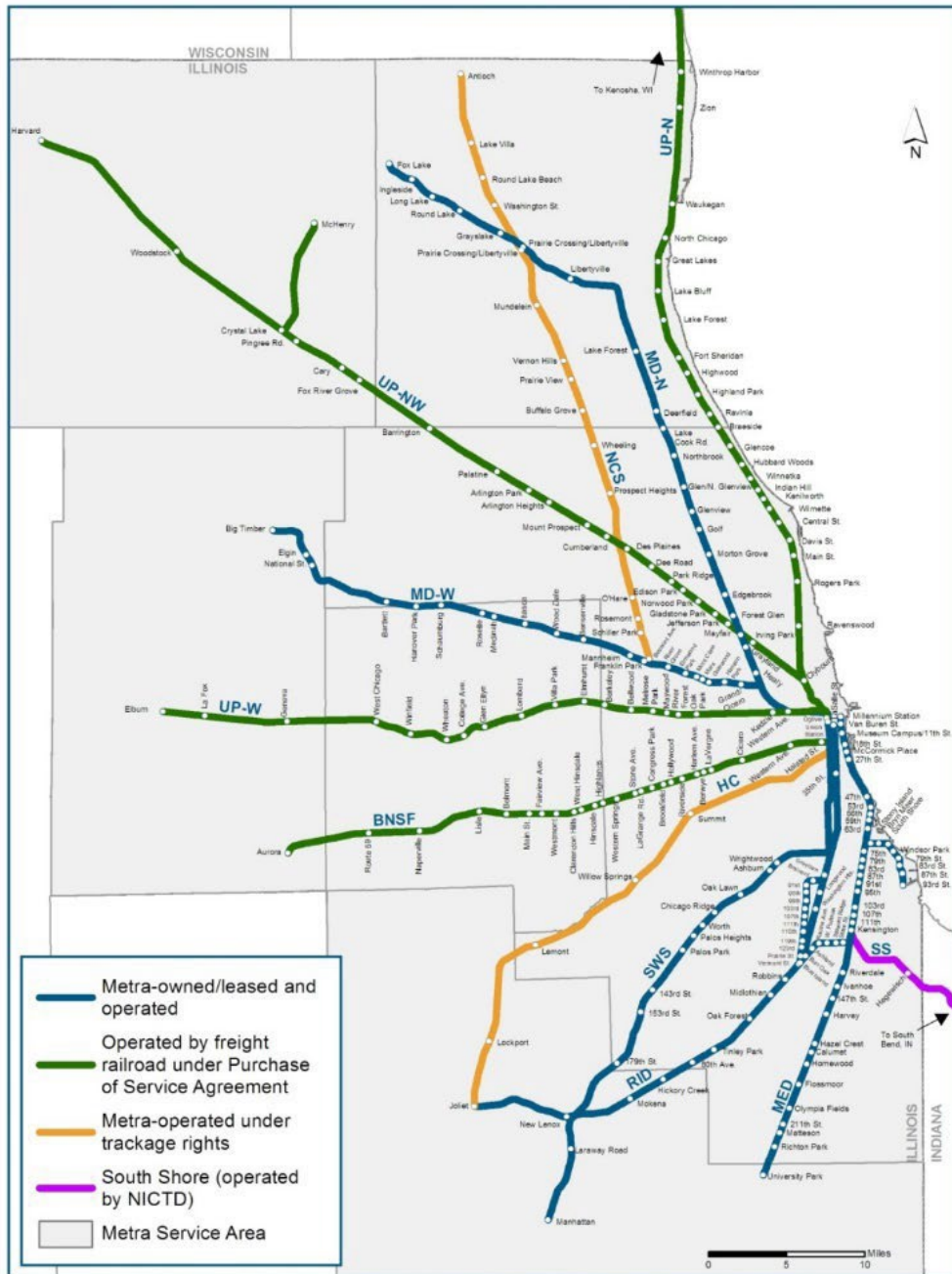
- Objective
- Context of Agency
- Fleet Maintenance & Federal Reporting
- Improvement Program



## OBJECTIVE

This presentation will share the strategies and processes for modifying the FTA ULB for equipment rubber tire fleet, how age/mileage is being tracked, methods for condition assessment, and NTD Reporting including developing performance targets

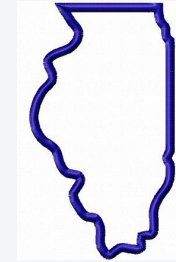




- 14.1 million passenger trips in 2021\*
- 582 weekday trains
- 269 Saturday trains
- 185 Sunday trains
- 242 stations
- 1,155 miles of track
- 488 route miles
- 173 locomotives
- 861 diesel passenger railcars
- 182 electric propelled passenger railcars
- 926 bridges
- 565 grade crossings
- 24 rail yards
- 92,000 parking spaces
- 12 electrical substations
- 3 electrical tie stations
- 12 fuel facilities

---

# Governance in Illinois



MPO



Oversight Agency to Service Boards

---



Bus &  
Heavy Rail



Commuter  
Rail



Suburban Bus &  
Paratransit



## Category

## Asset Inventory

## Assessing Condition

### Equipment

- **All** non-revenue service vehicles and equipment > \$50K used in the provision of public transit, except 3rd-party equipment assets

- Only equipment with **direct** capital responsibility, no third party assets

### Rolling Stock

- **All** revenue vehicles used in the provision of public transit

- Only revenue vehicles with **direct** capital responsibility

### Infrastructure

- **All** infrastructure used in the provision of public transit

- Only infrastructure with **direct** capital responsibility

### Facilities

- **All** facilities used in the provision of public transit (excluding bus shelters)

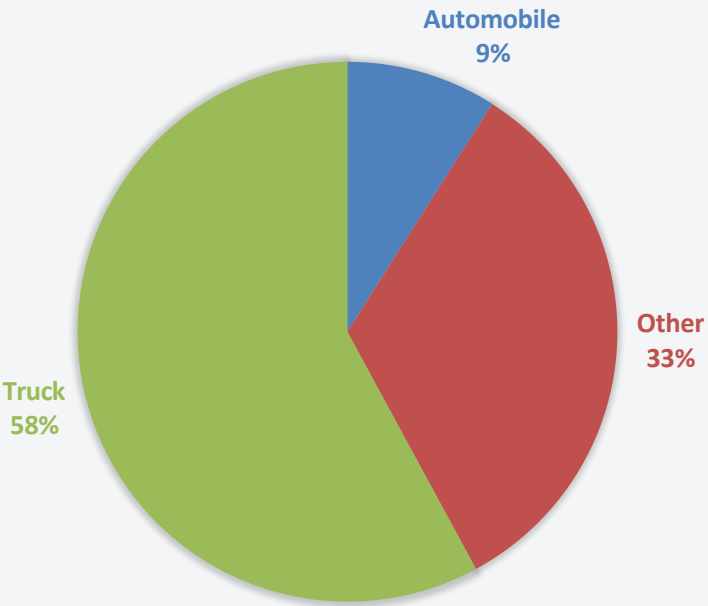
- Only facilities with **direct** capital responsibility (excluding bus shelters)



# Fleet Maintenance



# RY2021 EQUIPMENT BREAKDOWN



Fleet  
Maintenance  
*Metra*

Asset Category	Asset Class	Total Fleet	ULB	Within SGR	Over SGR	2021 Target	2021 Performance	Difference	Met/Missed 2021 Target	2022 Target
Rolling Stock	Commuter Rail Locomotive	170	30	74	96	53%	56.47 %	3.47%	Missed	70%
	Commuter Rail Passenger Coach	850	30	482	368	44%	43.29 %	-0.71%	Met	44%
	Commuter Rail Self-Propelled Passenger C	186	30	186	0	0%	0.00%	0.00%	Met	0%
Asset Category	Asset Class	Total Fleet	ULB	Within SGR	Over SGR	2021 Target	2021 Performance	Difference	Met/Missed 2021 Target	2022 Target
Equipment	Automobiles	50	7	38	12	23.21%	24.00 %	0.79%	Missed	25%
	Trucks and other Rubber Tire Veh	600	7 & 14	422	178	33.54%	29.67 %	-3.87%	Met	42%
	Steel Wheel Vehicles	79	25	50	29	42.67%	36.71 %	-5.96%	Met	40%
Asset Category	Asset Class	Total Facilities		Within SGR	Over SGR	2021 Target	2021 Performance	Difference	Met/Missed 2021 Target	2022 Target
Facilities	Passenger Stations	243		225	18	9.00%	7.75%	-1.25%	Met	9%
	Passenger Parking*	312		287	25					
	Maintenance & Administrative	106		94	12	N/A	11.32 %	N/A	N/A	13%
*Only passenger parking with capital responsibility is reflected in performance and targets										
Asset Category	Asset Class	Total Track Miles			2021 Average	2021 Target	2021 Performance	Difference	Met/Missed 2021 Target	2022 Target
Infrastructure	DO & PT Performance Restrictions	1085.9			54.75	5%	5.04%	-0.04%	Missed	6%

# Performance Targets



Asset Category	Asset Class	Total Fleet	ULB	Within SGR	Over SGR	2021 Target	2021 Performance	Difference	Met/Missed 2021 Target	2022 Target
Equipment	Automobiles	50	7	38	12	23.21%	24.00%	0.79%	Missed	25%
	Trucks and other Rubber Tire Vehicles	600	7 & 14	422	178	33.54%	29.67%	-3.87%	Met	42%
	Steel Wheel Vehicles	79	25	50	29	42.67%	36.71%	-5.96%	Met	40%



# Fleet/Equipment



547 W. Jackson Boulevard, Chicago, IL 60661 312-322-6900 metrarail.com

April 19, 2019

VIA Electronic Delivery at mshadoni.smith@dot.gov

Mshadoni Smith  
TAM Program Manager, Office of Budget and Policy  
Federal Transit Administration  
1200 New Jersey Ave., SE  
Washington, DC 20590

Re: Useful Life Benchmark for Non-Revenue Vehicles

Dear Ms. Smith:

The Northeast Illinois Regional Commuter Railroad Corporation (d/b/a Metra) submits the following Useful Life Benchmark (ULB) request for use in Metra's implementation of the Federal Transit Administration's (FTA) Transit Asset Management program. As noted by the FTA in its "Default Useful Life Benchmark (ULB) Cheat Sheet," the FTA has set a default ULB as the expected service years for various vehicle classes<sup>1</sup> citing eight (8) years for automobiles and fourteen (14) years for (trucks)/other rubber tire vehicles. The FTA ULB is the average age-based equivalent of a 2.5 rating on the FTA Transit Economic Requirements Model (TERM) scale.

However, the FTA permits transit agencies to "adjust their Useful Life Benchmarks with approval from FTA."<sup>2</sup> Accordingly, for the reasons set forth below, Metra respectfully requests approval of a seven (7) year ULB for its automobiles and trucks/other rubber tire non-revenue equipment service vehicles (collectively, "Vehicles"). Metra believes that the use of this ULB will accurately and closely reflect the usage of Metra's Vehicles. Indeed, Metra's internal policy regarding maintenance of its Vehicles has a long-standing seven-year useful life. The requested adjustment will improve Metra's reporting and implementation of TAM and make Metra's policies consistent across the board.

#### Overview of Metra

Metra is one of the largest and most complex commuter rail systems in North America, serving a six-county region of more than 3,700 square miles. The agency provides service to and from downtown Chicago with 11 routes totaling nearly 500 route miles, approximately 1,200 miles of track, 847 bridges, and over 500 grade crossings. The commuter rail agency uses close to 1,200 pieces of rolling stock, storing and maintaining this equipment at seven maintenance facilities across 24 rail yards. Metra also oversees and maintains 242 passenger stations with over 400 station platforms which also have approximately 90,000 passenger parking spaces along our system.

As part of its operations, Metra owns 92 automobiles and 453 trucks and other rubber tire Vehicles for a total of 545 Vehicles (This excludes non-revenue equipment construction vehicles which will remain with the default

<sup>1</sup> [https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA\\_TAM\\_ULB\\_Cheat\\_Sheet\\_2016-10-26.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_TAM_ULB_Cheat_Sheet_2016-10-26.pdf) (last visited April 5, 2019).

<sup>2</sup> *Id.*

## Metra Support Vehicles Policy

METRA POLICY

FM-00.01  
REFERENCE NUMBER

### II.10 Periodic Inventory Assessment

Metra's departments and Fleet Management will regularly assess, and inventory support vehicles as defined in the Periodic Vehicle Assessments and Inventories section in the FM-00.01 Procedure.

### II.11 Vehicle Maintenance and Replacement Keys

All maintenance and repair service for Metra support vehicles will be managed by Fleet Management. (See FM-01.01, Repair and Maintenance of Metra Vehicles.) Employees are responsible for vehicle keys and their replacement.

### II.12 Fleet Replacement

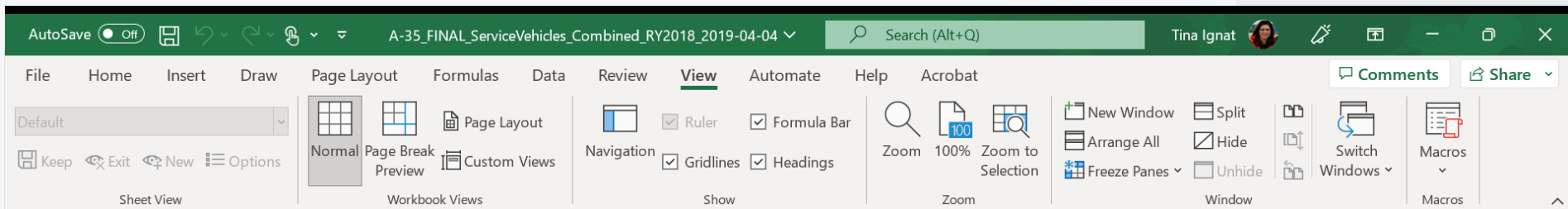
Each Metra-owned support vehicle will become eligible for replacement, based on vehicle mileage and age. If a vehicle incurs substantial damage from a collision or a major component failure occurs (engine or transmission) may be replaced up to 18 months early regardless of mileage if the early retirement is beneficial to Metra.

Metra-owned Support Vehicle Retirement Review Schedule		
Vehicle Type	Age	Mileage
Sedans, Supervisory SUVs, Vans, Trucks	7 Years	125,000 Miles
Police Patrol Vehicles	5 Years	100,000 Miles

Vehicle Type		Default ULB (in years)
AB	Articulated bus	14
AG	Automated guideway vehicle	31
AO	Automobile	8
BR	Over-the-road bus	14
BU	Bus	14
CC	Cable car	112
CU	Cutaway bus	10
DB	Double decked bus	14
FB	Ferryboat	42
HR	Heavy rail passenger car	31
IP	Inclined plane vehicle	56
LR	Light rail vehicle	31
MO	Monorail vehicle	31
MV	Minivan	8
RL	Commuter rail locomotive	39
RP	Commuter rail passenger coach	39
RS	Commuter rail self-propelled passenger car	39
SB	School bus	14
	Steel wheel vehicles	25
SR	Streetcar	31
SV	Sport utility vehicle	8
TB	Trolleybus	13
	Trucks and other rubber tire vehicles	14
TR	Aerial tramway	12
VN	Van	8
VT	Vintage trolley	58

# Modifying ULB





ID				
	A	B	C	D
2	ID	Agency Fleet ID	Fleet Name	Vehicle Type
113		QSB3.3-C85	BRODERSON	Trucks and other Rubber Tire Vehicles
114		2500	CHEVROLET	Trucks and other Rubber Tire Vehicles
115		C2500	CHEVROLET	Trucks and other Rubber Tire Vehicles
116		C2500	CHEVROLET	Trucks and other Rubber Tire Vehicles
117		C3500	CHEVROLET	Trucks and other Rubber Tire Vehicles
118		C3500	CHEVROLET	Trucks and other Rubber Tire Vehicles
119		C3500	CHEVROLET	Trucks and other Rubber Tire Vehicles
120		C3500	CHEVROLET	Trucks and other Rubber Tire Vehicles
121		C7500	CHEVROLET	Trucks and other Rubber Tire Vehicles
122		C7500	CHEVROLET	Trucks and other Rubber Tire Vehicles
123		EXPRESS	CHEVROLET	Trucks and other Rubber Tire Vehicles
124		G3500	CHEVROLET	Trucks and other Rubber Tire Vehicles
125		KODIAK	CHEVROLET	Trucks and other Rubber Tire Vehicles
126		KODIAK	CHEVROLET	Trucks and other Rubber Tire Vehicles
127		TAHOE	CHEVROLET	Trucks and other Rubber Tire Vehicles
128		DAKOTA	DODGE	Trucks and other Rubber Tire Vehicles
129		E-250	FORD	Trucks and other Rubber Tire Vehicles
130		E-350	FORD	Trucks and other Rubber Tire Vehicles
131		E-350	FORD	Trucks and other Rubber Tire Vehicles
132		E-350	FORD	Trucks and other Rubber Tire Vehicles
133		ESCAPE	FORD	Trucks and other Rubber Tire Vehicles

ID	Agency Fleet Id	Fleet Name	Vehicle Type	Primary Mode	Year Manufactured	Estimated Cost	Useful Life Benchmark (Years)	Useful Life Remaining (Years)	Total Vehicles	Transit Agency Capital Responsibility (%)	Year Dollars of Estimated Cost	Secondary Modes	Notes	Status
19486	EXPLORER POLICE EQUIPPED	FORD	Trucks and other Rubber Tire Vehicles	CR - Commuter Rail	2018	\$206,750.00	7	7	5	100.00	2018		11101-11109; 11111-11139	
19487	F-150	FORD	Trucks and other Rubber Tire Vehicles	CR - Commuter Rail	2014	\$43,510.00	7	3	2	100.00	2014		14403; 14404	Active
19488	F-150	FORD	Trucks and other Rubber Tire Vehicles	CR - Commuter Rail	2014	\$133,820.00	7	3	6	100.00	2014		14405-14410	Active
19489	F-150	FORD	Trucks and other Rubber Tire Vehicles	CR - Commuter Rail	2015	\$156,130.00	7	4	6	100.00	2015		15407; 15408; 15422-15424; 16423; 16424	Active
19490	F-150	FORD	Trucks and other Rubber Tire Vehicles	CR - Commuter Rail	2016	\$152,424.72	7	5	6	100.00	2016		16423; 16424; 16426; 16427; 16428; 16429;	Active
19491	F-250	FORD	Trucks and other Rubber Tire Vehicles	CR - Commuter Rail	2014	\$247,796.00	7	3	6	100.00	2014		14401; 14402; 15401-15404	Active

# NTD Reporting





# System of Record

Employee Portal x New Tab x Fleet Assets x +

https://metra.mro.com/maximo/ui/?event=loadapp&value=fleetasset&uisessionid=11497&\_tt=266775r37p8upm61otfc9e60f5

Tina Ignat

Query Find Asset Select Action

List View Asset Specifications Warranties PMs History

Asset: 10515 FORD F450 CC ESBT NTD ID: 19421 Replacement Pending?

Department: ENGINEERING

Location: KYD Area: 4771

Type: DIESEL

Attachments

Document	Description
REGISTRATION	Vehicle Registration
REGISTRATION	Vehicle Registration
TITLE	Vehicle Title

Details

Model: F-450 Year: 2010 Vin #: 1FDXW4GRXAE95501

Make: FORD

State: IL License Plate #: M178684 Weight: 16000 Manufactured Date: 11/1/09

GPS Last Address: 2936 W Chicago Ave, Chicago, IL 60622, USA GPS Geofence: WACY

Owners

Owner Name: Robert Castro Office Phone#: 2716

Owner Email: RCastro@METRARR.COM Owner Cell#: 312-907-4360

Director Name: Ed Schafroth District: MED

Meters

Meter	Open Filter CTRL+Z Log Date	Last Reading
ODOMETER	7/10/22 7:20 PM	24,503.28

Edit Readings

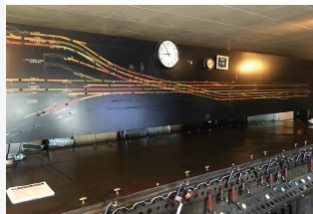
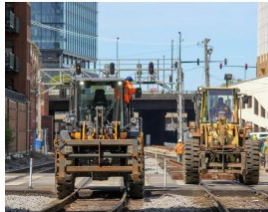
Comments/Notes:

EXTENDED CAB  
2WD  
AUTOMATIC TRANSMISSION

Disposal Details

Sale/Retired Date: Sale Amount: Sale Memo:

Sold To:



## Transit Asset Management Plan

2022-2026 HORIZON



Asset Management Implementation

Table 15. Asset Management Implementation Actions

IMPLEMENTATION ACTION	STATUS AND NEXT STEPS
Develop an Asset Management Policy, Objectives, and Strategy that are aligned with overall strategic objectives, communicated widely and approved by the relevant agency stakeholders, and subject to regular revision.	Metra's first TAM Policy, which is aligned to overall strategic objectives, was signed on August 8, 2018. The policy must still be communicated throughout the agency, which will occur as part of a broader communication campaign (including as part of new-hire onboarding) that will last for the duration of the TAM horizon period, contributing to culture change around implementing asset management.
Complete development of the Asset Management System (AMS) as a comprehensive repository of all asset management-related policies, plans, and procedures; available online internally to all staff.	Metra's TAM Policy and Plan form the initial documents that will compose an AMS. More work is required to further build out the AMS, make it accessible, and promote awareness.
Develop an overarching TAM Plan, compliant with the FTA final ruling, and update the TAM Plan through the horizon period when a significant change occurs.	This document represents the first version of Metra's TAM plan, and was developed with input and buy-in from departments across the agency. It is expected to undergo substantial revision during the current horizon period as Metra continues to improve its asset management processes.
Develop a formal capital project prioritization methodology, defining the criteria for deciding which projects better justify funding than others, including alignment with Metra's strategic goals.	Metra has developed a capital project prioritization methodology for the FY2019-FY2023 capital program. Additional work is required to communicate the new methodology internally and to improve the data that informs the prioritization.
Define an asset condition assessment approach that describes how, when, and what is measured for facilities, rated using a 1 to 5 scale.	Metra is developing a condition assessment methodology for facilities to evaluate one-quarter of Metra's facilities this year. As the process is tested, it is expected to undergo revision.
Define an asset condition assessment approach that describes how, when, and what is measured across all asset classes. Condition rating parameters may differ across asset classes but the scoring scale, e.g., 1 to 5, should remain consistent to enable comparison.	In addition to the condition assessment methodology for facilities, an approach to assigning a reliable condition rating has also been developed for rolling stock assets. Development of assessment methodologies for other asset classes have not yet begun.
Craft and carry out a plan for improving inventory collection, storage, and update methods to support TAM.	Metra has created a plan for increasing the use of Maximo to store asset information in order to inform decision-making.

The implementation actions described above will require the full horizon period of this TAM Plan to achieve and to embed throughout Metra. Carrying out these activities will affect a range of business processes and may require cultural change.

Metra looks forward to building on the first steps taken in developing this TAM Plan, in order to grow a mature asset management system that will enable improvement of Metra's state of good repair and ensure the successful operations of its passenger rail network for many years to come.



Asset Management Implementation

Table 14. 2022-2026 Asset Management Implementation Actions

IMPLEMENTATION ACTION	DESCRIPTION
Prepare for EAM Implementation	<p>The EAM implementation will require creation of business requirements, against which functional requirements of new software can be created and vetted. Business requirements will be based on business processes, which will need to be in place to enable Metra departments to articulate how activities are carried out within and across teams and business functions within the EAM system.</p> <p>To prepare for EAM implementation, Metra will identify and set up required contracts and prepare foundational data elements and processes for all asset classes. As referenced in Table 13, Metra has initiated preparation for the EAM implementation by carrying out a detailed review of asset hierarchies and asset-related data sets, as well as related databases across the agency. Linked to this, asset condition assessment approaches, also referenced in Table 13, are examples of a business process that will be necessary to define prior to EAM software implementation. Metra is working towards completion of Asset Class Condition Assessment Guidelines, which will ultimately inform functional requirements of the EAM implementation.</p> <p>Alongside technical process and data preparation, Metra will work toward preparing its people to actively participate in the documentation of business requirements, and ultimately to adopt the new EAM toolsets. Change management activities will therefore be a core component of EAM implementation preparation.</p>
Implement core asset management functionality for all asset classes	<p>Having prepared for EAM implementation, Metra will proceed to implement new EAM functionality which will support core business processes related to asset management, maintenance and operations. Components of this functionality may include:</p> <ul style="list-style-type: none"><li>Asset Registry: the ability to identify the systems, assets and components which Metra owns and their current status, as well as essential identifying data such as year of installation, make, model and serial number.</li><li>Asset Condition Assessments and Inspections: the ability to make field-based observations of asset condition within a handheld device, where appropriate, and submit data electronically, perhaps incorporating asset tagging and geospatial referencing.</li><li>Work Requests or Corrective Actions (also known as Trouble Tickets): the ability to receive, log and route unplanned requests to the appropriate resource(s) for resolution and close. Requests could be categorized by urgency and importance, based on criteria which would be defined as part of "preparation for EAM implementation".</li><li>Work Planning and Management: the ability to proactively schedule routine and cyclical work activities, as well as work arising from initial responses to work requests.</li><li>Warranty Management: the ability for users at all levels to identify assets, materials, parts and components that have a warranty, so that the most cost-effective decisions can be made when determining interventions.</li><li>Cost Capture: the ability to associate labor, equipment and materials costs to work orders, as well as the ability to assign values to assets as an enabler of lifecycle cost analysis (LCA).</li><li>Reporting: the aggregation of large data sets into easy-to-understand, visual reports, which enable stakeholders at all levels of the agency, as well as external parties, to understand real-time status of critical processes.</li></ul> <p>Given the magnitude of this undertaking, which will entail decommissioning of existing systems as well as transfer of data sets and wide-scale training, Metra will require support of subject matter experts. Prioritization will be needed to define realistic phases over which new functionality can be developed and deployed over time, without disrupting day-to-day operations or increasing risk.</p>

# Improvement Program







547 West Jackson Boulevard  
Chicago, IL 60661

Like us on Facebook: Metra Follow us  
on Twitter: @Metra Visit us at  
[www.metrarail.com](http://www.metrarail.com)

LinkedIn: [www.linkedin.com/in/tina-ignat-1720064](http://www.linkedin.com/in/tina-ignat-1720064)

312.322.1466 | [tignat@metrarr.com](mailto:tignat@metrarr.com)

Contributor | Dave Mason, Manager, Non-Revenue Fleet Management |  
[dmason@metrarr.com](mailto:dmason@metrarr.com)



TINA IGNAT

Let's Talk

# Q&A



Thank you for attending. Please  
complete the evaluation!



**TRANSIT  
ASSET  
MANAGEMENT**



U.S. Department of Transportation  
Federal Transit Administration