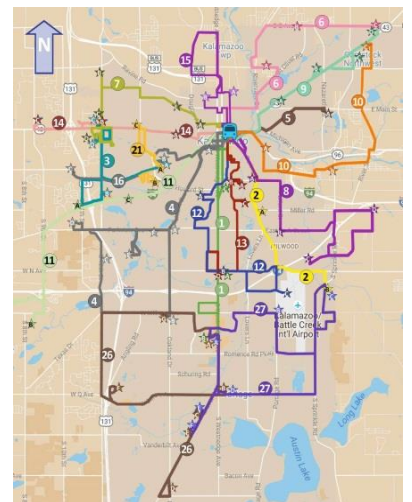




TRANSIT ASSET MANAGEMENT PLAN

Version September 2022



About Metro

The Central County Transportation Authority or “Metro” is granted legal status from the State of Michigan under Public Act 196 of the compiled laws of Michigan to provide service throughout the 132 square miles of the County of Kalamazoo. The population that Metro serves is 209,703 making it a large urban system as recognized by the FTA in 2013. Growth in population and ridership is continuing in the region and creates greater funding needs to allow the system to maintain a State of Good Repair.

Metro provides over 2,700,000 trips a year and accumulates approximately 7,500,000 miles driven. The CCTA has a local millage that supports a portion of the transit system from property taxes, and the State of Michigan Department of Transportation (MDOT) has historically provided funding assistance from fuel tax collected for both a portion of operating and capital expenses at all Michigan transit authorities.

Metro currently provides the Kalamazoo urbanized area with scheduled fixed-route bus service. Metro’s bus fleet operates on routes serving six municipalities within the urbanized area. Metro’s current service hours are between 6 am and 12:15 am Monday through Friday, between 6 am and 10:15 pm on Saturdays and between 9 am and 5:00 pm on Sundays. A second service, *Metro Connect*, provides countywide Americans with Disabilities Act (ADA) and paratransit services during the same hours. Reduced fare programs are available for senior citizens and persons with disabilities. Metro also provides a specialized service program called *Metro Share* that provides vehicles to agencies serving seniors and individuals with disabilities.

Central County Transportation Authority Staff Responsible for TAMP Oversight

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Table of Contents

Section Number	Section Title	Page
	Executive Summary	1
Section 1	Introduction and Applicability	4
Section 2	Asset Inventory	11
Section 3	Asset Condition Assessment	15
Section 4	Decision Support Tools and Management Approach	17
Section 5	Prioritized List of Investments	24
Section 6	Annual Performance Targets and Measures	26
Section 7	Record Keeping and Reporting	28
Section 8	Updates and Continuous Improvement	29
Section 9	Conclusion	30

Attachment Listing

Table Title
Condition Assessment Results - Rolling Stock (2022)
TAM Ratings Facilities (2022)
Facility Assessment Report (June 2021)

Executive Summary

A Transit Asset Management Plan (TAMP) is a business model that uses the condition of assets to guide the optimal prioritization of funding at transit agencies in order to keep transit systems in a State of Good Repair (SGR). The purpose of the TAMP is to comply with the requirements of the Federal Transit Administration Final Rule and to:

- Consider how Metro’s level of service affects and are affected by asset management activities.
- Document Metro’s asset portfolio – including nature, extent, age, and condition of physical assets.
- Define action plans to improve Metro’s asset management.
- Identify lifecycle management needs by asset class - including maintenance, renewal, and replacement.
- Assess the capital and operating budgets required to support safe and reliable service delivery.
- Create a link between investment decisions and specific asset goals.
- Identify resources required to implement this TAMP.

A summary of TAM requirements is included in the following Table A.

**Table A
TAM Rule Summary and References**

Subject	FTA Requirement	Section of TAM Rule
Elements of a National TAM	Transit Asset Management Regulations	625.15
Basic Principles of Transit Asset Management	Transit Asset Management Regulations Prepare for Implementation – Establish Leadership and Accountability	625.17
TAM Plan Requirements	Asset Management Vision and Direction Asset Management Vision and Direction – Role of Asset Management Planning Lifecycle Management	625.25
TAM Plan Horizon and Updates	Asset Management Vision and Direction Asset Management Vision and Direction – Role of Asset Management Planning Cross-Asset Planning and Management – Role of Capital Planning and Programming	625.29
Investment Prioritization	Cross-Asset Planning and Management – Role of Capital Planning and Programming	625.33
Measuring the Condition of Capital Assets	Lifecycle Management– Role of Capital Planning and Programming	625.41
Performance Measures for Capital Assets	Lifecycle Management– Role of Capital Planning and Programming Asset Management Guide Supplement	625.43
Setting Performance Targets	Asset Management Guide Supplement	625.45

Recordkeeping for TAM	Asset Management Vision and Direction – Role of Asset Management Planning	625.53
Reporting	Asset Management Information Systems Transit Agencies and Asset Management Information Systems	625.55

By implementing a TAMP, the benefits include:

- Improved transparency and accountability for safety, maintenance, asset use, and funding investments;
- Optimized capital investment and maintenance decisions;
- Data-driven maintenance decisions; and
- System safety and performance outcomes.

The consequences of an asset not being in a SGR include:

- Safety risks (Accidents per 100,000 revenue miles);
- Decreased system reliability (On-time performance);
- Higher maintenance costs; and/or
- Lower system performance (Missed runs due to breakdown).

Transit Asset Management Plan (TAMP) Policy:

The Central County Transportation Authority (also known as and herein referenced as “Metro”) has developed this TAMP to aide in: (1) Assessment of the current condition of capital assets; (2) determine what condition and performance of its assets should be (if they are not currently in a State of Good Repair); (3) identify the unacceptable risks, including safety risks, in continuing to use an asset that is not in a State of Good Repair; and (4) deciding how to best balance and prioritize reasonably anticipated funds (revenues from all sources) toward improving asset condition and achieving a sufficient level of performance within those means.

Agency Overview:

Metro provides both fixed route bus and shared ride paratransit public transportation services to approximately 2.9 million passengers annually in Kalamazoo County, Michigan. Metro has an extensive inventory of vehicles and capital assets, including the following:

- 46 Fixed route buses;
- 48 Paratransit vehicles;
- 10 Specialized service vans;
- 10 Service Vehicles; and
- An administration/operations/vehicle storage/refueling & maintenance facility; and,
- A historic multi-modal transit center.

The transit system has been in operation since 1967 and was operated until 2016 by the City of Kalamazoo. In October 2016 the transit system was transferred to the Central County Transportation Authority. Metro today operates the public transit system that consists of three main services that include: 1) the fixed-route bus system, 2) the paratransit services called Metro Connect which includes the complementary ADA demand-response service as well as countywide paratransit services available to all residents, and 3) a shared van pool program called Metro Share.

Metro Connect services are contracted to a third-party contractor Apple Bus, Incorporated. Apple Bus has been the contractor of this service for 8 years. As part of the contract, Metro provides all vehicles for the program and Apple Bus is responsible for maintenance of the Metro Connect fleet that includes 48 vehicles.

Local operating conditions of the transit system consist of weekday service from 6 am to 12:15 am, Saturday service from 6 am to 10:15 pm and Sunday service from 9 am to 5:00 pm. The operating climate conditions in the service area consist of cold and snowy winter weather for six months out of the year. Winter weather conditions account for the large-scale use of road salt and liquid “brine”, which historically has caused the bodywork and undercarriage/frame structure of some revenue and service vehicles to severely rust and to no longer be usable in a state of good repair. Additionally, warm weather conditions characterize an average of four to five months out of the year. Warmer weather conditions place a strain on the A/C and climate controls of revenue service vehicles during the varying four seasons experienced in the service area.

Metro has utilized a variety of systems over many years to effectively manage system assets. The TAMP is an important resource for developing Metro’s financial management, Vehicle Maintenance Plan, Facility Maintenance Program and a coordinated funding approach. The TAMP is another tool to assist in assessing the condition of its existing assets and determine its needs over time for keeping the now expanding system in a state of good repair.

Section 1 - Introduction and Applicability

The Central County Transportation Authority (also known as and herein referenced as “Metro”) is committed to operating a public transportation system that offers reliable, accessible and convenient service with safe vehicles and facilities. Transit Asset Management (TAM) is an administrative management process that combines the components of investment (available funding), rehabilitation and replacement actions, and performance measures with the outcome of operating assets in the parameters of a *State of Good Repair* (SGR).

Metro is currently operating as a FTA-defined *Tier II* transit operator in compliance with (49 CFR § 625.45 (b)(1)). Tier II transit providers are those transit agencies that do not operate rail fixed-guideway public transportation systems and have either 100 or fewer vehicles in fixed-route revenue service during peak regular service, or have 100 or fewer vehicles in general demand response service during peak regular service hours.

This TAMP provides a planning horizon on how Metro will assess, monitor, and report the physical condition of assets utilized in the operation of the public transportation system. Metro’s approach to accomplish a SGR includes the strategic and systematic process of operating, maintaining, and improving physical assets, with a focus on both engineering and economic analysis based on quality of information, to identify a structured sequence of maintenance, preservation, repair, rehabilitation, and replacement actions that will achieve and sustain a desired state of good repair over the lifecycle of the assets at a minimum practicable cost. This document shall cover a “horizon period” of time (10/1/2018 to 9/30/2021) beginning with the completion of the initial TAM plan in 2018, continuing with full implementation on October 1, 2018, and ending four years later on September 30, 2021. This TAMP shall be amended during the four-year horizon period when there is a significant change to staff, assets, and/or operations occurring at Metro.

1.1 Accountable Executive:

Per FTA TAM requirements, each transit operator receiving FTA funding shall designate an “Accountable Executive” to implement the TAM Plan. The Authority’s Accountable Executive shall be the Director of Support Services. Metro’s Accountable Executive must balance transit asset management, safety, day-to-day operations, and expansion needs in approving and carrying out the TAM Plan and a public transportation agency safety plan.

The Accountable Executive shall be responsible to ensure the development and implementation of the TAM Plan, in accordance with §625.25 (*Transit Asset Management Plan requirements*). Additionally, the Accountable Executive shall be responsible to ensure the reporting requirements, in accordance with both § 625.53 (*Recordkeeping for Transit Asset Management*) and § 625.55 (*Annual Reporting for Transit Asset Management*) are completed. Furthermore, the Accountable Executive shall approve the annual asset performance targets, TAMP document, and SGR Policy. These required approvals shall be self-certified by the Accountable Executive via the annual FTA Certifications and Assurances forms in TrAMS.

1.2 TAMP Elements:

As a Tier II public transportation provider, the Authority has developed and implemented a TAMP containing the following elements:

- (1) Asset Inventory Portfolio: An inventory of the number and type of capital assets to include: Rolling Stock, Facilities, and Equipment.
- (2) Asset Condition Assessment: A condition assessment of those inventoried assets for which Metro has direct ownership and capital responsibility.
- (3) Decision Support Tools & Management Approach: A description of the analytical processes and decision-support tools that Metro uses to estimate capital investment needs over time, and develop its investment prioritization.
- (4) Investment Prioritization: Metro's project-based prioritization of investments, developed in accordance with §625.33.

1.3 Definitions

Accountable Executive: Means a single, identifiable person who has ultimate responsibility for carrying out the safety management system of a public transportation agency; responsibility for carrying out transit asset management practices; and control or direction over the human and capital resources needed to develop and maintain both the agency's public transportation agency safety plan, in accordance with 49 U.S.C. 5329(d), and the agency's transit asset management plan in accordance with 49 U.S.C. 5326.

Asset Category: Means a grouping of asset classes, including a grouping of equipment, a grouping of rolling stock, a grouping of infrastructure, and a grouping of facilities.

Asset Class: Means a subgroup of capital assets within an asset category. For example, buses, trolleys, and cutaway vans are all asset classes within the rolling stock asset category.

Asset Inventory: Means a register of capital assets and information about those assets.

Capital Asset: Means a unit of rolling stock, a facility, a unit of equipment, or an element of infrastructure used for providing public transportation.

Decision Support Tool: Means an analytic process or methodology: (1) To help prioritize projects to improve and maintain the state of good repair of capital assets within a public transportation system, based on available condition data and objective criteria; or (2) To assess financial needs for asset investments over time.

Direct Recipient: Means an entity that receives Federal financial assistance directly from the Federal Transit Administration.

Equipment: Means an article of nonexpendable, tangible property having a useful life of at least one year.

Exclusive-Use Maintenance Facility: Means a maintenance facility that is not commercial and either owned by a transit provider or used for servicing their vehicles.

Facility: Means a building or structure that is used in providing public transportation.

Full Level of Performance: Means the objective standard established by FTA for determining whether a capital asset is in a state of good repair.

Horizon Period: Means the fixed period of time within which a transit provider will evaluate the performance of its TAM plan. FTA standard horizon period is four years.

Implementation Strategy: Means a transit provider's approach to carrying out TAM practices, including establishing a schedule, accountabilities, tasks, dependencies, and roles and responsibilities.

Infrastructure: Means the underlying framework or structures that support a public transportation system.

Investment Prioritization: Means a transit provider's ranking of capital projects or programs to achieve or maintain a state of good repair. An investment prioritization is based on financial resources from all sources that a transit provider reasonably anticipates will be available over the TAM plan horizon period.

Key Asset Management Activities: Means a list of activities that a transit provider determines are critical to achieving its TAM goals.

Life-Cycle Cost: Means the cost of managing an asset over its whole life.

Participant: Means a Tier II provider that participates in a group TAM plan.

Performance Measure: Means an expression based on a quantifiable indicator of performance or condition that is used to establish targets and to assess progress toward meeting the established targets (e.g., a measure for on-time performance is the percent of trains that arrive on time, and a corresponding quantifiable indicator of performance or condition is an arithmetic difference between scheduled and actual arrival time for each train).

Performance Target: Means a quantifiable level of performance or condition, expressed as a value for the measure, to be achieved within a time period required by the Federal Transit Administration (FTA).

Public Transportation System: Means the entirety of a transit provider's operations, including the services provided through contractors.

Public Transportation Agency Safety Plan: Means a transit provider's documented comprehensive agency safety plan that is required by 49 U.S.C. 5329.

Recipient: Means an entity that receives Federal financial assistance under 49 U.S.C. Chapter 53, either directly from FTA or as a subrecipient.

Rolling Stock: Means a revenue vehicle used in providing public transportation, including vehicles used for carrying passengers on fare-free services.

Service Vehicle: Means a unit of equipment that is used primarily either to support maintenance and repair work for a public transportation system or for delivery of materials, equipment, or tools.

State of Good Repair (SGR): Means the condition in which a capital asset is able to operate at a full level of performance.

Subrecipient: Means an entity that receives Federal transit grant funds indirectly through a State or a direct recipient.

TERM Scale: Means the five (5) category rating system used in the Federal Transit Administration's Transit Economic Requirements Model (TERM) to describe the condition of an asset: 5.0—Excellent, 4.0—Good; 3.0—Adequate, 2.0—Marginal, and 1.0—Poor.

Tier I Provider: Means a recipient that owns, operates, or manages either (1) one hundred and one (101) or more vehicles in revenue service during peak regular service across all fixed route modes or in any one non-fixed route mode, or (2) rail transit.

Tier II Provider: Means a recipient that owns, operates, or manages (1) one hundred (100) or fewer vehicles in revenue service during peak regular service across all non-rail fixed route modes or in any one non-fixed route mode, (2) a subrecipient under the 5311 Rural Area Formula Program, (3) or any American Indian tribe.

Transit Asset Management (TAM): Means the strategic and systematic practice of procuring, operating, inspecting, maintaining, rehabilitating, and replacing transit capital assets to manage their performance, risks, and costs over their life cycles, for the purpose of providing safe, cost-effective, and reliable public transportation.

Transit Asset Management (TAM) Plan: Means a plan that includes an inventory of capital assets, a condition assessment of inventoried assets, a decision support tool, and a prioritization of investments.

Transit Asset Management (TAM) Policy: Means a transit provider's documented commitment to achieving and maintaining a state of good repair for all of its capital assets. The TAM policy defines the transit provider's TAM objectives and defines and assigns roles and responsibilities for meeting those objectives.

Transit Asset Management (TAM) Strategy: Means the approach a transit provider takes to carry out its policy for TAM, including its objectives and performance targets.

Transit Asset Management (TAM) System: Means a strategic and systematic process of operating, maintaining, and improving public transportation capital assets effectively, throughout the life cycles of those assets.

Transit Provider (provider): Means a recipient or subrecipient of Federal financial assistance under 49 U.S.C. Chapter 53 that owns, operates, or manages capital assets used in providing public transportation.

Useful life: Means either the expected life cycle of a capital asset or the acceptable period of use in service determined by FTA.

Useful life benchmark (ULB): Means the expected life cycle or the acceptable period of use in service for a capital asset, as determined by a transit provider, or the default benchmark provided by FTA.

1.4 State of Good Repair (SGR) Standards Policy

A capital asset is in a state of good repair (SGR) when each of the following objective standards is met:

- (1) If the asset is in a condition sufficient for the asset to operate at a full level of performance. An individual capital asset may operate at a full level of performance regardless of whether or not other capital assets within a public transportation system are in a SGR;

- (2) The asset is able to perform its manufactured design function;
- (3) The use of the asset in its current condition does not pose an identified unacceptable safety risk and/or deny accessibility; and
- (4) The assets life-cycle investment needs have been met or recovered, including all scheduled maintenance, rehabilitation and replacements (ULB).

The TAMP is a tool used to assess Metro to predict the impact of its policies and investment justification decisions on the condition of its assets throughout the asset's life cycle, and enhances the ability to maintain a SGR by proactively investing in an asset before the asset's condition deteriorates to an unacceptable level.

Metro shall establish annual TAM goals, which are separate from annual SGR performance goals, based upon tangible criteria related to asset performance. TAM goals include monitoring the following criteria located below in Table 1.1.

**Table 1.1
Metro Annual TAM Goals**

Criteria	Measure	FY 2022 Goal	FY 2021 Actual
Safety Risks	Number of preventable accidents per 100,000 miles by mode (FR)	0.5	.416
Safety Risks	Number of preventable accidents per 100,000 miles by mode (DR)	0.5	0
Safety Risks	Number of facility related accidents to employees or customers	0	0
System Reliability	On-time performance (FR)	82%	81%
System Reliability	On-time performance (DR)	95%	98%
Maintenance Resources	Preventative maintenance completed on-time (FR)	90%	100%
Maintenance Resources	Preventative maintenance completed on-time (DR)	90%	100%

It is the belief of Metro that TAMP implementation and monitoring provides a framework for maintaining a SGR by considering the condition of its assets in relation to the local operating environment. Metro has developed its SGR policies to account for the prevention, preservation, maintenance, inspection, rehabilitation, disposal, and replacement of capital assets. The goal of these policies is to allow Metro to determine and predict the cost to improve asset condition(s) at various stages of the asset life cycle, while balancing prioritization of capital, operating and expansion needs. The two foundational criteria of SGR performance measures are *Useful Life Benchmark (ULB)* and *Condition*.

1.5 Useful Life Benchmark:

The Useful Life Benchmark (ULB) is defined as the expected lifecycle of a capital asset for a particular transit provider’s operating environment, or the acceptable period of use in service for a particular transit provider’s operating environment. ULB criteria are user defined, whereas ULB takes into account, a provider’s unique operating environment (service frequency, weather, geography).

Metro recognized and took into account the local operating environment of its assets within the service area, historical maintenance records, manufacturer guidelines, and the default asset ULB derived from the FTA. In most cases, if an asset exceeds its ULB, then it is a strong indicator that it may not be in a state of good repair. All fleet assets (facilities, equipment, and fixed route rolling stock) were first assessed by using the FTA default ULB metrics and then adjusted for local conditions to identify the Metro Useful Life Benchmark located below in Table 1.2. FTA lifecycle standards are found in FTA Circular 5010.1E, IV-24.

**Table 1.2
Minimum Useful Life Benchmarks for Buses and Vans**

Category	Type	FTA Minimum Useful Life (whichever comes first)		Metro Useful Life Benchmark
		Years	Miles	Years
Heavy-Duty Large Bus	Gillig 35 and 40 foot, diesel and hybrid	12	500,000	14
Heavy-Duty Small Bus	Gillig 30 ft, diesel and Chevrolet Supreme	10	350,000	12
Medium Duty, Medium-Size Bus	Ford E-450s, Eldorado,	7	200,000	10
Revenue Vehicle – Paratransit Van	Ford E-250, Ford Transit,	4	100,000	6 Metro Connect 9 Metro Share

1.6 Condition Assessment:

The physical condition of an asset is rated as an SGR performance measure because it is a direct reflection of its ability to perform its intended function. As part of the TAMP SGR Standards, the Authority requires each vehicular asset and facility meeting FTA TAMP criteria to have a physical condition assessment conducted on an annual basis, where applicable. The condition assessments use a rating scale to rate the current physical appearance, maintenance requirements, safety and accessibility of an asset, “as it currently sits”. See Section 3 for more information on condition assessments.

1.7 SGR Performance Measures & Targets:

SGR performance measures combine the measures of ULB and physical condition to create performance measures from which asset performance targets can be derived on an annual basis. These performance measures are directly related to asset lifecycle (ULB & condition) and maintenance needs. By the time an asset meets or exceeds its assigned ULB, it should have reached its prescribed mileage, maintenance, and condition requirements. Further information related to annual SGR targets can be found in Section 6. FTA-defined SGR performance measures include:

- Rolling Stock: (Age) The SGR performance measure for rolling stock is the percentage of revenue vehicles (fixed route & paratransit) within a particular asset class that have either met or exceeded their ULB.
- Equipment (non-revenue service vehicles): (Age) The SGR performance measure only applies to non-revenue service vehicles. The SGR performance measure for non-revenue, support-service and maintenance vehicles equipment is the percentage of those vehicles that have either met or exceeded their ULB.
- Facilities: (Condition) The SGR performance measure for facilities is the percentage of facilities within an asset class, rated below condition three on the FTA TERM Scale.

Section 2 - Asset Inventory

The following capital asset items that Metro owns, operates, and has a direct capital responsibility, included in the TAMP asset inventory are comprised of: Rolling Stock, Equipment, and Facilities. Table 2.1 below summarizes the asset inventory by class. At the time of this writing, Metro is not a grantee that operates passenger rail or ferry service. Therefore, Metro does not have any associated rail or ferry infrastructure in its asset portfolio.

Metro utilizes internal spreadsheet reports and iMaint (DPSI) fleet management software to maintain inventory, schedule maintenance, and track the condition of assets. Assets are inventoried and tracked by entering into EDEN (Tyler ERP Solution) software. The Metro maintenance department utilizes the iMaint software system to track and schedule fleet maintenance.

**Table 2.1
Asset Inventory Summary**

Asset Category	Total Number	Average Age	Average Mileage
Revenue Vehicles – Fixed Route	46	8 years old	248,2502
Revenue Vehicles – Demand Response	48	5 years old	101,218
Revenue Vehicles - Van Pool	10	7 years old	2,827
Service Vehicles	10	9 years old	40,147
Van Buren County	4	1 year old	37,649
Equipment Over \$50,000	11	N/A	N/A
Facility – Administration and Maintenance	1	7 (major expansion/renovation in 2011)	N/A
Facility – Transportation Center	1	12 (major expansion/renovation in 2006)	N/A

2.1 Rolling Stock

Rolling stock is Metro-owned and operated for revenue service vehicle used in the provision of providing fixed route bus service and the shared van pool service. Rolling stock is Metro-owned and operated through a third-party contractor for revenue service vehicle used in the provision of providing demand response service. Metro does not utilize or operate any third-party rolling stock assets. In addition to the TAMP, data for rolling stock assets is maintained and updated in internal spreadsheets, our iMaint fleet management software by the Facilities and Fleet Manager (or his designee) and our EDEN accounting system by Finance. The following required data fields are maintained for each rolling stock asset (public transit vehicle):

External Vehicle ID	Asset Tag #
Asset Description	Classification
Vehicle Type	Last Maintenance Performed
Vehicle Title Ownership	Expected Useful Life
Mileage	Expected Useful Miles

VIN Number	Useful Life Benchmark (UBL)
Manufacturer	Anticipated Replacement or Rehab year
Year Built/In Service Date/Age	License Plate
Reported Condition Assessment	Gross Vehicle Weight
Purchase Cost	Vehicle Features
Book Value	Purchase Date
Capacity: Seating/Standing/Wheelchair	Purchase Status (New/Used)
Vehicle Length	Purchase Source (Vendor/Dealer)
Current Status of Vehicle	Fuel Type
Storage Location	Make/Model
Disposition Date, Cost, Buyer	Grant Source (State/Federal %)
Grant Number	SGR Status

Metro is responsible for three public transportation service divisions, fixed-route, paratransit, and a shared van pool program. Metro operates the fixed-route service and contracts with a third-party to operate paratransit.

The fixed-route bus inventory consists of 35' and 40' Gillig diesel buses and hybrid buses. The paratransit fleet inventory (which is owned by Metro and operated by a 3rd-Party Contractor Apple Bus Incorporated) consists of Ford E-250 Econoline vans, Ford E-350 Econoline vans, Ford Transit 350 vans, C5500 El Dorado medium duty buses, F550 El Dorado medium duty buses, C5500 Chevrolet Supreme medium duty buses and Ford E-450 cutaways. The Metro Share fleet inventory consists of Ford E-250 and E-350 vans. The service vehicle fleet is included in Attachment 2.1.

2.2 Equipment:

Equipment evaluated per FTA requirements in this TAMP, is all non-revenue service vehicles regardless of value, and any Metro owned equipment with a cost of \$50,000 or less in acquisition value. Equipment includes non-revenue service vehicles that are primarily used to support maintenance and repair work for a public transportation system, supervisory work, or the delivery of materials, equipment, or tools. Metro does not utilize or operate any third-party non-revenue service vehicle equipment assets. All non-revenue service vehicle equipment assets are owned and operated by Metro.

2.3 Equipment: Non-Revenue Service Vehicles

Metro operates nine non-revenue vehicles in its daily operations located in Table 2.2. Two vehicles are primarily used for administrative purposes a Ford Escape and a Pontiac Grand Prix. Metro also operates three passenger vans that are primarily used for operation supervisors and driver exchanges, Ford E-250, and one staff car a Chevy Impala. In addition, Maintenance operates two GMC Sierra trucks, one for parts and one for service, and one Ford F-350 4x4 truck with plow which is used for facility winter maintenance and construction projects.

In addition to the TAMP, data for non-revenue service vehicle equipment assets are updated in EDEN (Tyler ERP solutions) software by Finance, internal spreadsheets and maintained through iMaint Fleet software by Fleet and Facilities Manager (or his designee). The following required data fields are maintained for each non-revenue service vehicle equipment asset:

External Vehicle ID	Asset Tag #
Asset Description	Classification

Vehicle Type	Last Maintenance Performed
Vehicle Title Ownership	Expected Useful Life
Mileage	Expected Useful Miles
VIN Number	Useful Life Benchmark (UBL)
Manufacturer	Anticipated Replacement or Rehab year
Year Built/In Service Date/Age	License Plate
Reported Condition Assessment	Gross Vehicle Weight
Purchase Cost	Vehicle Features
Book Value	Purchase Date
Capacity: Seating/Wheelchair	Purchase Status (New/Used)
Vehicle Length	Purchase Source (Vendor/Dealer)
Current Status of Vehicle	Fuel Type
Storage Location	Make/Model
Disposition Date, Cost, Buyer	Grant Source (State/Federal %)
Grant Number	SGR Status

2.4 Equipment: At or Over \$50,000 in Acquisition Value

Equipment is any Metro-owned asset item (single line item or group) with a cost of over \$50,000 in acquisition value. Equipment includes items that are utilized in the operations of providing public transportation service. Metro does not utilize or operate any third-party equipment assets. All equipment assets are owned and operated by Metro.

In the provision of operating a public transportation system, Metro has equipment with an acquisition value of \$50,000 or more located in Attachment 2.3.

In addition to the TAMP, data for non-vehicle equipment assets is maintained and updated in internal spreadsheets and EDEN (Tyler ERP Solutions) Software by Finance and the Fleet and Facilities Manager or a designee. The following required data fields are maintained for each non-vehicle equipment asset with an acquisition value of \$50,000 or more:

Type	Book Value
Asset Tag	Location
Description	Acquisition Date
Status	Purchase Source
Age	Purchase Price
Condition	Item Serial Number
Rehabilitation Year	Model
Replacement Year	Grant Source Used (State/Federal %)
Vendor	Grant Number
Quantity	Disposal Date, Cost & Buyer
Units	SGR Status

2.5 Facilities

Facilities are any structure used in providing public transportation where Metro has a direct capital responsibility. Facilities utilized and owned or operated by Metro include the Administration and Maintenance Building and the Kalamazoo Transportation Center (KTC). These buildings are owned by the City of Kalamazoo and provided to Metro through a long-term lease of 25-years through 2051.

Metro currently utilizes one location for operations, administration, maintenance, storage, and refueling. Metro has a separate adjacent transit center located in downtown Kalamazoo, Michigan. Please see Attachment 2.4 for listing.

In addition to the TAMP, data for facility assets is maintained and updated in internal spreadsheets and EDEN (Tyler ERP Solutions) software and updated on an annual basis by Finance and the Fleet and Facilities Manager or a designee. The following required data fields are maintained for each facility asset:

Asset Ownership	Build Cost
Asset Description/Name	Purchase Date
Physical Location/Address	In-Service Date
Asset Tag #	Purchase Status (New/Used)
External ID	Expected Useful Life
Classification	Land Owner
Asset Type	Building Owner
Status	Facility Size
Age/Year Built	Section of Larger Facility
Reported Condition	Percent Operational
Last Maintenance	Number of Structures
Book Value	Number of Floors
Rehabilitation Year	Number of Elevators or Escalator
Replacement Year	Number of Parking Spaces(Public/Private/ADA)
Vendor/Builder	Line Number
FTA Facility Classification	Features & Amenities (ADA)
Interior Size (Sq. Ft.)	Disposition Date, Cost, & Buyer
Lot Size	Grant Number
Grant Source (State/Federal %)	SGR Status

Section 3 - Asset Condition Assessment

Metro assesses the condition of its assets on an annual basis by utilizing the FTA TERM (Transit Economic Requirements Model) condition rating assessment scale located below in Table 3.1. This rating scale assigned a numerical value or rank based on the physical condition(s) presented by each individual asset throughout its life cycle. The rating scale is based on numbers 1 to 5, with five being new and one being poor. Assets with a rating of 2.5 or higher are considered to be in a SGR.

**Table 3.1
FTA TERM Rating Scale**

Score	Rating	Description
5.0	New/Excellent	New asset, no visible defects
4.0	Good	Some slightly defective/deteriorated component(s)
3.0	Adequate	Some moderately defective/deteriorated component(s)
2.0	Marginal	Increasing number of moderately defective/deteriorated component(s) and maintenance needs
1.0	Poor	In need of immediate repair or replacements; item is a safety hazard and may have critically damaged components

The inspection process and documentation forms utilized to assess facility and vehicle assets are detailed in the following TAMP companion documents:

- Metro Vehicle Maintenance Plan
 - SGR Fleet Inspection Procedures & Inspection Assessment Standards
- Metro Facility Maintenance Program
 - SGR Facility Inspection Procedures & Inspection Assessment Standards

3.1 Rolling Stock

The TAMP Rolling Stock condition assessment consists of assigning a condition rating to all rolling stock assets for which Metro owns and has a direct capital responsibility. A condition assessment ranking is not conducted in the TAMP for rolling stock assets for which Metro does not own the rolling stock asset, the rolling stock asset is owned by a 3rd party, and/or where Metro does not have a direct capital responsibility for the rolling stock asset. However, for the purposes of NTD reporting (Inventory & Condition Submittal), all Metro owned rolling stock assets are assigned an asset condition rating. At the time of this writing, the Authority owns and operates all rolling stock including revenue vehicles.

The fleet condition assessment for all service vehicles can be found on Attachment 3.1.

3.2 Equipment: Non-Revenue Service Vehicles

The TAMP Equipment condition assessment consists of assigning a TERM physical condition rating to both all equipment that is either a non-revenue service vehicle or a non-vehicle equipment asset with an acquisition value of \$50,000 or more (individual line item or group). Furthermore, the equipment condition assessment contains only assets for which the Authority owns and has a direct capital responsibility.

A condition assessment ranking is not conducted in the TAMP for equipment assets for which Metro does not own, is owned by a 3rd party, the equipment has an acquisition cost below \$50,000 (individual line item or group), or where Metro does not have a direct capital responsibility.

However, for the purposes of NTD reporting (Inventory & Condition Submittal), all Authority owned equipment (with direct capital responsibility) that is a non-revenue service vehicle is only reported. At the time of this writing, Metro owns and operates all equipment that is either a non-revenue service vehicle or a non-vehicle equipment asset with an acquisition cost at or above \$50,000.

The non-revenue service vehicle equipment condition assessment can be found on Attachment 3.2.

3.3 Equipment: Over \$50,000 in Acquisition Value (Non-Vehicle)

The equipment over \$50,000 condition assessment can be found on Attachment 3.3.

3.4 Facilities

The TAM Plan Facilities condition assessment consists of assigning a physical condition rating, based on the FTA TERM Scale, to all facility assets for which Metro owns and or leases and has a direct capital responsibility. A condition assessment ranking is not conducted in the TAM Plan for a facility that Metro does not have a direct capital responsibility for the facility asset.

For the purposes of NTD reporting (Inventory & Condition Submittal), all Metro owned and Metro facility assets with a direct capital responsibility are included in the Facility Condition Rating Assessment (see Attachment 3.4) and are assigned a facility asset condition rating.

Each condition assessment inspection will take place on April 30th every year. The inspection of major facility components and subcomponents will be conducted by the Deputy Director of Fleet and Facilities, with results and data reported to the Director of Support Services. Facility equipment assets that have an acquisition value of \$50,000 or greater will also be included in the facility condition assessment inspection.

The process developed to assess the condition of the facilities where Metro has direct capital responsibility is as follows:

1. Define the facility components and sub-components;
2. Establish the condition assessment language based on the FTA TERM Scale;
3. Conduct the assessment on an annual basis, to be conducted in April of each year;
4. Calculate the overall condition by using the *Median Value Method*; and,
5. Document and report the assessed condition.

In addition, the Metro facility inspector(s) will gather and review the following elements before conducting a condition assessment inspection:

- Agency inspection & maintenance procedures/schedules found in the Fleet and Facility Maintenance Plans;
- Inspection schedule/alignment with reporting schedule;
- Data needs;
- Warranty status & age of components;
- Third-party inspection records; and,
- Previous inspection records.

Section 4 – Decision Support Tools and Management Approach

Sections 4 and 5 of this document are interrelated and detail the process and tools used to manage the lifecycle planning of capital public transportation assets. Metro staff utilizes a variety of management practices, policies, and technology to manage, maintain, and plan throughout the life cycle of an asset.

4.1 Decision Support Tools:

The following analytical process is in place to support investment decision-making, including project selection and prioritization located below in Table 4.1. The decision support tools that Metro utilizes for asset lifecycle management and investment planning, include both electronic software and written policy manuals. Each written policy manual and software program complements each other as they contribute to asset management throughout the lifecycle, from planning and procurement to disposal. An explanation of the decision support tools can be found in Table 4.2.

**Table 4.1
TAMP Decision Support and Capital Asset Investment Planning Process**

Activity #	Process Activity Description
1	At least quarterly capital meetings involving operation, maintenance and administrative staff. The purpose to evaluate status of implementing capital plans and reviewing on-going and future capital needs.
2	Development and upkeep of organizational policies and procedures including Vehicle Maintenance Plan, Facility Maintenance Program, Budget , Capital Plan, Procurement Policy and TAMP
3	Data collection, analysis and review
4	Update, record and report data to include TrAMS, NTD, IMaint, Eden, TAMP
5	Development and approval of Capital Plan
6	Placement on Transportation Improvement Program
7	Inclusion in MDOT and FTA grants
8	Procurement Process
9	Capital project implementation, monitoring and reporting
10	Capital Plan and backlog of unmet needs

**Table 4.2
TAMP Decision Support Tools**

Document, Software, Process Tool	Description
Metro Facility Maintenance Program	Program details policies and procedures related to Metro facilities and equipment. It includes preventative maintenance standards for all facilities and related equipment. It also includes checklists.
Metro Vehicle Maintenance Program	Plan details ongoing vehicle maintenance procedures including preventative maintenance, inspection checklists, timeframes, procurement, reporting, inventory and responsibilities.

CCTA Purchasing Manual	The manual lists all purchasing policies and procedures, contract/bidding requirements, and asset disposal requirements
Metro TAM Plan	The TAMP is a document containing information to support a business model that uses the condition of capital assets to guide the optimal prioritization of funding to keep the transit system in a State of Good Repair. The plan contains the following elements: asset inventory, asset condition assessment, decision support tools and management approach, investment prioritization list of projects and programs and NTD reporting.
iMaint Software	The software allows staff to track, schedule and record all fleet and facility related maintenance activities in a single platform. This program allows for reporting, inventory of parts, vendor management, work orders, and personnel activity tracking
Eden Software	The software provides an inventory tracking of all Metro assets.
Metro Capital Plan	The Capital Plan provides for two-year identification of funding for capital projects. The Capital Plan correlates with the TIP, MDOT Grants and FTA Grants.
Kalamazoo Area Transportation Study (KATS) Transportation Improvement Program (TIP)	KATS is the Metropolitan Planning Organization for the Kalamazoo region. The TIP is a list of upcoming transportation projects covering a period of four years. The TIP includes capital and operating transportation projects. The TIP contains all regionally significant projects receiving FHWA and FTA funds.
Michigan Department of Transportation (MDOT) Public Transit Management System (PTMS)	PTMS is a software program that allows Metro to report to MDOT on a variety of financial, operating, capital and grant related items. This provides MDOT information for compliance and data analysis purposes. PTMS captures information related to fleet assets.
Transit Economic Recovery Model Lite (TERM-Lite)	FTA-funded analysis tool to assist with SGR backlog, annual investment, funding variations, and investment priorities.

4.2 Management Approach to Asset Management:

The primary management approach utilized to maintain an SGR is risk mitigation. This management philosophy applies risk mitigation strategies (policies and procedures) throughout the assets life cycle, both from a maintenance perspective (breakdowns), a safety perspective (accidents) and accessibility perspective (ADA requirements).

Throughout each asset’s life cycle, Metro shall monitor all assets for unsafe and inaccessible conditions. However, identifying an opportunity to improve the safety of an asset does not necessarily indicate an unsafe condition. When Metro encounters and identifies an unacceptable safety risk associated with an asset, the asset shall be ranked with higher investment prioritization, to the extent practicable. Metro’s risk management philosophy is the proactive approach of identifying future projects and ranking preventative projects with a better return on investment higher in the investment prioritization risk. Policies and procedures to mitigate risk are included in the documents presented in Tables 4.3.a to 4.3.b.

Performing an analysis of the asset life cycle at the individual asset level is just one management approach Metro uses to maintain a SGR. This analysis follows the asset from the time it is purchased, placed in operation, maintained, and ultimately disposed. The analysis is a snap shot of each asset’s current status. The asset lifecycle stages consist of the following strategies:

- Table 4.3.a: Acquisition Strategy (Design/Procurement)
- Table 4.3.b: Maintenance Strategy (Operate/Maintain/Monitor)
- Table 4.3.c: Overhaul & Rehabilitation Strategy (Rebuild)
- Table 4.3.d: Replacement Strategy (Disposal)
- Table 4.3.e: Risk Management Strategy (Mitigation)

**Table 4.3.a
Acquisition Strategy**

Acquisition: Determine when to initiate acquisition activities for assets. Describe Metro’s long-term replacement strategy, and how long-term renewal and improvement activities are assessed based on the assets lifecycle. As applicable, describe any planned changes or improvements to these processes, describing the strategies.		
Asset Category	Asset Class	Acquisition Strategy
Rolling Stock	Bus	Replace buses as the buses reach the minimal ULB of 500,000 miles or 12 years to approximately 600,000 miles and 14 years. Continue to purchase diesel buses. Projection for replacement starts the day new vehicles are added as an asset.
Rolling Stock	Metro Connect	Replace vans and medium duty buses as they reach minimum ULB benchmark. Projection for replacement starts the day new vehicles are added as an asset.
Rolling Stock	Metro Share	Due to lower mileage use on an annual basis replacement of vans will extend beyond the minimum useful life of 4 years and 100,000. Plan for replacement is more in the 8 to 10 year range. Projection for replacement starts the day new vehicles are added as an asset.
Equipment	Service Vehicles	Due to lower mileage use on an annual basis replacement of vans will extend beyond the minimum useful life of 4 years and 100,000. Plan for replacement is more in the 10 to 12 year range. Projection for replacement starts the day new vehicles are added as an asset.
Facilities		In the event a facility needs to be updated or expanded, the project is scheduled in the Capital Plan and placed out to bid using the proper procurement method for both design and construction components. Facilities are maintained on an annual basis to extend useful life.

**Table 4.3.b
Maintenance Strategy**

Maintenance: List regularly planned maintenance activities. As applicable, describe any planned changes or improvements to these processes.			
Asset Category	Asset Class	Maintenance Activity	Frequency
Rolling Stock	Bus	Clean and wash Pre-trip inspection “A” PM Service “D” PM Service Non Hybrid Transmission Service Hybrid Transmission Service Minor Farebox Inspection Major Farebox Inspection Air Conditioning & Heat Inspections Tire Inspection Fire Suppression System Inspection (buses with systems) Fire Extinguisher Inspection (3 rd Party) SGR Inspection	Daily Daily 6,000 Miles Annual 75,000 miles 100,000 miles Annual Triennial Annual Annual Semi-Annual Annual Annual
Rolling Stock	Metro Connect	Clean and wash Pre-trip inspection PM Service Fire Extinguisher Inspection (3 rd Party) Quarterly Inspection (Metro Staff) Tire Inspection SGR Inspection	As Needed Daily 5,000 Miles Annual Quarterly Monthly Annual
Rolling Stock	Metro Share	Clean and wash Pre-trip inspection PM Service Fire Extinguisher Inspection (3 rd Party) Tire Inspection SGR Inspection	As Needed Daily 90 Days Annual Monthly Annual
Equipment	Service Vehicles	Clean and wash PM Service Fire Extinguisher Inspection (3 rd Party) Tire Inspection SGR Inspection	As Needed 90 Days Annual Monthly Annual
Facilities	Administration & Maintenance and KTC	Facility and Equipment Inspection Mission Critical Facility and Equipment Inspection Mission Critical Facility and Equipment Inspection Mission Critical Facility and Equipment Inspection Mission Critical Facility and Equipment Inspection Mission Critical SGR Inspection	Daily Monthly Quarterly Bi-Annual Annual Annual

Table 4.3.c

Overhaul and Rehabilitation Strategy

Overhaul and Rehabilitation: Determine how and when assets get overhauled or replaced. Describe what activities take place during an overhaul. As applicable, describe any planned changes or improvements to these processes.		
Asset Category	Asset Class	Acquisition Strategy
Rolling Stock	Bus	It is the policy of Metro to repair damaged or non-functional assets and components only on an as needed basis. Metro does not overhaul or rehabilitate its fleet assets. Assets are replaced once the following conditions are met: 1) The assets ULB is met; or 2) an asset is considered a total loss by covering insurance. In either case Metro will work to seek appropriate approvals from FTA and MDOT.
Rolling Stock	Metro Connect	
Rolling Stock	Metro Share	
Equipment	Service Vehicles	
Facilities		It is the policy of Metro to extend the useful life of facilities through routine maintenance and major renovations, as needed. Both facilities have recently seen major overhauls in approximately the last 10-years. There are no plans, short-term or long-term, to replace Metro facilities.

**Table 4.3.d
Disposal Strategy**

Disposal: Describe strategy for disposing of assets that are being replaced. Describe the approval process, including procedures for physically removing the asset from the property. As applicable, describe any planned changes or improvements to these processes.		
Asset Category	Asset Class	Acquisition Strategy
Rolling Stock	Bus	Buses, once ULB is met or exceeded are disposed by using the following method: 1) Asset documents are reviewed for remaining book value. If vehicle has \$5,000 or more remaining value, FTA must be reimbursed; 2) Approval received from FTA and as needed MDOT to initiate disposal; 3) Vehicles are placed out to bid, sold directly, scrapped or auctioned. Appropriate advertisements and notices are utilized; 4) Auctioned vehicles are sold to the highest bidder; 5) Deputy Director of Fleet and Facilities is responsible for all appropriate documentation and coordinates with grants/finance staff; 6) Asset is written off the books by finance staff and removed from TAMP tracking; 7) Buyer receives title and is responsible for removing vehicle from the property.
Rolling Stock	Metro Connect	Same process as for Buses described above.
Rolling Stock	Metro Share	Same process as for Buses described above.
Equipment	Service Vehicles	Same process as for Buses described above.
Facilities		Metro will not be disposing of any property for a long time. If facilities were to be disposed the following method would be used: 1) Approval from CCTA Board, FTA, MDOT and City of Kalamazoo to initiate process. 2) Facility is independently inspected and appraised. 3) Utilizing a real-estate professional the facility is placed for sale. 4) Facility is sold to the highest bidder and sale is approved by CCTA Board, FTA, MDOT and City of Kalamazoo. 5) Metro removes all equipment and personal property and vacates. 6) The asset is written off the financial books by Finance staff and removed from TAMP tracking. 7) New property owner receives title and takes ownership.

**Table 4.3.e
Risk Management Strategy**

Risk Management: Identify any risks to Metro assets or the organization as a whole, and describe the mitigation strategies for each risk.	
Risk	Mitigation Strategy
Loss of significant amount of federal/state/local funding	Utilize available reserve funds. Change mix of federal funds used for operating versus capital. Extend useful life of vehicles that do not impose a safety risk. Cut back on service and maintenance activities in order to balance budget. Seek alternative sources of funding like competitive grants or business partnerships.
Parts supply chain disruption	Diversify parts suppliers. Partner with regional transit agencies and OEMs to retain parts supply chain.
Catastrophic loss of assets due to natural or man-made disasters and hazards	Establish Catastrophic Loss Plan. Partner with other regional transit agencies to utilize reserve or disposed vehicles. Partner with regional organizations for use of back-up facilities.

Section 5 – Prioritized List of Investments

5.1 Investment Prioritization Process:

Metro shall perform an investment prioritization analysis annually as part of two year Budget and Capital Plan development process, in order to:

- (1) Determine what capital investments are needed, how much (and when), in order to maintain SGR; and
- (2) Rate and rank SGR programs and projects in order of implementation priority.

The investment prioritization analysis aids Metro in making more informed investment decisions to improve SGR of our capital assets, and define when an asset needs overhaul or replacement. The investment prioritization list contains the work plan(s) and schedule(s) of the proposed projects and programs that the Metro estimates would achieve its SGR goals, and a ranking of projects and programs based on implementation priority over the TAMP horizon period of four (4) years.

Metro will rank selected projects and programs to improve or manage the SGR of capital assets for which Metro has direct capital responsibility. The ranking criteria of projects and programs shall be consistent throughout the TAMP. Priority consideration will be given to local projects and programs that: (1) both improve SGR and correct an identified unacceptable safety risk; and (2) take into consideration ADA requirements (49 CFR Part 37) concerning maintenance of accessible features and the alteration of transit facilities. Furthermore, when developing an investment prioritization list, Metro shall take into consideration its estimation of funding levels from all sources that it reasonably expects will be available in each fiscal year during the TAMP horizon period.

The ranking of investment prioritization programs and projects will be expressed as: *High Priority*, *Medium Priority*, or *Low Priority*. Each investment prioritization program or project ranked shall contain a year and/or date in which Metro intends to carry out the program or project. This output process is a list of ranked projects and programs at the asset class level that identify assets from the asset inventory. Metro’s list of prioritized investments can be found in below in Table 5.1.

**Table 5.1
TAMP Investment Prioritization List
for Period October 1, 2022 through September 30, 2025**

Project Fiscal Year	Asset Category/Class	Project Description	Priority	Cost
2022	Rolling Stock / Bus	Line-Haul Bus Replacement (4 Buses)	High	\$2,146,668
2022	Rolling Stock / Metro Connect Medium Duty Bus	Medium Duty Bus Replacement (4 Buses)	High	\$430,116
2022	Rolling Stock / Metro Connect Vans	Van Replacement (12 Vans)	High	\$628,920
2022	Rolling Stock / Van Buren County Medium Duty Bus	Medium Duty Expansion (1 Medium Duty Bus)	High	\$107,529

2022	Rolling Stock / Service Vehicle	Replace service vehicle	Medium	\$50,000
2022	Facility	Upkeep to Transportation Center and Administration and Maintenance Facility	Medium	\$860,000
2023	Rolling Stock / Bus	Line-Haul Bus Replacement (3 Buses)	High	\$1,735,686
2023	Rolling Stock / Van Buren County Medium Duty Bus	Medium Duty Expansion (2 Medium Duty Busses)	High	\$240,000
2023	Rolling Stock / Metro Connect Vans	Van Replacement (2 Vans)	High	\$200,000
2023	Facility	Upkeep to Transportation Center and Administration and Maintenance Facility	Medium	\$540,000
2024	Rolling Stock / Bus	Line-Haul Bus Replacement (4 Buses)	High	\$2,314,248
2024	Rolling Stock / Metro Connect Vans	Van Replacement (10 Vans)	High	\$750,000
2024	Facility	Upkeep to Transportation Center and Administration and Maintenance Facility	Medium	\$1,150,000
2024	Facility	Replace Roof at Administration and Maintenance	High	\$1,500,000

Section 6 – Annual Performance Targets and Measures

This section lists the process, data sources, and methodology used in the development of the FTA requirement for Metro to set annual SGR performance targets. As introduced in Section 1, a State of Good Repair (SGR) is a threshold that identifies the desired performance condition. Specifically, an asset is in SGR when: The condition of a capital asset is able to operate at a full level of performance. This means the asset:

1. Is able to perform its designed function;
2. Does not pose a known and/or unacceptable safety risk (Condition); and
3. Its lifecycle investments have been met or recovered (ULB).

The FTA has enlisted the use of the following asset performance measure criteria for use in the development of the Authority’s SGR performance targets located in Table 6.1.

**Table 6.1
FTA TAM Asset Category Performance Measures**

Asset Class	Performance Measure	Definition
Rolling Stock	Age	The percentage of vehicles within a particular asset class that have either met or exceeded their ULB
Equipment	Age	The percentage of non-revenue vehicles or maintenance equipment that have either met or exceeded their ULB
Facilities	Condition	The percent of facilities with a condition rating below 3.0 on the FTA’s TERM Scale

Metro shall establish one or more performance target(s) for each applicable asset class performance measure on an annual basis for the next fiscal year. The timeline for establishing SGR performance targets & measures are as follows:

Before the effective date of October 1, 2018, Metro set performance targets for the next fiscal year for each asset class included in this TAM Plan. These performance targets shall be established no later than the date of the September meeting of the CCTA and KCTA Board of Directors.

SGR performance targets are based on realistic expectations derived from both the most recent available data (ULB/condition), FTA performance measure criteria, and the financial resources from all sources that Metro reasonably expects will be available during the TAM Plan horizon period for capital planning purposes. SGR performance targets for the current fiscal year shall be monitored on a quarterly basis. The Accountable Executive is required to approve each annual performance target submission to FTA/NTD.

Metro’s annual SGR performance targets for Fiscal Year 2018 can be found below in Table 6.2.

**Table 6.2
Metro Performance Targets and Measures**

Asset Category	Asset Class	SGR Target Description	2022 SGR Target
Revenue Vehicles	Fixed Route Buses	ULB Benchmark 14 years	10% exceed ULB
Revenue Vehicles	Medium Duty Buses (Metro Connect)	ULB Benchmark 10 years	12% exceed ULB
Revenue Vehicles	Medium Duty Buses	ULB Benchmark 12 years	10% exceed ULB
Revenue Vehicles	Vans (Metro Connect)	ULB Benchmark 6 years	10% exceed ULB
Revenue Vehicles	Vans (Metro Share)	ULB Benchmark 9 years	10% exceed ULB
Service Vehicles		ULB Benchmark 10 years	10% exceed ULB
Facilities			15% 2 or below on FTA TERM Scale

Section 7 – Recordkeeping and Reporting

Metro shall maintain all supporting TAM Plan records and documents. Metro shall make TAMP records available to Federal (FTA), State (MDOT) and MPO's entities that provide(s) funding to Metro and to aid in the planning process. Metro shall report, on an annual basis, to the FTA's National Transit Database (NTD):

- Inventory of assets;
- SGR performance targets for the next fiscal year;
- Condition inspection assessments and performance measures of capital assets; and
- An annual narrative shall also be included and reported to NTD that provides a description of any change in the condition of the Metro transit system or operations from the previous year, and describe the progress made during the reporting year to meet the performance targets set in the previous reporting year.

Per NTD requirements, because Metro's fiscal year ends on September 30, 2018, annual TAM data reporting to NTD shall be completed by the last business day of January of each calendar year.

Section 8 – Updates and Continuous Improvements

The TAM Plan can be considered a “living document” that shall be reviewed on at least a quarterly basis, updated, and incorporated into Metro’s capital and budget planning, and reporting processes. Beginning in 2018, TAMP data shall serve as a “baseline” measure of asset performance management. As more data is collected, additional monitoring categories and goals will be included to support condition and reliability-based decision-making.

This document shall cover a “horizon period” of time (10/1/2021 to 9/30/2024) beginning with the completion of the initial TAM plan in 2018 and ending four years later on September 30, 2021. This TAMP shall be amended, as needed, during the four-year horizon period when there is a significant change to staff, assets, funding, maintenance plans, operations and/or FTA requirements.

Alternative fuel vehicles, most likely electric power, will eventually be part of this document. Although there are currently no electric fuel vehicles in the fleet, a FTA competitive grant application was submitted in partnership with the Michigan Department of Transportation in May of 2022. Even if that application is not approved, Metro recognizes that electric powered vehicles are likely to be included as part of the vehicle fleet.

Section 9 – Conclusion

Metro by implementing this *Transit Asset Management Program* (TAMP) will allow the transportation system to meet its mission and offer safe, efficient, reliable, and accessible public transportation options to the general public of Kalamazoo County. In addition, Metro believes that by implementing this TAMP, the following *State of Good Repair* (SGR) indicators will be either maintained or improved upon:

- Limit safety risks;
- Justify investments;
- Increase system reliability & accessibility;
- Lower maintenance costs; and/or
- Increase system performance.