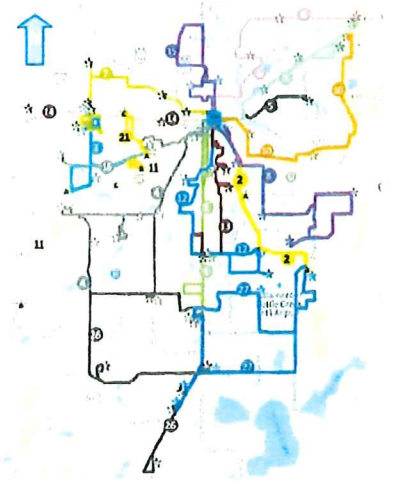


# TRANSIT ASSET MANAGEMENT PLAN

Adopted September 24, 2018

Effective October 1, 2018



## **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 8 am and 6:15 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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## 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**

<b>Subject</b>	<b>FTA Requirement</b>	<b>Section of TAM Rule</b>
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 aid 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:

- 40 Fixed route buses;
- 48 Paratransit vehicles;
- 11 Specialized service vans;
- 9 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 8 am to 6:15 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 Executive Director. 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. For FY 18-19, Metro shall use this time period to gather data in order to establish baseline measures. TAM goals include monitoring the following criteria located below in Table 1.1.

**Table 1.1  
Metro Annual TAM Goals**

<b>Criteria</b>	<b>Measure</b>	<b>FY 2018 Goal</b>	<b>FY 2018 Actual</b>
Safety Risks	Number of accidents per 100,000 miles by mode (FR)	0.5	TBD
Safety Risks	Number of accidents per 100,000 miles by mode (DR)	0.5	TBD
Safety Risks	Number of facility related accidents to employees or customers	0	TBD
System Reliability	On-time performance (FR)	82%	TBD
System Reliability	On-time performance (DR)	95%	TBD
Maintenance Resources	Preventative maintenance completed on-time (FR)	90%	TBD
Maintenance Resources	Preventative maintenance completed on-time (DR)	90%	TBD
System Performance	Number of missed runs per month due to major breakdown (FR)	1	TBD
System Performance	Number of missed runs per month due to major breakdown (DR))	1	TBD

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**

<b>Asset Category</b>	<b>Total Number</b>	<b>Average Age</b>	<b>Average Mileage</b>	<b>Total Value</b>
Revenue Vehicles – Fixed Route	40	8 years old	357,937	\$18,200,000
Revenue Vehicles – Demand Response	48	5 years old	154,612	\$2,880,000
Revenue Vehicles - Van Pool	11	7 years old	37,883	\$660,000
Service Vehicles	9	9 years old	47,684	\$360,000
Equipment Over \$50,000	11	N/A	N/A	\$3,601,450
Facility – Administration and Maintenance	1	7 (major expansion/renovation in 2011)	N/A	\$13,000,000
Facility – Transportation Center	1	12 (major expansion/renovation in 2006)	N/A	\$10,000,000

### **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 3<sup>rd</sup>-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**

<b>Score</b>	<b>Rating</b>	<b>Description</b>
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 3<sup>rd</sup> 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 3<sup>rd</sup> 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 30<sup>th</sup> every year. The inspection of major facility components and subcomponents will be conducted by the Fleet and Facility Manager, with results and data reported to the Deputy 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**

<b>Activity #</b>	<b>Process Activity Description</b>
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**

<b>Document, Software, Process Tool</b>	<b>Description</b>
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**

<b>Acquisition:</b> 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.		
<b>Asset Category</b>	<b>Asset Class</b>	<b>Acquisition Strategy</b>
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**

<b>Maintenance:</b> List regularly planned maintenance activities. As applicable, describe any planned changes or improvements to these processes.			
<b>Asset Category</b>	<b>Asset Class</b>	<b>Maintenance Activity</b>	<b>Frequency</b>
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 <sup>rd</sup> 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 <sup>rd</sup> 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 <sup>rd</sup> 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 <sup>rd</sup> 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**

<b>Overhaul and Rehabilitation:</b> 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.		
<b>Asset Category</b>	<b>Asset Class</b>	<b>Acquisition Strategy</b>
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) Fleet and Facility Manager 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**

<b>Risk Management:</b> Identify any risks to Metro assets or the organization as a whole, and describe the mitigation strategies for each risk.	
<b>Risk</b>	<b>Mitigation Strategy</b>
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, 2018 through September 30, 2021**

<b>Project Fiscal Year</b>	<b>Asset Category/Class</b>	<b>Project Description</b>	<b>Priority</b>	<b>Cost</b>
2018	Rolling Stock/Bus	Line-Haul Bus Replacement (2 Buses)	High	\$950,000
2018	Rolling Stock/Metro Connect Vans	Van Replacement (5 vans)	High	\$318,500
2018	Rolling Stock/Metro Connect Medium Duty Bus	Medium Duty Bus Replacement (8 Buses)	High	\$889,000
2018	Service Vehicle	Replace service vehicle	Medium	\$50,000
2018	Facility	Upkeep to Transportation Center and Administration and Maintenance Facility	Medium	\$346,000
2019	Rolling Stock/Bus	Line-Haul Bus Replacement (3 Buses)	High	\$1,400,000

2019	Rolling Stock/Metro Connect Vans	Van Replacement (7 vans)	High	\$420,000
2019	Rolling Stock/Metro Share Vans	Van Replacement (3 vans)	High	\$180,000
2019	Rolling Stock/Metro Connect Medium Duty Bus	Medium Duty Bus Replacement (1 Bus)	High	\$110,000
2019	Facility	Upkeep to Transportation Center and Administration and Maintenance Facility	Medium	\$650,000
2019	Service Vehicle	Replace service vehicle	Medium	\$50,000
2019	Service Vehicle	Replace maintenance facility floor scrubber	Low	\$55,000
2020	Rolling Stock/Bus	Line-Haul Bus Replacement (4 Buses)	High	\$1,900,000
2020	Rolling Stock/Metro Connect Vans	Van Replacement (5 vans)	High	\$300,000
2020	Rolling Stock/Metro Share Vans	Van Replacement (3 vans)	High	\$180,000
2020	Rolling Stock/Metro Connect Medium Duty Bus	Medium Duty Bus Replacement (1 Bus)	High	\$115,000
2020	Facility	Upkeep to Transportation Center and Administration and Maintenance Facility	Medium	\$400,000
2021	Rolling Stock/Bus	Line-Haul Bus Replacement (4 Buses)	High	\$1,900,000
2021	Rolling Stock/Metro Connect Vans	Van Replacement (5 vans)	High	\$300,000
2021	Rolling Stock/Metro Connect Medium Duty Bus	Medium Duty Bus Replacement (1 Bus)	High	\$115,000
2021	Facility	Upkeep to Transportation Center and Administration and Maintenance Facility	Medium	\$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**

<b>Asset Class</b>	<b>Performance Measure</b>	<b>Definition</b>
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 shall 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**

<b>Asset Category</b>	<b>Asset Class</b>	<b>SGR Target Description</b>	<b>2018 SGR Target</b>
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 (10/1/2018 to 9/30/2021) 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.

## **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.

# Attachment 2.1 Service Fleet Inventory

Asset #	Description	Asset Class	Asset Type	Federal Grant Number	Acquire Date	Original Cost	% of FTA Funding	\$ of FTA Funding	Useful Life	Accumulated Depreciation	FTA Depreciation Share	Location
115795	#9-07 2008 FORD ECONOLINE (COMM SERV)	veh-auto	vehicles	MI-90-0495	12/30/2007	27,398.00	80%	21,918.40	4	27,398.00	21,918.40	METRO
115794	#9-08 2008 FORD ECONOLINE (COMM SERV)	veh-auto	vehicles	MI-90-0495	12/30/2007	27,398.00	80%	21,918.40	4	27,398.00	21,918.40	METRO
117054	#9-01 FORD E-250 LIFT EQUIPPED	veh-auto	vehicles	MI-95-0009	12/31/2009	29,775.00	80%	23,820.00	4	29,775.00	23,820.00	METRO
117057	#9-05 FORD E-250 LIFT EQUIPPED	veh-auto	vehicles	MI-95-0026	12/31/2009	29,775.00	80%	23,820.00	4	29,775.00	23,820.00	METRO
117060	#9-66 2009 FORD CUTAWAY	veh-auto	vehicles	MI-04-0014	12/31/2009	60,996.00	80%	48,796.80	7	56,639.14	45,311.31	APPLE
117063	#9-69 2009 FORD CUTAWAY	veh-auto	vehicles	MI-04-0014	12/31/2009	60,996.00	80%	48,796.80	7	56,639.14	45,311.31	APPLE
117066	#9-70 2009 FORD CUTAWAY	veh-auto	vehicles	MI-04-0027	12/31/2009	60,996.00	80%	48,796.80	7	56,639.14	45,311.31	APPLE
117052	#9-938 FORD E-250 LIFT EQUIPPED	veh-auto	vehicles	MI-04-0027	12/31/2009	29,775.00	80%	23,820.00	4	29,775.00	23,820.00	APPLE
117053	#9-939 FORD E-250 LIFT EQUIPPED	veh-auto	vehicles	MI-04-0027	12/31/2009	29,775.00	80%	23,820.00	4	29,775.00	23,820.00	APPLE
117055	#9-940 FORD E-250 LIFT EQUIPPED	veh-auto	vehicles	MI-95-0009	12/31/2009	29,775.00	80%	23,820.00	4	29,775.00	23,820.00	APPLE
117056	#9-941 FORD E-250 LIFT EQUIPPED	veh-auto	vehicles	MI-95-0009	12/31/2009	29,775.00	80%	23,820.00	4	29,775.00	23,820.00	APPLE
117058	#9-942 FORD E-250 LIFT EQUIPPED	veh-auto	vehicles	MI-95-0026	12/31/2009	29,775.00	80%	23,820.00	4	29,775.00	23,820.00	APPLE
117059	#9-943 FORD E-250 LIFT EQUIPPED	veh-auto	vehicles	MI-95-0026	12/31/2009	29,775.00	80%	23,820.00	4	29,775.00	23,820.00	APPLE
117987	#9-945 2010 FORD E-SERIES ADA VAN	veh-auto	vehicles	MI-04-0014	12/31/2010	29,775.00	80%	23,820.00	4	29,775.00	23,820.00	APPLE
117988	#9-09 2010 FORD E-SERIES ADA VAN	veh-auto	vehicles	MI-95-0009	12/31/2010	29,775.00	80%	23,820.00	4	29,775.00	23,820.00	METRO / V
118546	#9-03 2012 FORD E-350 XL EXTENDED VAN W/M	veh-auto	vehicles	MI-95-0009	12/31/2012	37,890.00	80%	30,312.00	4	33,153.75	26,523.00	METRO
118547	#9-04 2012 FORD E-350 XL EXTENDED VAN W/M	veh-auto	vehicles	MI-95-X073/MI-95-0047	8/15/2012	37,890.00	80%	30,312.00	4	33,153.75	26,523.00	METRO
118548	#9-946 2012 FORD E-350 XL EXTENDED VAN W/	veh-auto	vehicles	MI-95-X073	8/15/2012	37,890.00	80%	30,312.00	4	33,153.75	26,523.00	APPLE
118988	#9-947 2012 FORD E-350 XL EXTENDED VAN W/	veh-auto	vehicles	MI-95-X073	8/15/2012	37,890.00	80%	30,312.00	4	33,153.75	26,523.00	APPLE
119938	#9-02 FORD E-350 XL EXTENDED VAN	veh-auto	vehicles	MI-95-X054	4/30/2014	36,411.00	80%	29,128.80	4	13,654.13	10,923.30	METRO
119939	#9-06 FORD E-350 XL EXTENDED VAN	veh-auto	vehicles	MI-95-X054	4/30/2014	36,411.00	80%	29,128.80	4	13,654.13	10,923.30	APPLE
119945	#9-948 FORD E-350XL EXTENDED VAN	veh-auto	vehicles	MI-95-X054	4/30/2014	36,411.00	80%	29,128.80	4	13,654.13	10,923.30	APPLE
119940	#9-949 FORD E-350XL EXTENDED VAN	veh-auto	vehicles	MI-95-X073	4/30/2014	36,411.00	80%	29,128.80	4	13,654.13	10,923.30	APPLE
119941	#9-950 FORD E-350XL EXTENDED VAN	veh-auto	vehicles	MI-95-X080	4/30/2014	36,411.00	80%	29,128.80	4	13,654.13	10,923.30	APPLE
112577	#1097 2003 35' GILLIG BUS	veh-bus/trg	vehicles	MI-90-0382	7/1/2003	284,333.00	80%	227,466.40	12	284,333.00	227,466.40	METRO
112576	#1098 2003 35' GILLIG BUS	veh-bus/trg	vehicles	MI-90-0382	7/1/2003	284,333.00	80%	227,466.40	12	284,333.00	227,466.40	METRO
114675	#1001 2006 GILLIG 40' BUS	veh-bus/trg	vehicles	MI-03-0206	7/1/2006	288,345.00	80%	230,676.00	12	228,273.13	182,618.50	METRO
114677	#1003 2006 GILLIG 40' BUS	veh-bus/trg	vehicles	MI-03-0206	7/1/2006	288,345.00	80%	230,676.00	12	228,273.13	182,618.50	METRO
114678	#1004 2006 GILLIG 40' BUS	veh-bus/trg	vehicles	MI-03-0206	7/1/2006	288,345.00	80%	230,676.00	12	228,273.13	182,618.50	METRO
116986	#1005 35' COACH DIESEL - S50 ENGINE	veh-bus/trg	vehicles	MI-03-0216	12/31/2008	313,522.00	80%	250,817.60	12	195,951.24	156,760.99	METRO
116983	#1006 35' COACH DIESEL - S50 ENGINE	veh-bus/trg	vehicles	MI-03-0216	12/31/2008	313,522.00	80%	250,817.60	12	195,951.24	156,760.99	METRO
116984	#1007 35' COACH DIESEL - S50 ENGINE	veh-bus/trg	vehicles	MI-03-0216	12/31/2008	313,522.00	80%	250,817.60	12	195,951.24	156,760.99	METRO
116985	#1008 35' COACH DIESEL - S50 ENGINE	veh-bus/trg	vehicles	MI-03-0216	12/31/2008	313,522.00	80%	250,817.60	12	195,951.24	156,760.99	METRO
117038	#1009 35' COACH DIESEL / S50 ENG	veh-bus/trg	vehicles	MI-03-0216/MI-04-0014	12/31/2009	313,522.00	80%	250,817.60	12	169,824.41	135,859.53	METRO
117039	#1010 35' COACH DIESEL / S50 ENG	veh-bus/trg	vehicles	MI-03-0216	12/31/2009	313,522.00	80%	250,817.60	12	169,824.41	135,859.53	METRO
117040	#1011 35' COACH DIESEL / S50 ENG	veh-bus/trg	vehicles	MI-03-0216	12/31/2009	313,522.00	80%	250,817.60	12	169,824.41	135,859.53	METRO
117041	#1012 35' COACH DIESEL / S50 ENG	veh-bus/trg	vehicles	MI-03-0216	12/31/2009	313,522.00	80%	250,817.60	12	169,824.41	135,859.53	METRO
117042	#1013 35' COACH DIESEL / S50 ENG	veh-bus/trg	vehicles	MI-03-0216	12/31/2009	313,522.00	80%	250,817.60	12	169,824.41	135,859.53	METRO
117043	#1014 35' COACH DIESEL / S50 ENG	veh-bus/trg	vehicles	MI-03-0216	12/31/2009	313,522.00	80%	250,817.60	12	169,824.41	135,859.53	METRO
118159	#1015 35' COACH DIESEL / S50 ENG	veh-bus/trg	vehicles	MI-03-0216	12/31/2009	313,522.00	80%	250,817.60	12	169,824.41	135,859.53	METRO
118158	#1016 35' LOW FLOOR HYBRID ELECTRIC BUS	veh-bus/trg	vehicles	MI-04-0014	12/31/2011	543,384.00	80%	434,707.20	12	203,769.00	163,015.20	METRO
118160	#1017 35' LOW FLOOR HYBRID ELECTRIC BUS	veh-bus/trg	vehicles	MI-03-0216/MI-04-0014	12/31/2011	543,384.00	80%	434,707.20	12	203,769.00	163,015.20	METRO
118161	#1018 35' LOW FLOOR HYBRID ELECTRIC BUS	veh-bus/trg	vehicles	MI-04-0014	12/31/2011	543,384.00	80%	434,707.20	12	203,769.00	163,015.20	METRO
118162	#1019 35' LOW FLOOR HYBRID ELECTRIC BUS	veh-bus/trg	vehicles	MI-04-0014/MI-04-0027	12/31/2011	543,384.00	80%	434,707.20	12	203,769.00	163,015.20	METRO
118163	#1020 35' LOW FLOOR HYBRID ELECTRIC BUS	veh-bus/trg	vehicles	MI-04-0027	12/31/2011	543,384.00	80%	434,707.20	12	203,769.00	163,015.20	METRO
119238	#1021 GILLIG HYBRID BUS, LOW FLOOR, 35'	veh-bus/trg	vehicles	MI-04-0027	5/29/2013	564,715.00	80%	451,772.00	12	117,648.95	94,119.16	METRO
119239	#1022 GILLIG HYBRID BUS, LOW FLOOR, 35'	veh-bus/trg	vehicles	MI-04-0027	5/29/2013	564,715.00	80%	451,772.00	12	117,648.95	94,119.16	METRO
119240	#1023 GILLIG HYBRID BUS, LOW FLOOR, 35'	veh-bus/trg	vehicles	MI-04-0027	5/29/2013	564,715.00	80%	451,772.00	12	117,648.95	94,119.16	METRO
119577	#1024 35' LOW FLOOR ELECTRIC HYBRID BUS	veh-bus/trg	vehicles	MI-04-0027	2/12/2014	599,856.00	80%	479,884.80	12	74,982.00	59,985.60	METRO
119576	#1025 35' LOW FLOOR ELECTRIC HYBRID BUS	veh-bus/trg	vehicles	MI-04-0027	2/12/2014	599,856.00	80%	479,884.80	12	74,982.00	59,985.60	METRO
119578	#1026 35' LOW FLOOR ELECTRIC HYBRID BUS	veh-bus/trg	vehicles	MI-04-0027/MI-04-0047	2/12/2014	599,856.00	80%	479,884.80	12	74,982.00	59,985.60	METRO
115783	#9-63 2008 EL DORADO (CAV) BUS	veh-bus/trg	vehicles	G2002-055/Z17	9/25/2007	77,390.00	80%	61,912.00	7	77,390.00	61,912.00	APPLE

# Attachment 2.1 Service Fleet Inventory

Asset #	Description	Asset Class	Asset Type	Federal Grant Number	Acquire Date	Original Cost	% of FTA Funding	\$ of FTA Funding	Useful Life	Accumulated Depreciation	FTA Depreciation Share	Location
115784	#9-64 2008 EL DORADO (CAV) BUS	veh-busmed	vehicles	MI-90-0455	9/25/2007	77,390.00	80%	61,912.00	7	77,390.00	61,912.00	APPLE
115789	#9-65 2008 EL DORADO (CAV) BUS	veh-busmed	vehicles	G2002-955Z15	9/25/2007	77,390.00	80%	61,912.00	7	77,390.00	61,912.00	APPLE
117979	#9-73 2009 29' PASSENGER BUS WITH LIFT	veh-busmed	vehicles	MI-04-0014	12/31/2010	108,577.00	80%	86,861.60	10	70,575.05	56,460.04	APPLE
117980	#9-74 2009 29' PASSENGER BUS WITH LIFT	veh-busmed	vehicles	MI-04-0014	12/31/2010	108,577.00	80%	86,861.60	10	70,575.05	56,460.04	APPLE
117981	#9-75 2009 29' PASSENGER BUS WITH LIFT	veh-busmed	vehicles	MI-04-0014/MI-95-0026	12/31/2010	108,577.00	80%	86,861.60	10	70,575.05	56,460.04	APPLE
117982	#9-76 2009 29' PASSENGER BUS WITH LIFT	veh-busmed	vehicles	MI-04-0014/MI-95-0047	12/31/2010	108,577.00	80%	86,861.60	10	70,575.05	56,460.04	APPLE
117983	#9-77 2009 29' PASSENGER BUS WITH LIFT	veh-busmed	vehicles	MI-04-0014	12/31/2010	108,577.00	80%	86,861.60	10	70,575.05	56,460.04	APPLE
118710	#9-78 2012 EL DORADO AERO ELITE 290 29' BUS	veh-busmed	vehicles	MI-95-X047/MI-03-0240	1/14/2013	141,251.00	80%	113,000.80	7	50,446.78	40,357.42	APPLE
119973	#9-11 FORD E-350 XL EXTENDED VAN	veh-auto	vehicles	MI-95-X102	5/30/2014	36,411.00	80%	29,128.80	4	13,654.13	10,923.30	METRO
119974	#9-951 FORD E-350 XL EXTENDED VAN	veh-auto	vehicles	MI-95-X102	5/30/2014	36,411.00	80%	29,128.80	4	13,654.13	10,923.30	APPLE
119975	#9-952 FORD E-350 XL EXTENDED VAN	veh-auto	vehicles	MI-95-X102	5/30/2014	36,411.00	80%	29,128.80	4	13,654.13	10,923.30	APPLE
119976	#9-953 FORD E-350 XL EXTENDED VAN	veh-auto	vehicles	MI-95-X102	5/30/2014	36,411.00	80%	29,128.80	4	13,654.13	10,923.30	APPLE
119977	#9-954 FORD E-350 XL EXTENDED VAN	veh-auto	vehicles	MI-95-X102	5/30/2014	36,411.00	80%	29,128.80	4	13,654.13	10,923.30	APPLE
119978	#9-955 FORD E-350 XL EXTENDED VAN	veh-auto	vehicles	MI-95-X102	5/30/2014	36,411.00	80%	29,128.80	4	13,654.13	10,923.30	APPLE
120413	#1029 GILLIG HYBRID BUS, LOW FLOOR 35'	veh-busfig	vehicles	MI-04-0047	4/20/2015	623,509.00	80%	498,807.20	12	25,979.54	20,783.63	METRO
120414	#1028 GILLIG HYBRID BUS, LOW FLOOR 35'	veh-busfig	vehicles	MI-04-0047	4/20/2015	623,509.00	80%	498,807.20	12	25,979.54	20,783.63	METRO
120416	#1027 GILLIG HYBRID BUS, LOW FLOOR 35'	veh-busfig	vehicles	MI-04-0047	4/20/2015	623,509.00	80%	498,807.20	12	25,979.54	20,783.63	METRO
120427	#9-79 2015 EL DORADO BUS	veh-busmed	vehicles	MI-95-X080	5/6/2015	97,563.00	80%	78,050.40	7	6,968.79	5,575.03	APPLE
120428	#9-80 2015 EL DORADO BUS	veh-busmed	vehicles	MI-95-X080	5/6/2015	97,563.00	80%	78,050.40	7	6,968.79	5,575.03	APPLE
121255	#9-956 FORD TRANSIT VAN	veh-vanex4	vehicles	MET29, MET35, MET36	3/30/2016	\$39,329.00	80%	31,463.20	4	22,698.11	18,158.49	APPLE
121256	#9-957 FORD TRANSIT VAN	veh-vanex4	vehicles	MET36 MI-95-X112	3/30/2016	\$39,329.00	80%	31,463.20	4	22,698.11	18,158.49	APPLE
121257	#9-958 FORD TRANSIT VAN	veh-vanex4	vehicles	MET36 MI-95-X112	3/30/2016	\$39,329.00	80%	31,463.20	4	22,698.11	18,158.49	APPLE
121258	#9-959 FORD TRANSIT VAN	veh-vanex4	vehicles	MET36 MI-95-X112	3/30/2016	\$39,329.00	80%	31,463.20	4	22,698.11	18,158.49	APPLE
121259	#9-960 FORD TRANSIT VAN	veh-vanex4	vehicles	MET36 MI-95-X112	3/30/2016	\$39,329.00	80%	31,463.20	4	22,698.11	18,158.49	APPLE
121696	#9-964 FORD TRANSIT VAN	veh-vanex4	vehicles	MET36 MI-95-X112	8/31/2016	\$39,329.00	80%	31,463.20	4	19,835.50	15,868.40	APPLE
121707	#9-965 FORD TRANSIT VAN	veh-vanex4	vehicles	MET36 MI-95-X112	8/18/2016	\$39,329.00	80%	31,463.20	4	19,835.50	15,868.40	APPLE
121708	#9-966 FORD TRANSIT VAN	veh-vanex4	vehicles	MET36 MI-95-X112	8/18/2016	\$39,329.00	80%	31,463.20	4	19,835.50	15,868.40	APPLE
121709	#9-961 FORD TRANSIT VAN	veh-vanex4	vehicles	MET36 MI-95-X112	8/18/2016	\$39,329.00	80%	31,463.20	4	19,835.50	15,868.40	APPLE
121710	#9-962 FORD TRANSIT VAN	veh-vanex4	vehicles	MET36, MET38	8/18/2016	\$39,329.00	80%	31,463.20	4	19,835.50	15,868.40	APPLE
121711	#9-963 FORD TRANSIT VAN	veh-vanex4	vehicles	MET36, MET38	8/18/2016	\$39,329.00	80%	31,463.20	4	19,835.50	15,868.40	APPLE
121712	#9-81 FORD EL DORADO AERO LITE F-550 10+4 PASSENGER W/ BRAUN 1000# LIFT	veh-busmed	vehicles	MET 32, MET36	8/26/2016	\$100,908.00	80%	80,726.40	7	29,182.46	23,345.97	APPLE
121713	#9-82 FORD EL DORADO AERO LITE F-550 10+4 PASSENGER W/ BRAUN 1000# LIFT	veh-busmed	vehicles	MET 32, MET36	8/26/2016	\$100,908.00	80%	80,726.40	7	29,182.46	23,345.97	APPLE
#9-1055 2005 40' GILLIG BUS		veh-busfig	vehicles	NONE	9/5/2017	\$3,500.00	N/A	-	0	-	-	METRO
#9-1056 2005 40' GILLIG BUS		veh-busfig	vehicles	NONE	9/5/2017	\$3,500.00	N/A	-	0	-	-	METRO
#9-1057 2005 40' GILLIG BUS		veh-busfig	vehicles	NONE	9/5/2017	\$3,500.00	N/A	-	0	-	-	METRO
#9-1058 2005 40' GILLIG BUS		veh-busfig	vehicles	NONE	9/5/2017	\$3,500.00	N/A	-	0	-	-	METRO
#9-1059 2005 40' GILLIG BUS		veh-busfig	vehicles	NONE	9/5/2017	\$3,500.00	N/A	-	0	-	-	METRO
#9-967 2017 Ford Transit Van		veh-vanex4	vehicles	MI-16-X012 / MI 2016-031 / MI-2016-035	9/25/2017	55,812.00	80%	44,649.60	4	-	-	METRO
#9-968 2017 Ford Transit Van		veh-vanex4	vehicles	MI-16-X012 / MI 2016-031 / MI-2016-036	9/25/2017	55,812.00	80%	44,649.60	4	-	-	METRO
#9-969 2017 Ford Transit Van		veh-vanex4	vehicles	MI-16-X012 / MI 2016-031 / MI-2016-037	9/25/2017	55,812.00	80%	44,649.60	4	-	-	METRO
#9-970 2017 Ford Transit Van		veh-vanex4	vehicles	MI-16-X012 / MI 2016-031 / MI-2016-038	9/25/2017	55,812.00	80%	44,649.60	4	-	-	METRO
#1030 2017 GILLIG DIESEL BUS, LOW FLOOR 40'		veh-busfig	vehicles	MI-90-X677 / MI-34-0009	11/7/2017	429,273.00	80%	343,418.40	12	-	-	METRO
#1031 2017 GILLIG DIESEL BUS, LOW FLOOR 40'		veh-busfig	vehicles	MI-90-X677 / MI-34-0009	11/7/2017	429,273.00	80%	343,418.40	12	-	-	METRO
#1032 2017 GILLIG DIESEL BUS, LOW FLOOR 40'		veh-busfig	vehicles	MI-90-X677 / MI-34-0009	11/7/2017	429,273.00	80%	343,418.40	12	-	-	METRO
#1033 2018 GILLIG DIESEL BUS, LOW FLOOR 40'		veh-busfig	vehicles	MI-90-X677 / MI-2016-031	7/11/2018	433,840.00	80%	347,072.00	12	-	-	METRO
#1034 2018 GILLIG DIESEL BUS, LOW FLOOR 40'		veh-busfig	vehicles	MI-90-X677 / MI-2016-031	7/11/2018	433,840.00	80%	347,072.00	12	-	-	METRO

## Attachment 2.2 Non-Service Vehicle Inventory

Asset #	Description	Asset Class	Asset Type	Federal Grant Number	Acquire Date	Original Cost	% of FTA Funding	\$ of FTA Funding	Useful Life	Accumulated Depreciation	FTA Depreciation Share	Location
112572	#9-919 FORD E-250 CONVERSION VAN	veh-auto	vehicles	MI-90-0382	7/1/2003	28,218.00	80%	22,574.40	4	28,218.00	22,574.40	METRO
113987	#9-10 2005 PONTIAC GRAND PRIX	veh-auto	vehicles	MI-90-0431	7/1/2005	17,233.00	80%	13,786.40	4	17,233.00	13,786.40	METRO
114684	#9-927 ECONOLINE VAN	veh-auto	vehicles	MI-90-0455	7/1/2006	26,019.00	80%	20,815.20	4	26,019.00	20,815.20	METRO
117035	#9-14 CHEVROLET IMPALA (STAFF CAR)	veh-auto	vehicles	MI-90-0495	12/31/2009	18,502.00	100%	18,502.00	4	18,502.00	18,502.00	METRO
117036	#9-195 GMC SIERRA SERVICE TRUCK	veh-auto	vehicles	MI-90-0562	12/31/2009	31,074.00	80%	24,859.20	7	28,854.43	23,083.54	METRO
117037	#9-196 GMC SIERRA PARTS TRUCK	veh-auto	vehicles	MI-96-0015	12/31/2009	18,389.00	80%	14,711.20	7	17,075.50	13,660.40	METRO
117986	#9-15 2010 FORD ESCAPE HYBRID	veh-auto	vehicles	MI-96-0015	12/31/2010	29,659.00	80%	23,727.20	4	29,659.00	23,727.20	METRO
117985	#9-912 2010 FORD E-SERIES ADA VAN	veh-auto	vehicles	MI-96-0015	12/31/2010	29,775.00	80%	23,820.00	4	29,775.00	23,820.00	METRO
	#9-197 2017 FORD F350 4x4 PICK UP TRUCK W/PL	veh-auto	vehicles	MI-2016-031	8/31/2017	36,697.00	80%	29,357.60	6	-	-	METRO

## Attachment 2.3 Equipment Inventory - Greater than \$50,000

Asset #	Description	Asset Class	Federal Grant Number	Acquire Date	Original Cost	% of FTA Funding	\$ of FTA Funding	Useful Life	Accumulated Depreciation	FTA Depreciation Share	Location
106278	FUELING STATION & TANK MONITORING	m&e-med	MI-90-0065	7/1/1989	50,173.75	80%	40,139.00	10	50,173.75	40,139.00	METRO
111074	HYDRAULIC LIFT REFURBISHMEN	m&e-med	MI-90-0333	7/1/2001	57,000.00	80%	45,600.00	10	57,000.00	45,600.00	METRO
121729	GARAGE CCTV SYSTEM UPGRADE	mach&equip	MI-90-X677	7/31/2017	57,905.00	80%	46,324.00	5	11,259.32	9,007.46	METRO
110381	SOFTWARE PROFESSIONALS SOFT	m&e-med	None	7/1/2000	62,532.56	0%	-	6	62,532.56	-	METRO
117993	VEHICLE PLATFORM LIFT	m&e-med	MI-96-0015	12/31/2010	73,289.00	100%	73,289.00	10	40,308.95	40,308.95	METRO
111575	BUS INTERIOR CLEANER	m&e-med	MI-90-0317	7/1/2002	81,125.00	80%	64,900.00	10	81,125.00	64,900.00	METRO
115359	METRO: KEYLESS ENTRY (CES, INC)	m&e-med	MI-04-0014	3/1/2007	84,617.06	80%	67,693.65	10	71,924.51	57,539.61	METRO
121718	BUS WASHER RETROFIT Ross and White	bdgjmp-10	MI-90-X677	2/13/2015	54,879.00	80%	43,903.20	12	24,739.50	19,791.60	METRO
120733	TRANSIT CAMERA SYSTEM - BUSES	eqp-it	MI-90-X677	10/12/2015	159,618.65	80%	127,694.92	6	13,301.55	10,641.24	OFS
120189	ITS RESILIENCY BACK UP	eqp-it	MI-90-X677	4/30/2014	83,980.84	80%	67,184.67	6	20,995.21	16,796.17	ADMIN
119910	INTELLIGENT TRANSPORTATION SYSTEM	software10	MI-96-X015	3/20/2013	2,836,328.99	100%	2,836,328.99	10	709,082.25	709,082.25	ADMIN

## Attachment 2.4 Facility Inventory

Facility	Address	Location (city)	Year Built	Lot Size (acres)	Last Refurbishment Year	Building Size (square feet)	Replacement Cost
Metro Offices and Maintenance Garage	530 North Rose Street	Kalamazoo	1978	3.07	2012	77,100	13,000,000
Kalamazoo Transportation Center	459 North Burdick	Kalamazoo	1887	2.86	2006	12,600	10,000,000



## Attachment 3.1 Fleet Condition Ratings

Vehicle Number	Service Line	Vehicle Make	VIN Number	Condition	Type	Year	Mileage
9-01	Metro Share	Ford E-250 Community Service	1FTNE24L29DA76820	3	SmLD Van	2009	33,192
9-02	Metro Share	Ford E-350 Community Service	1FTSS3EL1EDA67116	4	SmLD Van	2014	36,610
9-03	Metro Share	Ford E-350 Community Service	1FTSS3EL0CDB06632	4	SmLD Van	2012	46,148
9-04	Metro Share	Ford E-350 Community Service	1FTSS3EL2CDB06633	4	SmLD Van	2012	45,202
9-05	Metro Share	Ford E-250 Community Service	1FTNE24L49DA76821	3	SmLD Van	2009	37,149
9-06	Metro Share	Ford E-350 Community Service	1FTSS3EL3EDA67117	4	SmLD Van	2014	35,080
9-07	Metro Share	Ford E-250 Community Service	1FTNE24L88DA12344	3	SmLD Van	2008	41,545
9-08	Metro Share	Ford E-250 Community Service	1FTNE24L68DA12343	3	SmLD Van	2008	44,755
9-09	Metro Share	Ford E-250 Community Service	1FTNE2EL5ADA30949	4	SmLD Van	2010	48,658
9-11	Metro Share	Ford E-350 Community Service	1FTSS3EL0EDA86532	4	SmLD Van	2014	33,807
9-12	Metro Share	Ford Transit 350	1FDZX2CM2GKA50860	5	SmLD Van	2016	14,562
9-938	Metro Connect	Ford E-250 Econoline Van	1FTNE24L59DA80022	2	SmLD Van	2009	319,666
9-939	Metro Connect	Ford E-250 Econoline Van	1FTNE24L39DA80021	2	SmLD Van	2009	334,244
9-940	Metro Connect	Ford E-250 Econoline Van	1FTNE24L79DA80023	2	SmLD Van	2009	309,278
9-941	Metro Connect	Ford E-250 Econoline Van	1FTNE24L09DA80025	2	SmLD Van	2009	291,498
9-942	Metro Connect	Ford E-250 Econoline Van	1FTNE24L29DA80026	2	SmLD Van	2009	335,755
9-943	Metro Connect	Ford E-250 Econoline Van	1FTNE24L49DA80027	2	SmLD Van	2009	321,189
9-945	Metro Connect	Ford E-250 Econoline Van	1FTNE2EL3ADA30948	2	SmLD Van	2010	278,167
9-946	Metro Connect	Ford E-350 Econoline Van	1FTSS3EL4CDB06634	3	SmLD Van	2012	201,329
9-947	Metro Connect	Ford E-350 Econoline Van	1FTSS3EL9CDB06631	3	SmLD Van	2012	211,997
9-948	Metro Connect	Ford E-250 Econoline Van	1FTSS3EL6EDA67113	3	SmLD Van	2014	103,056
9-949	Metro Connect	Ford E-350 Econoline Van	1FTSS3EL8EDA67114	3	SmLD Van	2014	147,458
9-950	Metro Connect	Ford E-350 Econoline Van	1FTSS3ELXEDA67115	3	SmLD Van	2014	160,546
9-951	Metro Connect	Ford E-350 Econoline Van	1FTSS3EL4EDA86534	3	SmLD Van	2014	135,246
9-952	Metro Connect	Ford E-350 Econoline Van	1FTSS3EL9EDA86531	3	SmLD Van	2014	134,241
9-953	Metro Connect	Ford E-350 Econoline Van	1FTSS3EL2EDA86533	3	SmLD Van	2014	146,478
9-954	Metro Connect	Ford E-350 Econoline Van	1FTSS3EL0EDA67110	3	SmLD Van	2014	136,287
9-955	Metro Connect	Ford E-350 Econoline Van	1FTSS3EL6EDA86535	3	SmLD Van	2014	133,666
9-956	Metro Connect	Ford Transit 350	1FDZX2CM4GKA50861	4	SmLD Van	2016	57,628
9-957	Metro Connect	Ford Transit 350	1FDZX2CM6GKA50862	4	SmLD Van	2016	55,650
9-958	Metro Connect	Ford Transit 350	1FDZX2CM8GKA50863	4	SmLD Van	2016	71,999
9-959	Metro Connect	Ford Transit 350	1FDZX2CMXGKA50864	4	SmLD Van	2016	67,419
9-960	Metro Connect	Ford Transit 350	1FDZX2CM1GKA50865	4	SmLD Van	2016	59,959
9-961	Metro Connect	Ford Transit 350	1FDZX2CM5GKB29200	4	SmLD Van	2016	40,419
9-962	Metro Connect	Ford Transit 350	1FDZX2CM7GKB29201	4	SmLD Van	2016	46,361
9-963	Metro Connect	Ford Transit 350	1FDZX2CM9GKB29202	4	SmLD Van	2016	45,054
9-964	Metro Connect	Ford Transit 350	1FDZX2CM9GKB29197	4	SmLD Van	2016	38,996
9-965	Metro Connect	Ford Transit 350	1FDZX2CM0GKB29198	4	SmLD Van	2016	44,132
9-966	Metro Connect	Ford Transit 350	1FDZX2CM2GKB29199	4	SmLD Van	2016	56,624
9-967	Metro Connect	Ford Transit 350	1FDZX2XM5HKB08326	5	SmLD Van	2017	6,054
9-968	Metro Connect	Ford Transit 350	1FDZX2XM0HKB08329	5	SmLD Van	2017	5,030
9-969	Metro Connect	Ford Transit 350	1FDZX2XM7HKB08327	5	SmLD Van	2017	4,490
9-970	Metro Connect	Ford Transit 350	1FDZX2XM9HKB08328	5	SmLD Van	2017	3,812
9-63	Metro Connect	C5500 Eldorado Areo Lite	1GBE5V1917F426289	2	MedDty	2007	253,982
9-64	Metro Connect	C5500 Eldorado Areo Lite	1GBE5V1947F426349	3	MedDty	2007	297,299
9-65	Metro Connect	C5500 Eldorado Areo Lite	1GBE5V1987F426158	2	MedDty	2007	227,854
9-66	Metro Connect	Ford E-450 Senator II	1FDFF45PX9DA21397	1	LdCutaway	2009	215,774
9-69	Metro Connect	Ford E-450 Senator II	1FDFF45P19DA21398	2	LdCutaway	2009	173,508
9-70	Metro Connect	Ford E-450 Senator II	1FDFF45P89DA25125	1	LdCutaway	2009	167,224
9-73	Metro Connect	C5500 Chevrolet Supreme	1GBG5C1989F403415	3	MedDty	2011	235,866
9-74	Metro Connect	C5500 Chevrolet Supreme	1GBG5C1959F404859	3	MedDty	2011	204,142
9-75	Metro Connect	C5500 Chevrolet Supreme	1GBG5C1989F405334	3	MedDty	2011	177,690
9-76	Metro Connect	C5500 Chevrolet Supreme	1GBG5C1989F408692	3	MedDty	2011	180,088
9-77	Metro Connect	C5500 Chevrolet Supreme	1GBG5C19X9F403477	3	MedDty	2011	206,991
9-78	Metro Connect	I H Eldorado Areo Lite	5WEASAAM4DJ298801	4	MedDty	2012	187,243
9-79	Metro Connect	F550 Eldorado Areo Lite	1FDA5FGT8FEC39612	4	MedDty	2015	188,197
9-80	Metro Connect	F550 Eldorado Areo Lite	1FDAF56T6FEC39611	4	MedDty	2015	204,095
9-81	Metro Connect	F550 Eldorado Areo Lite	1FDAF5GT6GEC18999	5	MedDty	2016	147,614
9-82	Metro Connect	F550 Eldorado Areo Lite	1FDAF5GT7GEC19000	5	MedDty	2016	50,085

## Attachment 3.1 Fleet Condition Ratings

Vehicle Number	Service Line	Vehicle Make	VIN Number	Condition	Type	Year	Mileage
1055	Fixed-Route Bus	Gillig 40 FT	15GGD291751076481	3	LrgHvyDty	2005	634,898
1056	Fixed-Route Bus	Gillig 40 FT	15GGD291061077134	3	LrgHvyDty	2006	502,968
1057	Fixed-Route Bus	Gillig 40 FT	15GGD291261077135	3	LrgHvyDty	2006	517,234
1058	Fixed-Route Bus	Gillig 40 FT	15GGD291661077137	3	LrgHvyDty	2006	483,897
1059	Fixed-Route Bus	Gillig 40 FT	15GGD291861077138	3	LrgHvyDty	2006	506,307
1097	Fixed-Route Bus	Gillig 35 FT	15GGB291X31073657	2	LrgHvyDty	2003	674,189
1098	Fixed-Route Bus	Gillig 35 FT	15GGB291131073658	2	LrgHvyDty	2003	588,641
1001	Fixed-Route Bus	Gillig 40 FT	15GGD291261076681	2	LrgHvyDty	2006	507,740
1003	Fixed-Route Bus	Gillig 40 FT	15GGD291661076683	2	LrgHvyDty	2006	605,966
1004	Fixed-Route Bus	Gillig 40 FT	15GGD291861076684	2	LrgHvyDty	2006	623,614
1005	Fixed-Route Bus	Gillig 35 FT	15GGB271981078438	3	LrgHvyDty	2008	453,030
1006	Fixed-Route Bus	Gillig 35 FT	15GGB271081078439	3	LrgHvyDty	2008	478,341
1007	Fixed-Route Bus	Gillig 35 FT	15GGB271781078440	3	LrgHvyDty	2008	488,075
1008	Fixed-Route Bus	Gillig 35 FT	15GGB271981078441	3	LrgHvyDty	2008	495,885
1009	Fixed-Route Bus	Gillig 35 FT	15GGB271991078442	4	LrgHvyDty	2009	454,781
1010	Fixed-Route Bus	Gillig 35 FT	15GGB271091078443	4	LrgHvyDty	2009	472,733
1011	Fixed-Route Bus	Gillig 35 FT	15GGB271291078444	4	LrgHvyDty	2009	486,536
1012	Fixed-Route Bus	Gillig 35 FT	15GGB271491078445	4	LrgHvyDty	2009	443,006
1013	Fixed-Route Bus	Gillig 35 FT	15GGB271691078446	4	LrgHvyDty	2009	468,614
1014	Fixed-Route Bus	Gillig 35 FT	15GGB271891078447	4	LrgHvyDty	2009	457,985
1015	Fixed-Route Bus	Gillig 35 FT	15GGB271X91078448	4	LrgHvyDty	2009	467,033
1016	Fixed-Route Bus	Gillig Hybrid 35 FT	15GGB3013B1179563	4	LrgHvyDty	2011	326,777
1017	Fixed-Route Bus	Gillig Hybrid 35 FT	15GGB3015B1179564	4	LrgHvyDty	2011	337,776
1018	Fixed-Route Bus	Gillig Hybrid 35 FT	15GGB3017B1179565	4	LrgHvyDty	2011	329,968
1019	Fixed-Route Bus	Gillig Hybrid 35 FT	15GGB3019B1179566	4	LrgHvyDty	2011	332,767
1020	Fixed-Route Bus	Gillig Hybrid 35 FT	15GGB3010B1179567	4	LrgHvyDty	2011	329,016
1021	Fixed-Route Bus	Gillig Hybrid 35 FT	15GGB3016D1180774	4	LrgHvyDty	2013	198,415
1022	Fixed-Route Bus	Gillig Hybrid 35 FT	15GGB3018D1180775	4	LrgHvyDty	2013	252,437
1023	Fixed-Route Bus	Gillig Hybrid 35 FT	15GGB301XD1180776	4	LrgHvyDty	2013	244,488
1024	Fixed-Route Bus	Gillig Hybrid 35 FT	15GGB3014E1182072	4	LrgHvyDty	2014	213,542
1025	Fixed-Route Bus	Gillig Hybrid 35 FT	15GGB3016E1182073	4	LrgHvyDty	2014	176,459
1026	Fixed-Route Bus	Gillig Hybrid 35 FT	15GGB3018E1182074	4	LrgHvyDty	2014	274,276
1027	Fixed-Route Bus	Gillig Hybrid 35 FT	15GGB3018F1182075	4	LrgHvyDty	2015	182,539
1028	Fixed-Route Bus	Gillig Hybrid 35 FT	15GGB301XF1182076	4	LrgHvyDty	2015	141,139
1029	Fixed-Route Bus	Gillig Hybrid 35 FT	15GGB3011F1182077	4	LrgHvyDty	2015	143,726
1030	Fixed-Route Bus	Gillig 40 FT	15GGD2715H3189034	5	LrgHvyDty	2017	8,155
1031	Fixed-Route Bus	Gillig 40 FT	15GGD2717H3189035	5	LrgHvyDty	2017	6,897
1032	Fixed-Route Bus	Gillig 40 FT	15GGD2719H3189036	5	LrgHvyDty	2017	7,624
1033	Fixed-Route Bus	Gillig 40 FT	15GGD2712J3189613	5	LrgHvyDty	2018	-
1034	Fixed-Route Bus	Gillig 40 FT	15GGD2714J3189614	5	LrgHvyDty	2018	-

**Attachment 3.2  
Non-Service Vehicle Condition Rating**

Vehicle Number	Vehicle Make	VIN Number	Condition	Type	Mileage	Year
9-10	Pontiac Grand Prix	2G2WP552361167547	2	Car	64,953	2006
9-15	Ford Escape Hybrid	1FMCU5K36AKB44160	4	Car	23,037	2010
9-195	GMC K3500 / Western Plow	1GT3K2J3G7AF110927	4	Truck	24,017	2010
9-196	GMC K1500 (parts truck)	1GTTPKTEX1A2127885	4	Truck	72,683	2010
9-197	Ford Heavy Duty F350	1FTRF3B69HEE49653	5	Truck	10	2017
9-14	Chevrolet Impala (staff car)	2G1WT5K391392047	3	Car	54,146	2009
9-912	Ford E-250 Econoline Van	1FTNE2EL1ADA30947	4	SmLD Van	26,637	2010
9-919	Ford E-250 Conversion Van	1FTNE24L4314A69786	2	SmLD Van	104,374	2003
9-927	Ford E-250 Econoline Van	1FTNE24L16HB41032	3	SmLD Van	59,298	2006

**Attachment 3.3  
Equipment Condition Rating-Greater than \$50,000**

Asset #	Description	Asset Class	Acquire Date	Original Cost	Useful Life	Accumulated Depreciation	Location	Condition Rating
106278	FUELING STATION & TANK MONITORING	m&e-med	7/1/1989	50,173.75	10	50,173.75	METRO	2.0
111074	HYDRAULIC LIFT REFURBISHMEN	m&e-med	7/1/2001	57,000.00	10	57,000.00	METRO	3.0
121729	GARAGE CCTV SYSTEM UPGRADE	mach&equip	7/31/2017	57,905.00	5	11,259.32	METRO	3.0
110381	SOFTWARE PROFESSIONALS SOFT	m&e-med	7/1/2000	62,532.56	6	62,532.56	METRO	2.0
117993	VEHICLE PLATFORM LIFT	m&e-med	12/31/2010	73,289.00	10	40,308.95	METRO	3.0
111575	BUS INTERIOR CLEANER	m&e-med	7/1/2002	81,125.00	10	81,125.00	METRO	1.0
115359	METRO: KEYLESS ENTRY (CES, INC)	m&e-med	3/1/2007	84,617.06	10	71,924.51	METRO	3.0
110390	ROSS & WHITE BUS WASHER SYSTEM	m&e-light	7/1/2000	88,638.00	5	88,638.00	METRO	4.0
120733	TRANSIT CAMERA SYSTEM - BUSES	eqp-it	10/12/2015	159,618.65	6	13,301.55	OPS	3.0
120189	ITS RESILIENCY BACK UP	eqp-it	4/30/2014	83,980.84	6	20,995.21	ADMIN	4.0
119910	INTELLIGENT TRANSPORTATION SYSTEM	software10	3/20/2013	2,836,328.99	10	709,082.25	ADMIN	4.0

**Attachment 3.4**  
**Facility Condition Rating Assessment**

**Facility Condition Rating Assessment**

Kalamazoo Transportation Campus

Prepared by TowerPinkster



## Attachment 3.4 Facility Condition Rating Assessment

### Metro Transit Bus Garage

#### Building History

The bus garage was constructed in 1977 as the central location for bus storage, service and administration. The garage includes service bays, tire center, parts storage and paint shop. The parking garage includes bus parking, staff parking, a bus wash bay, fueling station, vacuum station and storage. The administrative offices were remodeled in 2003 and include drivers lounge, central dispatch, staff offices, meeting rooms and a fitness room. In 2010, a 12,000-square foot addition was constructed to house the Transit Board room, offices, a large meeting room, toilets, kitchenette and storage.



## Attachment 3.4 Facility Condition Rating Assessment

**Building Name:** METRO TRANSIT BUS GARAGE  
**Building Use:** Transit offices, bus garage, bus storage, bus wash  
**Building Data:** Original Construction: 1977  
 Add | Renovations: 2003 Remodel, 2010 Addition  
 Number of Floors: 1  
 Construction Type: IIB  
 Fully Sprinkled: Yes  
 Building Area (sq. ft.): 77,100 total sf (1977=70,300 sf, 2010=6,800 sf)  
 Site Area (acres): ~3.07 acres (site=2.60 acres, parking=0.47 acres)

**Types of Construction:**

Masonry     Steel Frame     Concrete     Wood  
 Other

**Exterior Surfacing:**

Brick     Metal     Stucco     Wood  
 Other     Precast Concrete

**Floor Construction:**

Structural Slab     Steel Joists     Slab on Grade     Wood Joists  
 Other

**Air Conditioning:**

Roof Top     Window Units     Central     Room Units

**Heating:**

Roof Top     Forced Air     Central     Room Units  
 Steam     Hot Water

**Electrical Service:**

Aerial     Underground     Primary     Secondary  
 Voltage: 480V     Phase: 3     Wire: 4

**Generator:**

Exists     Natural Gas     Diesel     None

### Metro Transit Bus Garage: Facility Assessment Scoring

The Metro Transit Bus Garage received the following condition scores per category: A detailed description of each item and photo documentation is included in this report.

**Site Condition: Received a condition score of 69% identifying a “adequate” condition.**

Major concerns: Small site, poor concrete and paving and insufficient parking.

**Building Exterior Elements: Received a condition score of 81% identifying a “good” condition.**

Major concerns: Front door visibility and staff entries are not sheltered.

**Accessibility: Received a condition score of 84% identifying a “good” condition.**

## Attachment 3.4 Facility Condition Rating Assessment

Major concerns: No onsite barrier free parking.

**Structural: Received a condition score 90% identifying a “good” condition.**

Major concerns: No major concerns noted.

**Building Envelope: Received a condition score 70% identifying a “good” condition.**

Major concerns: The exterior brick band allows moisture to enter the wall cavity.

**Interior Finishes: Received a condition score 71% identifying a “good” condition.**

Major concerns: There are areas of the facility that have not been recently remodeled.

**Life Safety and Security: Received a condition score of 80% identifying a “good” condition.**

Major concerns: Old fire alarm system. Borderline security access & security camera coverage.

**Mechanical – HVAC: Received a condition score 56% identifying a “adequate” condition.**

Major concerns: Air handling equipment and controls outdated. Indoor air quality is very poor.

**Mechanical – Plumbing: Received a condition score 73% identifying a “good” condition.**

Major concerns: Condensate drain location above electrical gear and hot water recirculation.

**Electrical: Received a condition score 71% identifying a “adequate” condition.**




Major concerns: Non-efficient lighting, borderline emergency lighting.








## Attachment 3.4 Facility Condition Rating Assessment


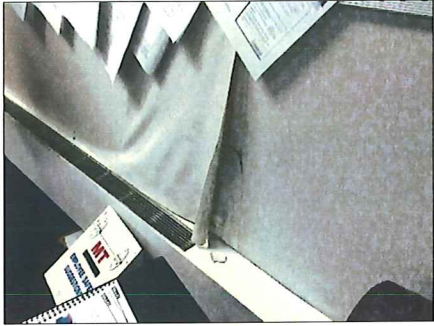
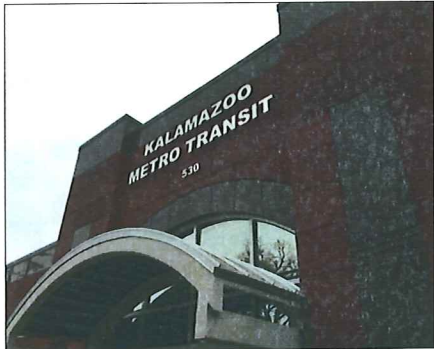
### Metro Transit Bus Garage: Bus Storage/Service/Administration

A. Substructure	TERM Rating	Photos
<ul style="list-style-type: none"> <li><b>Foundation</b></li> </ul>	<p><b>4: Good</b></p>	 <p>No Visible Signs of Cracks</p>
<p>No visible signs of foundation cracks or damage was observed.</p>		
B. Shell	TERM Rating	Photo
<ul style="list-style-type: none"> <li><b>Superstructure / Structural Frame, Including Columns, Pillars, and Walls</b></li> </ul>	<p><b>2: Marginal</b></p>	 <p>Brick Soldier Course</p>
<p>The exterior masonry is in marginal condition. There are issues with the brick soldier course allowing moisture into the wall space. The cast stone roof cap also allows moisture into the wall assembly. These areas should be sealed or refaced with metal panels or new metal wall cap. Visible structural elements appear satisfactory.</p>		
<ul style="list-style-type: none"> <li><b>Wall Insulation</b></li> </ul>	<p><b>3: Adequate</b></p>	 <p>Masonry Wall Construction</p>
<p>2010 ASHRAE Standard R-11.4 Continuous Insulation. Original building consists of 8-inch CMU, 1-inch rigid insulation and 4-inch face brick. This assembly has an assumed R-value of 5.55. The 2010 addition exterior walls are constructed with 8-inch concrete block, 2-inch air space and 2-inch rigid insulation with 4-inch face brick. This assembly has an assumed insulation value of R-15 or better.</p>		

## Attachment 3.4 Facility Condition Rating Assessment




<ul style="list-style-type: none"> <li>• <b>Structure Combustibility</b></li> </ul>	<p><b>5: Excellent</b></p>	 <p style="text-align: center;">Steel Joist and Metal Deck Construction</p>
<p>The original 1977 building structure consists of non-combustible concrete block, concrete columns and concrete roof structure (Type IIA). The 2010 addition consists of concrete block walls, steel columns and steel roof joists.</p>		
<ul style="list-style-type: none"> <li>• <b>Roof: Roof Surface, Gutters, Eaves, Skylights, Chimney Surrounds</b></li> </ul>	<p><b>3: Adequate</b></p>	 <p style="text-align: center;">Ballasted Membrane Roof</p>
<p>The original building area roof is stone ballasted membrane installed in 2002 with an assumed warranty period of 25 years (expiring in 2027). The 2010 addition is a membrane roof with an assumed warranty period of 20 years (expiring in 2030).</p>		
<ul style="list-style-type: none"> <li>• <b>Roof Insulation</b></li> </ul>	<p><b>5: Excellent</b></p>	 <p style="text-align: center;">Roof of Bus Storage/Service/Administration</p>
<p>2010 ASHRAE Standard requires an R-20 value. The addition in 2010 and re-roof in 2002 is assumed to have a minimum of 4 inches of rigid insulation.</p>		

## Attachment 3.4 Facility Condition Rating Assessment




<ul style="list-style-type: none"> <li>• <b>Exterior: Windows, Doors, and All Finishes (Paint, Masonry)</b></li> </ul>	<p><b>4: Good</b></p>	 <p style="text-align: center;">Northeast Staff Entry</p>
<p>The 2010 addition was constructed with 1-inch insulated glass. A small number of older windows with original ¼ inch non-insulated glazing remain. 2010 addition exterior doors are aluminum with insulated glass and are satisfactory. A few remaining non-insulated, painted hollow metal doors are in borderline condition.</p>		
<ul style="list-style-type: none"> <li>• <b>Openings/Penetrations Are Properly Sealed</b></li> </ul>	<p><b>3: Adequate</b></p>	 <p style="text-align: center;">Peeling Wallpaper</p>
<p>No major openings, holes or penetrations were visible in the building envelope. Peeling paint and wallpaper are a good indication there is evidence of water infiltration in the wall assembly. See superstructure.</p>		
<ul style="list-style-type: none"> <li>• <b>Exterior Building and Site Signage</b></li> </ul>	<p><b>4: Good</b></p>	 <p style="text-align: center;">Front Signage</p>
<p>The building signage is provided on the north side, northwest and southwest corners. No signage is located on the east side of the building.</p>		







## Attachment 3.4 Facility Condition Rating Assessment

<ul style="list-style-type: none"> <li><b>Building Entrances</b></li> </ul>	<p><b>3: Adequate</b></p>	 <p style="text-align: center;">West Side Staff Entry</p>
<p>The entry on the northwest corner is visible from the parking lot. The board room entry is not as visible. Public entries have sufficient sheltered canopies. The staff entry on the west side is not sheltered. The staff entry on the northeast side near the picnic table is not sheltered. Entrances and exits are at grade. At areas of sloped walks, handrails are provided.</p>		
<ul style="list-style-type: none"> <li><b>Daylighting</b></li> </ul>	<p><b>3: Adequate</b></p>	 <p style="text-align: center;">Exterior Windows</p>
<p>Original building has poor daylighting. The 2010 addition has large windows, skylights with good daylighting.</p>		
<ul style="list-style-type: none"> <li><b>Overall Curb Appeal</b></li> </ul>	<p><b>4: Good</b></p>	 <p style="text-align: center;">Exterior Walls</p>
<p>The overall curb appeal is satisfactory. The 2010 addition is clean and contemporary. The remaining masonry exterior walls are satisfactory.</p>		



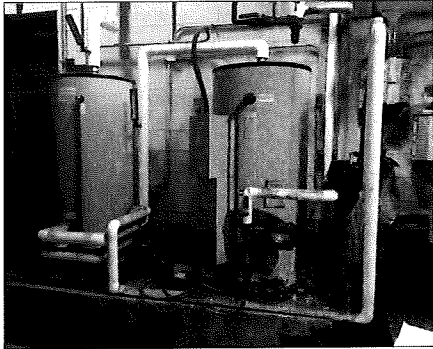
## Attachment 3.4 Facility Condition Rating Assessment

C. Interiors	TERM Rating	Photos
<ul style="list-style-type: none"> <li><b>Partitions: Walls, Interior Doors, Fittings, Signage</b></li> </ul>	<p><b>3: Adequate</b></p>	 <p style="text-align: center;">Old Door, Knob Type in Hardware</p>
<p>The conditions of walls, doors and hardware is adequate. The 2010 addition is satisfactory. There is evidence of peeling paint &amp; peeling wall covering on walls. The bus service area needs painting. The doors are a mix of new (2010) with proper lever type hardware and old with non-complaint knob type hardware.</p>		
<ul style="list-style-type: none"> <li><b>Finishes: Materials Used on Walls, Floors and Ceilings</b></li> </ul>	<p><b>4: Good</b></p>	 <p style="text-align: center;">Flooring Toilet Rooms</p>
<p>The condition of flooring and ceilings is good. The majority of the office area flooring was replaced in 2010. The flooring is in satisfactory condition. The majority of the office area ceilings were replaced in 2010. The ceilings are in satisfactory condition. The bus service area needs painting.</p>		
<ul style="list-style-type: none"> <li><b>Condition of Toilet Rooms</b></li> </ul>	<p><b>3: Adequate</b></p>	 <p style="text-align: center;">Service Tech Toilet Rooms</p>
<p>The addition and drivers lounge toilet rooms were constructed/remodeled in 2010 and are in satisfactory condition. Service technician locker rooms are in borderline condition. Unisex storage area toilet room is in poor condition.</p>		

## Attachment 3.4 Facility Condition Rating Assessment




<ul style="list-style-type: none"> <li>• <b>Condition of Kitchen Areas</b></li> </ul>	<p><b>4: Good</b></p>	 <p style="text-align: center;">Kitchen Area</p>
<p>Staff break room was added in 2010 and is in satisfactory condition. Drivers lounge area is in borderline condition.</p>		
<ul style="list-style-type: none"> <li>• <b>Condition of Casework</b></li> </ul>	<p><b>4: Good</b></p>	 <p style="text-align: center;">Casework</p>
<p>Building in casework appear to be satisfactory.</p>		
<ul style="list-style-type: none"> <li>• <b>Condition of Visual Displays</b></li> </ul>	<p><b>4: Good</b></p>	 <p style="text-align: center;">Television</p>
<p>Visual display boards, employee notice areas, tack boards and TV monitors appear satisfactory.</p>		
<ul style="list-style-type: none"> <li>• <b>Condition of Lockers</b></li> </ul>	<p><b>4: Good</b></p>	 <p style="text-align: center;">Staff Lockers</p>
<p>Lockers appear to be satisfactory</p>		

## Attachment 3.4 Facility Condition Rating Assessment

D. Plumbing	TERM Rating	Photos
<ul style="list-style-type: none"> <li><b>Fixtures</b></li> </ul>	<b>4: Good</b>	 <p style="text-align: center;">Plumbing Fixtures</p>
<p>The condition of plumbing fixtures are adequate for building occupancy.</p>		
<ul style="list-style-type: none"> <li><b>Barrier Free Toilet Rooms</b></li> </ul>	<b>4: Good</b>	 <p style="text-align: center;">Toilet Rooms</p>
<p>The toilet rooms are accessible. Toilet stalls do not contain a vertical grab bar (requirement added in 2012 Michigan Building Code adopted 9/1/2014)</p>		
<ul style="list-style-type: none"> <li><b>Water Distribution</b></li> </ul>	<b>3: Adequate</b>	 <p style="text-align: center;">Domestic Water Heating System</p>
<p>The condition of the internal water distribution system is adequate. The hot water recirculation line does not extend to showers.</p>		



## Attachment 3.4 Facility Condition Rating Assessment


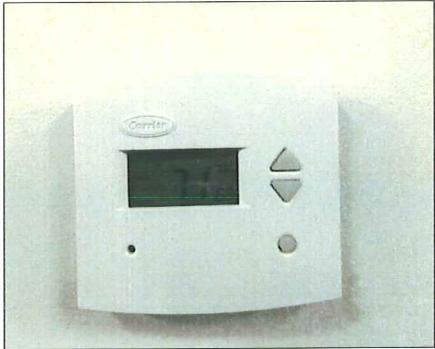

<ul style="list-style-type: none"> <li>Sanitary Waste</li> </ul>	<p><b>3: Adequate</b></p>	 <p style="text-align: center;">Condensate Drain Over Electrical Gear</p>
<p>The condition of the sanitary system is adequate. The condensate drain is directly above electrical gear and should be relocated.</p>		
<ul style="list-style-type: none"> <li>Rain Water Drainage</li> </ul>	<p><b>4: Good</b></p>	 <p style="text-align: center;">Rain Water Drainage</p>
<p>The condition of storm system is good. There were no issues raised or identified.</p>		
<p>E. HVAC</p>	<p>TERM Rating</p>	<p>Photos</p>
<ul style="list-style-type: none"> <li>Energy Supply</li> </ul>	<p><b>4: Good</b></p>	 <p style="text-align: center;">Office Area Air Handling Units</p>
<p>The condition of the heating source is good. It was installed in 2008 and there are 3 boilers, 2 typically run, 1800 MBH each. Revise boiler plant control to alternate use of all 3 boilers to equalize runtime.</p>		






## Attachment 3.4 Facility Condition Rating Assessment

<ul style="list-style-type: none"> <li>• <b>Cooling Source</b></li> </ul>	<p><b>3: Adequate</b></p>	<div data-bbox="911 262 1227 682" data-label="Image"> </div> <div data-bbox="980 688 1159 718" data-label="Caption"> <p>Cooling Source</p> </div>	
<p>The cooling system in the shop are nearing the end of their useful life and should be considered for replacement within 5 years. The compressors were replaced in 1990 however the runtime is low due to infrequent use.</p>	<ul style="list-style-type: none"> <li>• <b>Heating / Cooling Generation and Distribution Systems</b></li> </ul>	<p><b>3: Adequate</b></p>	<div data-bbox="854 1010 1284 1354" data-label="Image"> </div> <div data-bbox="964 1360 1175 1390" data-label="Caption"> <p>Make Up Air Unit</p> </div>
<p>The condition of the heating and cooling distribution system is adequate. The piping system is 39 years old. Heating for coin count room is inadequate. Some space heaters are used in the office area. Duct system has not been revised when walls have been moved.</p>	<ul style="list-style-type: none"> <li>• <b>Terminal Devices</b></li> </ul>	<p><b>3: Adequate</b></p>	<div data-bbox="854 1545 1284 1871" data-label="Image"> </div> <div data-bbox="992 1877 1143 1906" data-label="Caption"> <p>Unit Heaters</p> </div>
<p>Unit heaters in the garage area are nearing the end of their useful life (36 years old)</p>			


## Attachment 3.4 Facility Condition Rating Assessment

<ul style="list-style-type: none"> <li><b>Air Handling Equipment</b></li> </ul>	<p><b>2: Marginal</b></p>	 <p style="text-align: center;">Air Handling Equipment</p>
<p>The makeup air units and original exhaust fan have served their useful life and should be considered for replacement within 5 years.</p>		
<ul style="list-style-type: none"> <li><b>Testing, Balancing, Controls and Instrumentation</b></li> </ul>	<p><b>2: Marginal</b></p>	 <p style="text-align: center;">Thermostat Controls</p>
<p>The condition of the controls is marginal. The control of the original HVAC equipment in the shop and garage is manual. Temperature control in the office area is inadequate.</p>		
<ul style="list-style-type: none"> <li><b>Ventilation</b></li> </ul>	<p><b>2: Marginal</b></p>	 <p style="text-align: center;">Exhaust Fan</p>
<p>The indoor air quality in both the shop and garage is very poor. Select toilet room exhaust fans are not working. Ducts are dirty as evident from dust spots on the ceiling.</p>		

### Attachment 3.4 Facility Condition Rating Assessment



<ul style="list-style-type: none"> <li>• <b>Chimneys and Vents</b></li> </ul>	<p><b>4: Good</b></p>	 <p style="text-align: center;">Roof of Administrative Building</p>
<p>There are some plumbing vent stacks and HVAC vents which are in satisfactory condition.</p>		
<p>F. Fire Protection/Life Safety</p>	<p>TERM Rating</p>	<p>Photos</p>
<ul style="list-style-type: none"> <li>• <b>Sprinklers</b></li> </ul>	<p><b>5: Excellent</b></p>	 <p style="text-align: center;">Building is Fully Sprinkled</p>
<p>A fire sprinkler system is installed throughout the building.</p>		
<ul style="list-style-type: none"> <li>• <b>Fire Alarm</b></li> </ul>	<p><b>2: Marginal</b></p>	 <p style="text-align: center;">Wall Device</p>
<p>Fire alarm system is out of date in some areas, some spaces have all mounted strobes attached to ceiling, coverage could be examined.</p>		

### Attachment 3.4 Facility Condition Rating Assessment




<ul style="list-style-type: none"> <li>• <b>Security Access</b></li> </ul>	<b>3: Adequate</b>	<div style="text-align: center;">  <p>Security Camera</p> </div>
<p>Security control is provided at entry points. Overhead door entry is not secure. Suggest access to be added to overhead doors with vehicles tags.</p>		
<ul style="list-style-type: none"> <li>• <b>Card Access</b></li> </ul>	<b>4: Good</b>	<b>NEED A PHOTO</b>
<p>EPS monitored access system is installed</p>		
<ul style="list-style-type: none"> <li>• <b>Egress Stairways</b></li> </ul>	<b>5: Excellent</b>	<b>NEED A PHOTO</b>
<p>Exit stairways (mezzanine levels) is code compliant.</p>		






## Attachment 3.4 Facility Condition Rating Assessment

<ul style="list-style-type: none"> <li>• <b>Exit Door</b></li> </ul>	<b>5: Excellent</b>	 <p style="text-align: center;">Exit Door</p>
<p>Exit doors open outward and are provided with panic type hardware. Exiting is code compliant. Corridor egress routes are code compliant.</p>		
<ul style="list-style-type: none"> <li>• <b>Hydrants and Other Fire Protection Specialties</b></li> </ul>	<b>3: Adequate</b>	 <p style="text-align: center;">Fire Hydrant</p>
<p>The hydrants and other fire protection is satisfactory. The building is on the City of Kalamazoo water supply with adequate hydrant locations.</p>		
<b>G. Electrical</b>	<b>TERM Rating</b>	<b>Photos</b>
<ul style="list-style-type: none"> <li>• <b>Electrical Service &amp; Distribution</b></li> </ul>	<b>3: Adequate</b>	

## Attachment 3.4 Facility Condition Rating Assessment




<p>The conditions / capacity of the distribution and branch panels is adequate. The distribution and branch panels vary. There are original panels that could use cleaning and reworking, tightening of the covers, lack of surge protectors.</p>	 <p style="text-align: center;">Electrical Service</p>	
<ul style="list-style-type: none"> <li><b>Condition of Electrical Service</b></li> </ul>	<p><b>5: Excellent</b></p>	 <p style="text-align: center;">Square D Transformer</p>
<p>Facility substation consists of a new Square D 750 kVA 8320/480 dry type transformer serving a new main distribution panel, 1200A main with metering.</p>		
<ul style="list-style-type: none"> <li><b>Lighting &amp; Branch Wiring (Interior and Exterior)</b></li> </ul>	<p><b>3: Adequate</b></p>	 <p style="text-align: center;">Metal Halide Lighting</p>
<p>Lighting is primarily metal halide in the garage and workshop areas, mixture of different linear fluorescent and compact fluorescent in the office areas. Can be improved in aesthetics and energy utilization with LED fixtures.</p>		

## Attachment 3.4 Facility Condition Rating Assessment

<ul style="list-style-type: none"> <li>• <b>Lighting Controls Meet Energy Code</b></li> </ul>	<p><b>3: Adequate</b></p>	 <p style="text-align: center;">Lighting Controls</p>
<p>Some newly added or renovated spaces are provided with occupancy sensors to meet energy code. There are many areas (older office and other storage rooms, etc.) that have no automatic lighting control.</p>		
<ul style="list-style-type: none"> <li>• <b>Condition of Receptacles and Circuiting</b></li> </ul>	<p><b>3: Adequate</b></p>	 <p style="text-align: center;">Old Receptacle</p>
<p>There are worn and aging receptacles in areas that would be replaced in a renovation. Receptacles appear to meet code and should be replaced in the older parts of the building.</p>		
<ul style="list-style-type: none"> <li>• <b>Communications &amp; Security</b></li> </ul>	<p><b>3: Adequate</b></p>	 <p style="text-align: center;">Security Camera</p>
<p>A security camera system is installed. The camera and recording system is outdated. An update is recommended to IP WDR cameras</p>		






## Attachment 3.4 Facility Condition Rating Assessment




<ul style="list-style-type: none"> <li>• <b>Other Electrical System-Related Pieces Such as Lightning Protection, Generators, and Emergency Lighting</b></li> </ul>	<p><b>3: Adequate</b></p>	 <p style="text-align: center;">Security Lighting</p>
<p>Emergency lighting is provided and meets current egress requirements. Emergency lighting is provided with double head emergency battery packs. Any renovation would incorporate emergency into the normal light.</p>		
H. Site	TERM Rating	Photos
<ul style="list-style-type: none"> <li>• <b>General Site</b></li> </ul>	<p><b>4: Good</b></p>	 <p style="text-align: center;">Site Aerial</p>
<p>There is minimum area for expansion. The site is maximized. The site is stable with no signs of erosion. The site drains to the city streets. The street curb and gutters have areas of surface water ponding.</p>		
<ul style="list-style-type: none"> <li>• <b>Roadways/Driveways and Associated Signage, Markings, and Equipment</b></li> </ul>	<p><b>3: Adequate</b></p>	 <p style="text-align: center;">Bus Storage</p>
<p>The roadways and driveways as well as associated signage, markings and equipment are satisfactory.</p>		





## Attachment 3.4 Facility Condition Rating Assessment

<ul style="list-style-type: none"> <li><b>Vehicular Entrances and Exits</b></li> </ul>	<p><b>4: Good</b></p>	 <p style="text-align: center;">Entrance/Exit</p>
<p>The majority of the facility traffic is designed to pull through. There is minimal backup.</p>		
<ul style="list-style-type: none"> <li><b>Parking Lots and Associated Signage, Markings, and Equipment</b></li> </ul>	<p><b>3: Adequate</b></p>	 <p style="text-align: center;">Concrete Paving is Cracked</p>
<p>Vehicle concrete has cracks across large areas, but pavement is not spalling. Asphalt parking lot has cracking and some large settling cracks.</p>		
<ul style="list-style-type: none"> <li><b>On Site Parking</b></li> </ul>	<p><b>3: Adequate</b></p>	 <p style="text-align: center;">Parking Lot Across the Street</p>
<p>There is an approximate 50 car parking lot across the street that does not provide sufficient parking. Minimal parking adjacent to the building. Bollards are needed to protect the building.</p>		
<ul style="list-style-type: none"> <li><b>Barrier Free Parking</b></li> </ul>	<p><b>2: Marginal</b></p>	

## Attachment 3.4 Facility Condition Rating Assessment

<p>Barrier free is provided in the lot across the street. There are two accessible spaces of 49 non-accessible spaces provided. No barrier free parking is adjacent to the building. Accessible walks are excellent.</p>	 <p style="text-align: center;">Barrier Free Parking</p>	
<ul style="list-style-type: none"> <li>• <b>Pedestrian Areas and Associated Signage, Markings, and Equipment</b></li> </ul>	<p><b>3: Adequate</b></p>	 <p style="text-align: center;">Pedestrian Sidewalk</p>
<p>Paved surfaces include adequate sidewalks with crosswalks, curb cuts, etc. City streets contain cross walks at intersections. The west parking lot does not have a dedicated cross walk to the building entry. The separation of bus, car and pedestrian traffic is adequate for the safety of the occupants.</p>		
<ul style="list-style-type: none"> <li>• <b>Site Development Such as Fences, Walls, and Miscellaneous Structures</b></li> </ul>	<p><b>3: Adequate</b></p>	 <p style="text-align: center;">Picnic Table Area</p>
<p>Outdoor facilities are adequate. Picnic table area appears to be satisfactory.</p>		
<ul style="list-style-type: none"> <li>• <b>Landscaping and Irrigation</b></li> </ul>	<p><b>4: Good</b></p>	

## Attachment 3.4 Facility Condition Rating Assessment

<p>Landscaping is irrigated and appears to be well maintained.</p>	 <p style="text-align: center;">Landscaping</p>
<ul style="list-style-type: none"> <li>• <b>Site Utilities</b></li> </ul>	<p><b>3: Adequate</b></p>
<p>Water, sanitary and sewer is provided by the City of Kalamazoo. Natural gas distribution is provided by Consumers.</p>	 <p style="text-align: center;">Gas Service</p>





## Attachment 3.4 Facility Condition Rating Assessment

### Metro Transit Transportation Center

#### Building History

The Amtrak station in Kalamazoo was constructed in 1887 as a replacement for an 1873 structure. The red brick and sandstone station is in the Richardson Romanesque style, with heavy masonry wall, and a distinguished red-tiled hipped roof. Today, the depot serves as a focal piece of the Kalamazoo Transportation Center, and is Michigan's second busiest Amtrak station.

In 1975 the building was placed on the National Register of Historic Places. In 2004, the City embarked on a remodeling, restoration and building addition effort. The building today combines modern needs with the classic architectural style of the late 1800's. Historical elements, such as the original terrazzo lobby floors, fireplaces and cathedral ceilings were maintained to capture the atmosphere of an old European train station. The refurbished depot is accessible for passengers with disabilities and includes ticketing, administration offices, storage, and passenger amenities such as restrooms and vending machines. A sundry and snack shop is located at the west end.

Outside, a 27,000 square foot bus canopy was constructed and adapted to a historic design. Twenty bus slips for Metro Transit busses along with sixteen bus slips for Indian Trails and Greyhound busses are housed under the new canopy structure. An open and attractive pedestrian plaza creates a central common access to the transportation center's front door.



## Attachment 3.4 Facility Condition Rating Assessment

### Metro Transit Bus Garage: Building Data

**Building Name:** Transportation Center  
**Building Use:** Bus and train station  
**Building Data:** Original Construction: 1873  
 Add | Renovations: 1987 (roof), 2004 - 2006  
 Number of Floors: 1  
 Construction Type: VB  
 Fully Sprinkled: Yes  
 Building Area (sq. ft.): 12,600 Train Station  
 27,000 Bus canopy  
 Site Area (acres): ~2.86 Acres (site=2.5, parking=0.36)

**Types of Construction:**

Masonry     Steel Frame     Concrete     Wood  
 Other

**Exterior Surfacing:**

Brick     Metal     Stucco     Wood  
 Other     Precast Concrete

**Floor Construction:**

Structural Slab     Steel Joists     Slab on Grade     Wood Joists  
 Other

**Air Conditioning:**

Roof Top     Window Units     Central     Room Units

**Heating:**

Roof Top     Forced Air     Central     Room Units  
 Steam     Hot Water

**Electrical Service:**

Aerial     Underground     Primary     Secondary  
 Voltage: 208V     Phase: 3     Wire: 4

**Generator:**

Exists     Natural Gas     Diesel     None

## **Attachment 3.4 Facility Condition Rating Assessment**

### **Metro Transit Bus Garage: Facility Assessment Scoring**

**Site: Received a condition score of 68% identifying a “adequate” condition.**

Major concerns: Small site, poor drainage, borderline traffic flow and insufficient parking.

**Building Exterior Element: Received a condition score of 84% identifying a “good” condition.**

Major concerns: No major concerns noted.

**Accessibility: Received a condition score of 90% identifying a “good” condition.**

Major concerns: No on site barrier free parking.

**Structural: Received a condition score 71% identifying a “good” condition.**

Major concerns: Snow guards need to be replaced.

**Building Envelope: Received a condition score 78% identifying a “good” condition.**

Major concerns: No major concerns noted.

**Interior Finishes: Received a condition score 92% identifying an “excellent” condition.**

Major concerns: No major concerns noted.

**Life Safety and Security: Received a condition score of 83% identifying a “good” condition.**

Major concerns: Poor security access control & security camera coverage.

**Mechanical – HVAC: Received a condition score 66% identifying a “adequate” condition.**

Major concerns: Boilers are old, heat distribution is poor toilet room ventilation is borderline.

**Mechanical – Plumbing: Received a condition score 77% identifying a “good” condition.**




Major concerns: Storm system (see site) allows ponding water.

**Electrical: Received a condition score 83% identifying a “good” condition.**




Major concerns: Lighting controls are borderline.

## Attachment 3.4 Facility Condition Rating Assessment

### Metro Transit Transportation Center




A. Substructure		TERM Rating	Photos
<ul style="list-style-type: none"> <li><b>Foundation</b></li> </ul>	<b>4: Good</b>	 <p style="text-align: center;">Condition of the Visible Foundation</p>	
Condition of the visible foundations is satisfactory.			
<ul style="list-style-type: none"> <li><b>Basement</b></li> </ul>	<b>3: Adequate</b>	 <p style="text-align: center;">Basement</p>	
The basement area is congested and dirty. Some areas of the floor slab need to be replaced.			
B. Shell		TERM Rating	Photos
<ul style="list-style-type: none"> <li><b>Superstructure / Structural Frame Including Columns, Pillars, and Walls</b></li> </ul>	<b>4: Good</b>	 <p style="text-align: center;">Wood Framed Roof</p>	
The roof framing appears to be satisfactory. There is a section of the first-floor wood framing that needs to be replaced in the basement area.			
<ul style="list-style-type: none"> <li><b>Wall Insulation</b></li> </ul>	<b>3: Adequate</b>		

## Attachment 3.4 Facility Condition Rating Assessment




<p>2010 ASHRAE Standard R-11.4. Continuous insulation. Original building consists of interior drywall, metal studs (assumed batt insulation) 8-inch masonry and 4-inch face brick. This assembly has an assumed R-value of R-8.</p>	 <p style="text-align: center;">Insulation in Attic</p>	
<ul style="list-style-type: none"> <li>• <b>Structure Combustibility</b></li> </ul>	<p><b>3: Adequate</b></p>	 <p style="text-align: center;">Exterior Masonry and Stone Bearing Walls</p>
<p>The structure is wood framed roof and floor construction with masonry exterior bearing walls.</p>		
<ul style="list-style-type: none"> <li>• <b>Roof: Roof Surface, Gutters, Eaves, Skylights, Chimney Surrounds</b></li> </ul>	<p><b>4: Good</b></p>	 <p style="text-align: center;">Discoloration on Slate Roof</p>
<p>Good slate roof restored in 1987. There is evidence of some discoloration and staining that should be cleaned. The bus canopy has a metal panel roof system. The existing snow guards need to be replaced. There is some rubber roof membrane installed in 2006 that is in good condition.</p>		
<ul style="list-style-type: none"> <li>• <b>Roof Insulation</b></li> </ul>	<p><b>3: Adequate</b></p>	





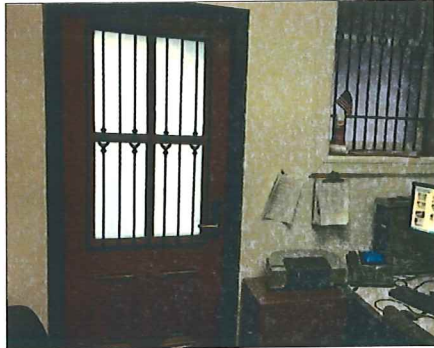
## Attachment 3.4 Facility Condition Rating Assessment

<p>The attic space contains batt insulation. The installation is messy and random at approximately 10 inches thick with an assumed R value of R-35. The attic space is used for equipment and sprinkler protection. The insulation layer should be at the underside of the roof deck.</p>	 <p style="text-align: center;">Wood Framed Roof</p>
<ul style="list-style-type: none"> <li>Exterior: Windows, Doors, and All Finishes (paint, masonry)</li> </ul>	<p style="text-align: center;"><b>4: Good</b></p>
<p>The exterior masonry and stone is in satisfactory condition. There are some areas that need to be cleaned. The existing wood overhangs and soffits require continual maintenance and painting.</p>	 <p style="text-align: center;">Exterior Masonry</p>
<ul style="list-style-type: none"> <li>Openings/Penetrations Are Properly Sealed</li> </ul>	<p style="text-align: center;"><b>5: Excellent</b></p>
<p>No major openings, holes or penetrations were visible in the building envelope.</p>	 <p style="text-align: center;">Building Envelope</p>

## Attachment 3.4 Facility Condition Rating Assessment




<ul style="list-style-type: none"> <li>• <b>Exterior Building and Site Signage</b></li> </ul>	<b>3: Adequate</b>	 <p style="text-align: center;">Site Signage</p>	
<p>“Welcome to Kalamazoo” sign, track side seems a little celebratory. Directional signage is adequate. Transportation Center monument signs at each corner need new letters and lighting.</p>		<ul style="list-style-type: none"> <li>• <b>Building Entrances</b></li> </ul> <p>The entrances have good coverage over the bus area. The train station has good coverage at the main entries. There is no cover “track side”-passengers can stay inside.</p>	 <p style="text-align: center;">Coverage Over Bus Area</p>
<ul style="list-style-type: none"> <li>• <b>Daylighting</b></li> </ul>	<b>10: Excellent</b>	 <p style="text-align: center;">Large Windows for Natural Daylighting</p>	
<p>The building has large windows on the north and south sides with an abundance of daylighting.</p>			

## Attachment 3.4 Facility Condition Rating Assessment




<ul style="list-style-type: none"> <li>• <b>Shell Appurtenances: Balconies, Fire Escapes, Gutters, Downspouts</b></li> </ul>	<b>4: Good</b>	 <p style="text-align: center;">Downspout on Transportation Center</p>
<p>The gutters and downspouts are in good shape however the downspouts create ponding on the walkways.</p>		
<ul style="list-style-type: none"> <li>• <b>Overall Curb Appeal</b></li> </ul>	<b>5: Excellent</b>	 <p style="text-align: center;">Beautiful Facility</p>
<p>It is beautiful, iconic, historic facility.</p>		
C. Interiors	TERM Rating	Photos
<ul style="list-style-type: none"> <li>• <b>Partitions: Walls, Interior Doors, Fittings, Signage</b></li> </ul>	<b>5: Excellent</b>	 <p style="text-align: center;">Wood Doors</p>
<p>The walls are in satisfactory condition. The restored fire places are excellent. The wood paneling is excellent. The wood doors are in satisfactory condition. The hardware is the proper lever type.</p>		






## Attachment 3.4 Facility Condition Rating Assessment

<ul style="list-style-type: none"> <li><b>Stairs: Interior Stairs and Landings</b></li> </ul>	<p><b>3: Adequate</b></p>	 <p style="text-align: center;"><b>Basement Stairs</b></p>
<p>The stairs are for basement and attic access for mechanical purposes only.</p>		
<ul style="list-style-type: none"> <li><b>Finishes: Materials Used on Walls, Floors and Ceilings</b></li> </ul>	<p><b>4: Good</b></p>	 <p style="text-align: center;"><b>Wood Ceiling</b></p>
<p>The ceilings were restored/remodeled in 2006 and are in satisfactory condition. The wood ceiling in the waiting area is beautiful. The flooring was restored/remodeled in 2006 and is in satisfactory condition. The restored terrazzo flooring is satisfactory.</p>		
<p>D. Plumbing</p>	<p>TERM Rating</p>	<p>Photos</p>
<ul style="list-style-type: none"> <li><b>Condition of Toilet Rooms</b></li> </ul>	<p><b>4: Good</b></p>	 <p style="text-align: center;"><b>Toilet Rooms</b></p>
<p>Toilet rooms were remodeled in 2006 and are in satisfactory condition. There are some signs of damage due to vandalism on the toilet partitions.</p>		




## Attachment 3.4 Facility Condition Rating Assessment

<ul style="list-style-type: none"> <li>• <b>Condition of Kitchen Areas</b></li> </ul>	<p><b>4: Good</b></p>	 <p style="text-align: center;">Kitchen Area</p>
<p>The kitchen area in the café contains 3-compartment sink for cleaning and disinfecting. The area is in satisfactory condition.</p>		
<ul style="list-style-type: none"> <li>• <b>Condition of Casework</b></li> </ul>	<p><b>4: Good</b></p>	 <p style="text-align: center;">Casework and Countertops</p>
<p>The casework, countertops and other built in items are satisfactory.</p>		
<ul style="list-style-type: none"> <li>• <b>Condition of Visual Displays</b></li> </ul>	<p><b>5: Excellent</b></p>	 <p style="text-align: center;">Visual Displays</p>
<p>The visual displays, room signage, way finding signage is excellent.</p>		

## Attachment 3.4 Facility Condition Rating Assessment


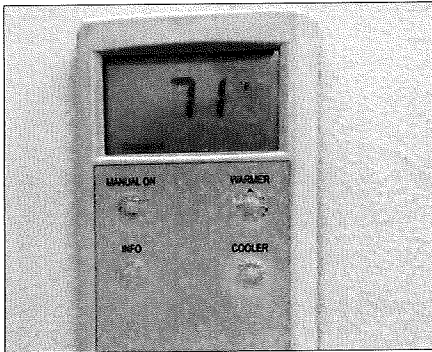
<ul style="list-style-type: none"> <li>• <b>Fixtures</b></li> </ul>	<p><b>4: Good</b></p>	 <p style="text-align: center;">Plumbing Fixtures</p>
<p>The plumbing fixtures are adequate for building occupancy. The sanitary line is undersized. Consider replacing the sanitary line during the next major renovation.</p>		
<ul style="list-style-type: none"> <li>• <b>Barrier Free Toilet Rooms</b></li> </ul>	<p><b>4: Good</b></p>	 <p style="text-align: center;">Accessible Toilets</p>
<p>The toilet rooms are accessible. The toilet stalls do not contain a vertical grab bar (requirement add in 2012 Michigan Building Code adopted 9/1/2014).</p>		
<ul style="list-style-type: none"> <li>• <b>Water Distribution</b></li> </ul>	<p><b>4: Good</b></p>	 <p style="text-align: center;">Water Distribution</p>
<p>The condition of the internal water distribution is satisfactory. No issues raised or identified.</p>		

## Attachment 3.4 Facility Condition Rating Assessment

<ul style="list-style-type: none"> <li>Sanitary Waste</li> </ul>	<p><b>4: Good</b></p>	 <p style="text-align: center;">Public Toilet Room</p>
<p>The condition of the sanitary waste is satisfactory. No issues raised or identified.</p>		
<ul style="list-style-type: none"> <li>Rain Water Drainage</li> </ul>	<p><b>2: Marginal</b></p>	 <p style="text-align: center;">Gutter and Downspouts</p>
<p>Downspouts create nuisance puddles in the pedestrian traffic area.</p>		
<p>E. HVAC</p>	<p>TERM Rating</p>	<p>Photos</p>
<ul style="list-style-type: none"> <li>Energy Supply</li> </ul>	<p><b>2: Marginal</b></p>	 <p style="text-align: center;">Aged Heating Boilers</p>
<p>The boilers are aged. Poor gas pressure and flow rate. Cannot run all three boilers at one time.</p>		





## Attachment 3.4 Facility Condition Rating Assessment




<ul style="list-style-type: none"> <li>• <b>Cooling Source</b></li> </ul>	<p><b>4: Good</b></p>	<div style="text-align: center;">  <p><b>Cooling Condenser</b></p> </div>
<p>No issues raised or identified.</p>		
<ul style="list-style-type: none"> <li>• <b>Heating / Cooling Generation and Distribution Systems</b></li> </ul>	<p><b>2: Marginal</b></p>	
<p>The main lobby is cold/hot when passengers are entering and exiting the building. Radiant heat is not keeping up with the load at the east end. Some radiant panels are running wild. Storage room behind vending is cold (west end).</p>		
<ul style="list-style-type: none"> <li>• <b>Testing, Balancing, Controls and Instrumentation</b></li> </ul>	<p><b>3: Adequate</b></p>	<div style="text-align: center;">  <p><b>Thermostat Controls</b></p> </div>
<p>The controls need revisions to meet set points. Consider energy saving controls for snowmelt system.</p>		






### Attachment 3.4 Facility Condition Rating Assessment

<ul style="list-style-type: none"> <li>Terminal Devices</li> </ul>	<b>3: Adequate</b>	<p style="text-align: center;"><b>NEED PICTURE</b></p>
<p>The condition is acceptable. Many are not maintaining space temperature.</p>		
<ul style="list-style-type: none"> <li>Air Handling Equipment</li> </ul>	<b>4: Good</b>	<p style="text-align: center;"><b>NEED PICTURE</b></p>
<p>New in 2004</p>		
<ul style="list-style-type: none"> <li>Ventilation</li> </ul>	<b>3: Adequate</b>	<div style="text-align: center;">  <p>Ventilation</p> </div>
<p>Poor ventilation and air distribution in main toilet rooms.</p>		
<ul style="list-style-type: none"> <li>Chimney and Vents</li> </ul>	<b>4: Good</b>	<div style="text-align: center;">  <p>Chimney</p> </div>
<p>There are some plumbing vent stacks and HVAC vents which are in satisfactory condition.</p>		


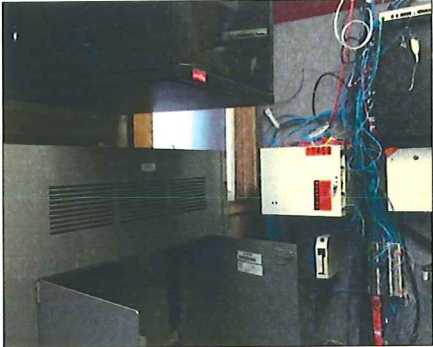
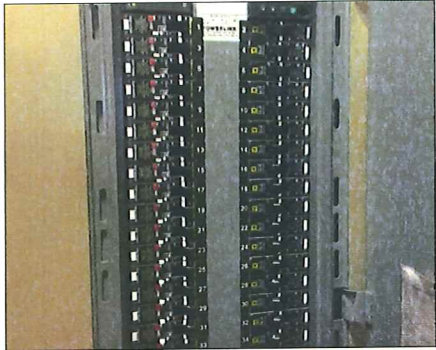
## Attachment 3.4 Facility Condition Rating Assessment

F. Fire Protection/ Life Safety	TERM Rating	Photos
<ul style="list-style-type: none"> <li>• <b>Sprinklers</b></li> </ul>	<b>5: Excellent</b>	 <p style="text-align: center;">Sprinklers</p>
<p>The building is fully sprinkled.</p>		
<ul style="list-style-type: none"> <li>• <b>Fire Alarm</b></li> </ul>	<b>4: Good</b>	 <p style="text-align: center;">Fire Alarm</p>
<p>Noticed a few power supplies that need to be on dedicated circuits.</p>		
<ul style="list-style-type: none"> <li>• <b>Security Access</b></li> </ul>	<b>2: Marginal</b>	 <p style="text-align: center;">Security Camera</p>
<p>There is a system in place but it is outdated. Recommend an update to IP using wide dynamic range cameras and network recording device.</p>		

## Attachment 3.4 Facility Condition Rating Assessment

<ul style="list-style-type: none"> <li>• <b>Card Access</b></li> </ul>	<p><b>4: Good</b></p>	<div style="text-align: center;">  <p style="text-align: center;">Security Panel</p> </div>
<p>A card access is provided. Office areas, Consumer's service, Amtrak area and the concessions area are accessed by manual key.</p>		
<ul style="list-style-type: none"> <li>• <b>Egress Stairway</b></li> </ul>	<p><b>10: Excellent</b></p>	<div style="text-align: center;">  <p style="text-align: center;">Spiral Stair For Mechanical Room</p> </div>
<p>Egress stairway from the mechanical attic is compliant.</p>		
<ul style="list-style-type: none"> <li>• <b>Exit Door</b></li> </ul>	<p><b>5: Excellent</b></p>	<div style="text-align: center;">  <p style="text-align: center;">Exit Door</p> </div>
<p>Exit doors are code compliant.</p>		

## Attachment 3.4 Facility Condition Rating Assessment




<ul style="list-style-type: none"> <li>Hydrants and Other Fire Protection Specialties</li> </ul>	<b>3: Adequate</b>	 <p style="text-align: center;">Fire Hydrant</p>
<p>The hydrants and other fire protection is satisfactory. The building is on the City of Kalamazoo water supply with adequate hydrant locations.</p>		
G. Electrical	TERM Rating	Photos
<ul style="list-style-type: none"> <li>Electrical Service &amp; Distribution</li> </ul>	<b>4: Good</b>	 <p style="text-align: center;">Electrical Service</p>
<p>The distribution and branch panels are in great condition. There were a couple of panels that were not updated that could use replacement.</p>		
<ul style="list-style-type: none"> <li>Condition of Electrical Service</li> </ul>	<b>5: Excellent</b>	 <p style="text-align: center;">Electrical Panel</p>
<p>The electrical was renovated in the 2004-2006 renovation. The service is fed from a Consumers pad mount transformer serving a 1200A 208V main panel. The panel is equipped with metering and surge protection.</p>		






## Attachment 3.4 Facility Condition Rating Assessment

<ul style="list-style-type: none"> <li>• <b>Lighting &amp; Branch Wiring (interior and exterior)</b></li> </ul>	<p><b>4: Good</b></p>	<div data-bbox="945 262 1209 604" data-label="Image"> </div> <p data-bbox="954 613 1203 642" style="text-align: center;">Lights in Main Lobby</p>
<p>Lighting was renovated in 2005 with the building renovation. The light fixtures are not the most energy efficient to today's standards, however, they have appropriate historic aesthetic. Emergency lighting is provided and meets current egress requirements.</p>		
<ul style="list-style-type: none"> <li>• <b>Lighting Controls Meet Energy Code</b></li> </ul>	<p><b>3: Adequate</b></p>	<div data-bbox="922 835 1239 1255" data-label="Image"> </div> <p data-bbox="987 1264 1174 1293" style="text-align: center;">Interior Lighting</p>
<p>The time of day / photo controls are utilized for the exterior lighting, interior spaces are provided with some sensors, although not all areas are controlled as required by code.</p>		
<ul style="list-style-type: none"> <li>• <b>Condition of Receptacles and Circuiting</b></li> </ul>	<p><b>5: Excellent</b></p>	<div data-bbox="950 1360 1214 1707" data-label="Image"> </div> <p data-bbox="1015 1715 1149 1745" style="text-align: center;">Receptacle</p>
<p>The receptacles were generally replaced in the building renovation and are in good condition.</p>		

## Attachment 3.4 Facility Condition Rating Assessment




<ul style="list-style-type: none"> <li><b>Communications &amp; Security</b></li> </ul>	<p><b>4: Good</b></p>	 <p style="text-align: center;">Security Camera</p>	
<p>The facility is a public building. Access points are not secured. They can be monitored by staff. Suggest account control be added to the storage area.</p>	<ul style="list-style-type: none"> <li><b>Other Electrical System-Related Pieces Such As Lightning Protection, Generators, and Emergency Power</b></li> </ul>	<p><b>4: Good</b></p>  <p style="text-align: center;">Exit Sign</p>	
<p>This building does not have an emergency generator system supplying backup power.</p>	<p>H. Site</p>	<p>TERM Rating</p>	<p>Photos</p>
<ul style="list-style-type: none"> <li><b>General Site</b></li> </ul>	<p><b>2: Marginal</b></p>	 <p style="text-align: center;">Site</p>	
<p>The site is very small and there is lots of activity taking place in one location. No room for growth.</p>			

## Attachment 3.4 Facility Condition Rating Assessment

<ul style="list-style-type: none"> <li><b>Roadways/Driveways and Associated Signage, Markings, and Equipment</b></li> </ul>	<p><b>3:</b> <b>Adequate</b></p>	 <p style="text-align: center;">Uneven Brick Pavers</p>
<p>Some minor cracks in vehicle concrete. Some minor un even brick pavers.</p>		
<ul style="list-style-type: none"> <li><b>Vehicular Entrances and Exits</b></li> </ul>	<p><b>3:</b> <b>Adequate</b></p>	 <p style="text-align: center;">Site</p>
<p>The busses back out of the loading parking spaces. The bus entrance is very near the intersection at Kalamazoo Ave.</p>		
<ul style="list-style-type: none"> <li><b>Parking Lots and Associated Signage, Markings, and Equipment</b></li> </ul>	<p><b>4:</b> <b>Good</b></p>	 <p style="text-align: center;">Parking Across the Street</p>
<p>No onsite parking is available. There are two loops for drop-off and pick-up only. Parking is available across the street, at meters or at other City locations. Parking lots has cracking is asphalt.</p>		





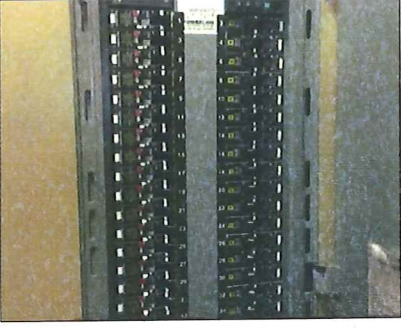
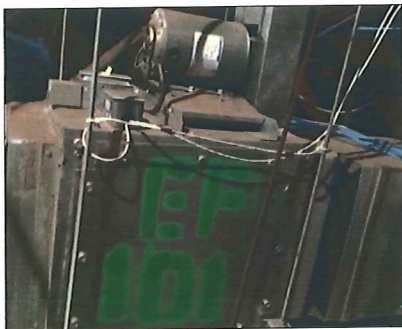
## Attachment 3.4 Facility Condition Rating Assessment

<ul style="list-style-type: none"> <li>• <b>Barrier Free Parking</b></li> </ul>	<p><b>3: Adequate</b></p>	 <p style="text-align: center;">Barrier Free Parking</p>
<p>Barrier Free spaces provided in parking is provided along the curb and the lot across Rose Street but there isn't a direct cross walk. Pedestrians have to walk to Kalamazoo Avenue intersection to cross.</p>		<ul style="list-style-type: none"> <li>• <b>Pedestrian Areas and Associated Signage, Markings, and Equipment</b></li> </ul>
<p>No striped crosswalk to parking area across Park Street. City curb cuts are satisfactory.</p>	<p><b>4: Good</b></p>	 <p style="text-align: center;">Entry Plaza</p>
<ul style="list-style-type: none"> <li>• <b>Site Development Such as Fences, Walls, and Miscellaneous Structures</b></li> </ul>	<p><b>5: Excellent</b></p>	 <p style="text-align: center;">Fence Along Bus Canopy</p>
		<p>The plaza area between the bus loading is open and attractive complete with benches for sitting and gathering.</p>



## Attachment 3.4 Facility Condition Rating Assessment

<ul style="list-style-type: none"> <li>• <b>Landscaping and Irrigation</b></li> </ul>	<p><b>5: Excellent</b></p>	 <p style="text-align: center;">Areas of Landscaping</p>
<p>Landscaping is irrigated and appears to be well maintained.</p>		
<ul style="list-style-type: none"> <li>• <b>Site Utilities</b></li> </ul>	<p><b>3: Adequate</b></p>	 <p style="text-align: center;">Gas Service</p>
<p>Water, sanitary and sewer is provided by the City of Kalamazoo. Natural gas distribution is provided by Consumers.</p>		



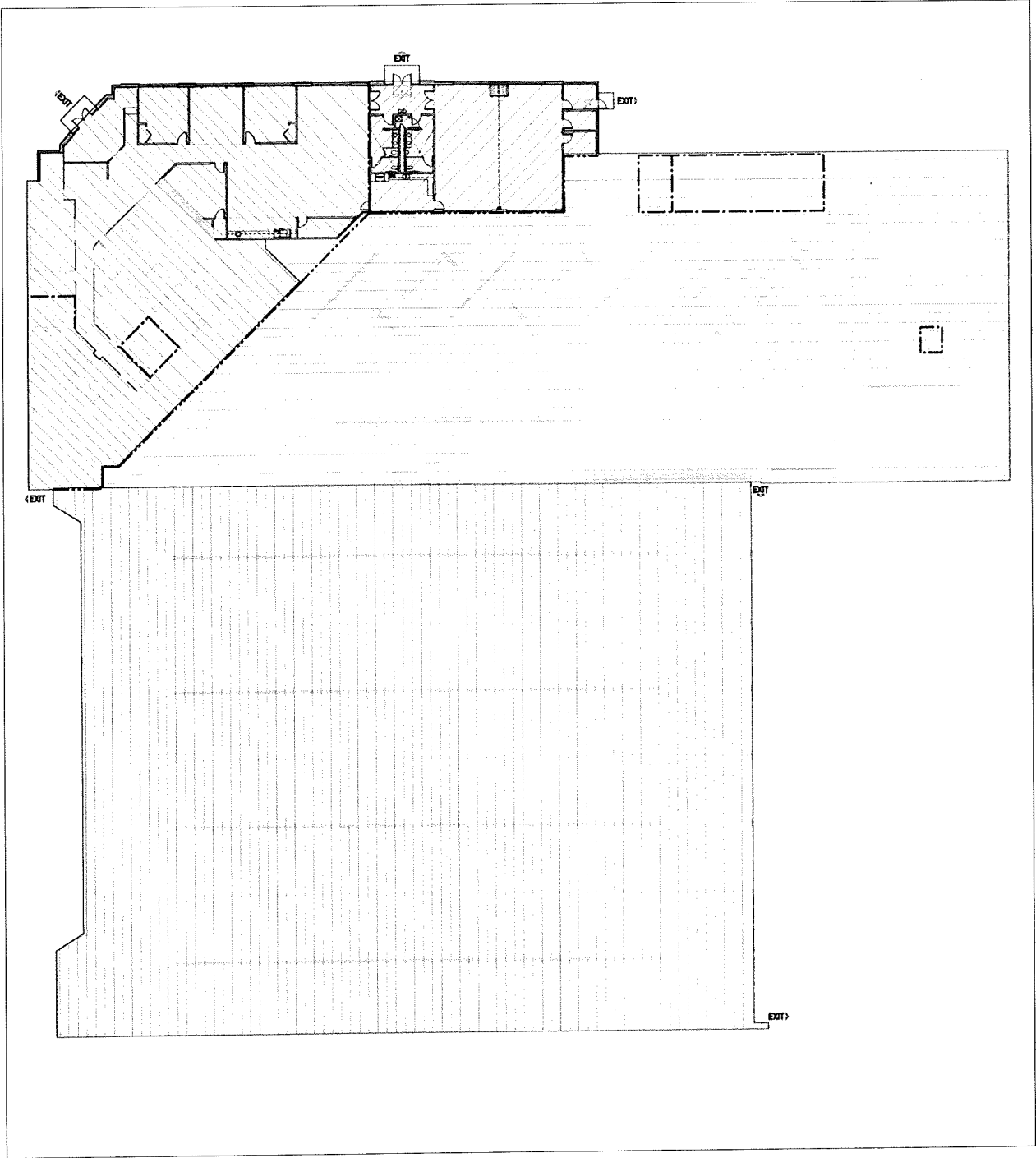
**Attachment 3.4  
Facility Condition Rating Assessment**

**Metro Transit: Campus Site Aerial**



**Attachment 3.4  
Facility Condition Rating Assessment**

**Metro Transit: Floor Plan**





**Attachment 3.4  
Facility Condition Rating Assessment**

**Metro Transit: Floor Plan**

