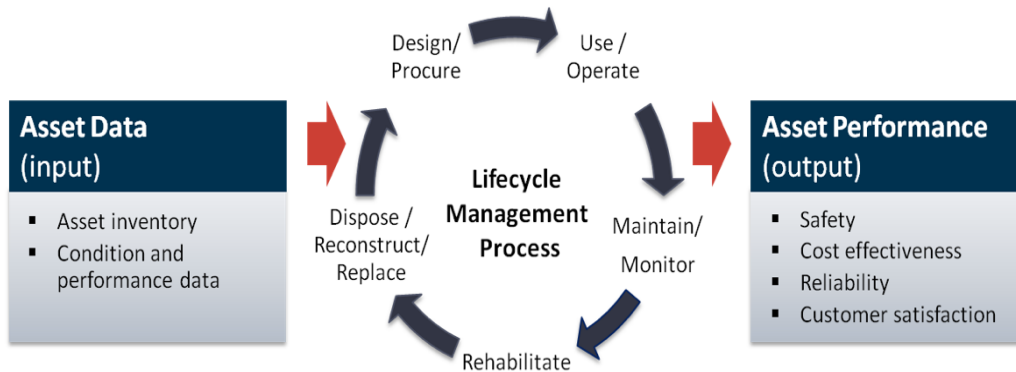




# TRANSIT ASSET MANAGEMENT

Federal Transit Administration

## Group TAM Plan for Section 5311 and recipients in Missouri



Sponsored by MoDOT – Transit

Missouri Department of Transportation

OCTOBER 2022

# Transit Asset Management

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# ***Transit Asset Management***

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## **ACRONYMS:**

FAST – Fixing America’s Surface Transportation Act

FTA – Federal Transit Administration

MAP-21 - Moving Ahead for Progress in the 21st Century Act

MoDOT – Missouri Department of Transportation

MPO – Metropolitan Planning Organization

NTD – National Transit Data

SGR – State of Good Repair

STIP - State Transportation Improvement Plan

TAM – Transit Asset Management

TERM – Transit Economic Requirements Model (Rating Scale - Analytical Tool)

ULB – Useful Life Benchmark

# Transit Asset Management

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## INTRODUCTION

Pursuant to 49 U.S.C. 5301 et seq., the Missouri Department of Transportation (MoDOT) is the designated recipient and the agency responsible for administering the Federal Transit Administration (FTA) Sections 5304, 5310, 5311, and 5339 formula grant programs for areas outside of Missouri's large, urbanized areas. MoDOT – Transit is responsible for ensuring the fair and equitable distribution of FTA funds; announcing the program and availability of funds; developing a process to solicit, review, and approve eligible funding sources; providing management and technical assistance to applicants and grantees; administering and monitoring contracts; and ensuring compliance with federal requirements by all subrecipients.

MoDOT is committed to a safe, mobility focused public transportation program throughout Missouri that promotes economic growth and opportunity for all of Missouri's citizens. Public transportation is a vital part of Missouri's multimodal transportation system. It is a transportation option that relieves congestion, helps maximize capacity on roadways, improves air quality, reduces fuel consumption and connects people of all ages and abilities with their surrounding communities. Maintaining a transit fleet in a state of good repair is critical to providing a safe, reliable and comfortable environment for operators and the traveling public.

The Moving Ahead for Progress in the 21st Century Act (MAP-21) required the Secretary of Transportation to develop rules to establish a system to monitor and manage public transportation assets to improve safety and increase reliability and performance, and to establish performance measures, and the Fixing America's Surface Transportation (FAST) Act reaffirmed this requirement. On July 26, 2016, FTA published the Transit Asset Management (TAM) Final Rule.

The TAM final rule groups providers into two classifications:

- **Tier I:** Providers own, operate, or manage rail, more than 100 vehicles across all fixed-route modes, or more than 100 vehicles in one non-fixed route mode.
- **Tier II:** Providers are subrecipients of 5311 funds, or an American Indian Tribe, or own, operate, or manage less than 101 vehicles across all fixed route modes, or less than 101 vehicles in one non-fixed route mode.

Tier I providers must develop and carry out their own TAM plans. Tier II providers may develop their own plans or participate in a Group Plan, which is compiled by a Group Plan Sponsor (generally the State DOT or designated §5310 recipient). Tier II §5307 sub-recipients are not required to be offered a Group Plan but may participate if a Sponsor invites them. Each Transit Provider must designate an Accountable Executive to ensure that the necessary resources are available to carry out the TAM plan, regardless of whether it develops its own TAM Plan or participates in a Group Plan – MoDOT – Transit's Sponsored Group TAM Plan.

# Transit Asset Management

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## Transit Providers

### Tier I

- Individual Plans
  - Metro Bi State – (St. Louis area)
  - Kansas City Area Transportation Authority (KCATA), including City of Lee’s Summit
  - KC Streetcar – (Kansas City)

### Tier II

- Individual Plans
  - City of Joplin
  - City of St. Joseph
- MoDOT – Transit’s Sponsored Group TAM Plan
  - Cape Girardeau County Transit Authority
  - City of Columbia
  - City of Jefferson
  - City Utilities – Springfield
  - Section 5311 Subrecipients

In the 2022 MoDOT Transit’s Sponsored Group Transit Asset Management (TAM) Plan, there are 26 public transportation providers. These public transit providers operate a statewide fleet of 1,067 vehicles and provide more than three million passenger trips annually.

Public transportation providers assist the public, the elderly, individuals with disabilities, and low-income citizens to gain access to needed medical, nutrition, education, employment, and social services.

Participants choosing to opt-out of Group TAM Plans must notify MoDOT Transit Division no later than 12 months prior to the next TAM plan due date.

MoDOT’ – Transit’s Sponsored Group TAM Plan will be updated every four years.

## Transit Asset Management (TAM) and State of Good Repair Policy (SGR)

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

## Transit Asset Management Plan

The purpose of the MoDOT – Transit’s Sponsored Group TAM Plan is to aid the Transit Section in achieving and maintaining an SGR of transits assets designated in the State of Missouri. SGR is the condition in which a capital assist is able to operate at a full level of performance. This means the asset:

# Transit Asset Management

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1. Is able to perform its designed function
2. Does not pose a known unacceptable safety risk
3. Lifecycle investments have been met or recovered

The TAM final rule requires every transit provider that receives federal financial assistance under 49 U.S.C. Chapter 53 to develop a TAM plan or be part of a Group TAM Plan prepared by a sponsor (MoDOT - Transit). All TAM plans must contain four major components:

**Asset Inventory:** A register (comprehensive list) of agency's assets and specific information about those assets. The inventory is broken into four categories: Equipment, Rolling Stock, Facilities (maintenance and administration), and Infrastructure.

**Condition Assessment:** The process of assessing and documenting the condition or residual life of an asset. This process provides an overall assessment of equipment, maintenance, and administration facilities.

**Management Approach – Decision Support Tools:** An analytic process or methodology to help prioritize projects to improve and maintain the State of Good Repair of capital assets, based on available condition data, objective criteria, and financial needs for asset investments over time.

**Investment Prioritization:** A transit provider's ranking of capital projects or programs to achieve or maintain a SGR based on financial resources from all sources a transit provider reasonably anticipates will be available over the TAM Plan period. This section includes but is not limited to performance measures, targets, and proposed investments.

## **MoDOT – Transit's Sponsored Group TAM Plan - Participating Agencies and Accountable Executives**

In compliance with 49 C.F.R. Part 625 Subpart C, each transit provider participating in the MoDOT - Transit's Group TAM Plan has designated an Accountable Executive. An Accountable Executive is a singled, identifiable individual within a transit agency who will have direct responsibility over the resources to participate in the MoDOT – Transit's Group TAM Plan. Each agency participating in the Group Sponsored TAM Plan will provide a written statement of participation from their designated Accountable Executive. The following is a list of participating agencies and the Accountable Executive.

## **Transit Asset Management**

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### **Participating Agencies and the Accountable Executive**

<b>Agency Name</b>	<b>Accountable Executive</b>
Cape Girardeau County Transit Authority (small urban 5307 recipient)	Tom Mogelnicki
City of Bloomfield (5311 subrecipient)	Laranda Stanley
City of Carthage (5311 subrecipient)	Stg. Heather Wolfe
City of Clinton (5311 subrecipient)	Chuck Bailey
City of Columbia (small urban 5307 recipient)	Shannon Hemenway
City of El Dorado Springs (5311 subrecipient)	Lisa Allison
City of Excelsior Springs (5311 subrecipient)	Chad Birdsong
City of Houston (5311 subrecipient)	Heather Sponsler
City of Jefferson (small urban 5307 subrecipient)	Mark Mehmert
City of Lamar (5311 subrecipient)	Tiffany Triebel
City of Mt. Vernon (5311 subrecipient)	Shari Weldy
City of Nevada (5311 subrecipient)	Mark Mitchell
City of New Madrid (5311 subrecipient)	Richard McGill
City of West Plains (5311 subrecipient)	Mike Farrell
City Utilities of Springfield (large urban 5307 recipient)	Matthew Crawford
Dunklin County Transit Service, Inc. (5311 subrecipient)	Katrina Hodges
Licking Bridge Builders, Inc. (5311 subrecipient)	Cynthia Wampner
Macon Area Chamber of Commerce (5311 subrecipient)	Sharon Scott
Mississippi County Transit System (5311 subrecipient)	Samantha Jones
New Bourbon Port Authority (5311 subrecipient)	Margaret Yates
OATS, Inc. (5311 subrecipient)	Dorothy Yeager
Ray County Transportation, Inc. (5311 subrecipient)	Janine Clampitt
Ripley County Transit, Inc. (5311 subrecipient)	Laura Oldham
Scott County Transit System, Inc. (5311 subrecipient)	Marilyn Schollosser
SERVE, Inc. (5311 subrecipient)	Courtney Harrison
Southeast Missouri Transportation Service, Inc. (SMTS) (5311 subrecipient)	Ginny Smith
Southeast Missouri State University (old 5309 subrecipient)	Beth Glaus

### **Chapter 1: Asset Inventory**

The Asset Inventory is a register of capital assets from agencies that are participating in the MoDOT- Transit Sponsored Group TAM Plan. The inventory includes all assets for which a provider has direct or shared responsibility used in the provision of public transportation. There are four categories of assets: Equipment, Rolling Stock, Facilities, and Infrastructure.

Although these categories are used for Asset Inventory and Condition Assessment, not all participants will have assets in every category.

# Transit Asset Management

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**Equipment:** Classified as non-revenue support-service vehicles. The threshold for equipment is in the amount of \$50,000 at the time purchase. Currently, there is no equipment more than \$50,000 and therefore, requirements for performance measures will not apply to this Sponsored Group TAM Plan.

**Rolling Stock:** Classified as revenue vehicles for public transportation. There are six asset classes: automobiles, buses, cutaways, minivans, vans, and ferry boats.

**Facilities:** Maintenance and administration facilities in which an agency has a direct or shared capital responsibility.

**Infrastructure:** Tier II agencies will have no infrastructure assets. Therefore, the infrastructure requirements and performance measure will not apply to this Sponsored Group TAM Plan.

## Asset Inventory Summary

Asset Category/Class	# of Units
Rolling Stock	1,170
Facilities	38

Appendix "A" Vehicle Inventory Summary / Benchmark Useful Life

Appendix "B" Facility Inventory / Asset Condition Data (Term Scale Rating)

## Chapter 2: Condition Assessment

The Condition Assessment is the process of assessing and documenting the condition or residual life of an asset. This provides an overall condition of equipment, rolling stock, and facilities for which a provider has direct or shared responsibility. The condition assessment generates information at a level of detail to monitor capital assets.

MoDOT – Transit utilizes the following templates provided by FTA:

- TAM Plan Template (includes a group plan)
- FTA’s standards for determining Useful Life Benchmark (ULB)
- TAM Facility Performance Measure Reporting Guidebook: Condition Assessment Calculation, for guidance on how these assessments are to be completed and reported.

**Rolling Stock:** MoDOT – Transit uses the guidance from FTA for ULB. FTA has provided guidance to determine the maximum age of an asset – or at the point in which an asset enters the SGR backlog. FTA defines the ULB as the expected lifecycle of a capital asset for a transit provider’s or the acceptable period of use in service. The ULB considers a provider’s unique operating environment such as geography and service frequency. For the purposes of this plan, MoDOT – Transit utilizes the default ULB as criteria in determining the rolling stock beyond the ULB an asset (Appendix A). Inventory is requested annually and updated accordingly within the Sponsored Group TAM Plan.



## Transit Asset Management

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### Useful Life Benchmark:

Rolling Stock	Useful Life Benchmark
Automobiles, Minivans/Vans	8 years
Cutaways	10 years
Buses	14 years
Ferry Boats	42 years

### Appendix "A" Vehicle Inventory / Benchmark Useful Life Summary

**Facilities:** The condition assessment used for facilities is the National Transit Data (NTD) Transit Economic Requirements Model (TERM) Rating Scale, a five-point scale used by FTA.

### The TERM Rating Scale:

Rating / Condition	Description
5 - Excellent	No visible defects, new or near new condition, may still be under warranty if applicable
4 - Good	Good condition, but no longer new, may be slightly defective or deteriorated, but is overall functional
3 - Adequate	Moderately deteriorated or defective; but has not exceeded useful life
2 - Marginal	Defective or deteriorated in need of replacement, exceeded useful life
1 - Poor	Critically damaged or in need of immediate repair; well past useful life

The TERM Rating Scale breaks down the categories and subcategories into a Score Card (Appendix E). Agencies must use the Score Card and TERM Rating Scale to assess the condition of facility assets. The overall rating for facilities is based on Score Card total points and the replacement cost to compute the average weighted condition. The facility condition data must be updated every four years.

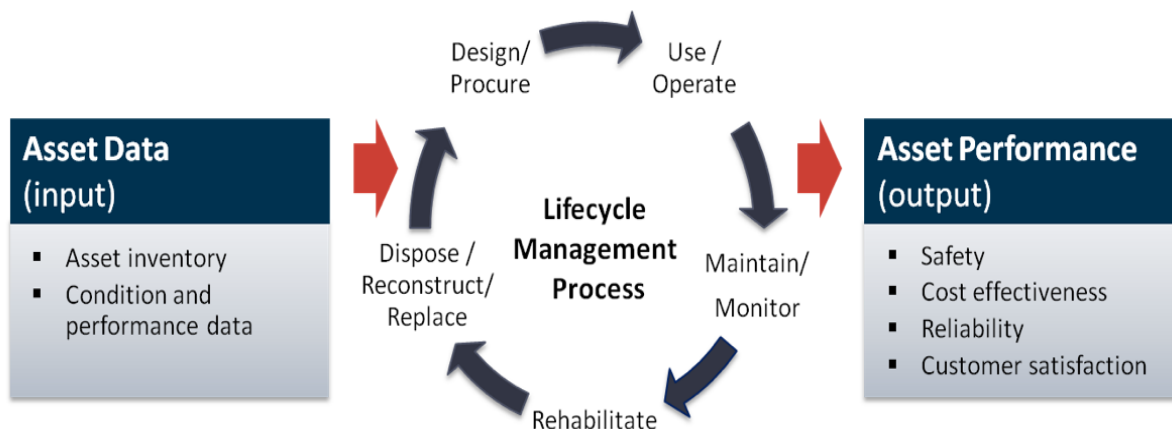
## Chapter 3: Decision Support Tools - Management Approach

The Decision Support Tools - Management Approach is the analytic process or methodology to help prioritize capital assets, projects, and maintain a SGR for public transportation in the State of Missouri.

MoDOT - Transit utilizes the support tool “Template” to assist in analyzing inventory, condition, investment prioritization, and documentation.

# Transit Asset Management

**Asset Life Cycle Process:** The demonstration below shows the life cycle of an asset. Asset management is the process of resource allocation, optimization, and utilization.



## Performance Measures and Targets

Performance Measurement is the process of collecting, analyzing and/ or reporting information regarding the performance of an individual, group, organization, system, or component. It can involve studying processes/strategies within organizations, to see whether outputs are in line with what was intended or should have been achieved.

MoDOT - Transit Sponsored Group TAM Plan will work in partnership with the Accountable Executives in collecting data, monitoring, and decision making. The ultimate goal is maintaining the assets at or below the targets. The Accountable Executive of the agency will be responsible for submitting the needed data to be included within the Sponsored Group TAM Plan.

The performance management approach initiated in the FAST ACT/ MAP-21 includes establishing performance measures and setting targets to improve system performance. A target is a quantifiable level of performance or condition, expressed as a numerical value for the measure. The following table is MoDOT-Transit Sponsored Group TAM Plan State Fiscal Year 2023 targets:

## Transit Asset Management

MoDOT Sponsored Group TAM Plan State Fiscal Year 2023 Targets		
Equipment: Non-revenue support-service and maintenance vehicles (exceeding \$50,000 at purchase)		N/A
Rolling Stock: Revenue vehicles by mode and ULB:		
Automobiles, Minivans, Vans	8 years	45%
Cutaways	10 years	45%
Buses	14 years	45%
Ferry Boats	42 years	30%
Facilities		
Administrative, passenger stations (buildings) and parking facilities	No more than 30% with a condition rating at or <b>below 3.0</b> on FTA's TERM Scale	
Maintenance facilities	No more than 25% with a condition rating at or <b>below 3.0</b> on FTA's TERM Scale	
Infrastructure		
Only rail fixed-guideway, track, signals and systems		N/A

It is important to identify what factors are considered when setting performance measure and targets. MoDOT – Transit implements the analysis tools provided by FTA to assist with this process.

The goal for rolling stock is to **reduce** the number of revenue vehicles exceeding the ULB by 45 percent. Rolling stock is divided into category:

### Rolling Stock – Inventory

Asset Type	# of Units	FTA's ULB	% > ULB	Target
Automobiles	21	8	44%	45%
Buses	69	14	42%	45%
Cutaways	699	10	39%	45%
*Minivans	284	8	47%	45%
Vans	96	8	40%	45%
Ferry Boat	1	42	0%	30%

\*Due to the inability to purchase vehicles and Buy America requirements, MoDOT Transit’s inventory of minivans is greater than the target percentage of the ULB.

### Facilities – Current Condition

Based on the TERM Rating Scale for facilities, the goal is to have **no** more than 30% with a condition rating below 3.0 on Administration/Passenger Facilities and **no** more than 25% on with a condition rating below 3.0 on Maintenance Facilities.

# Transit Asset Management

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Asset Type	# of Units	Avg TERM Condition	% < 3.0 TERM Rating Scale	Target
Administration Facilities	19	3.35	0%	30%
Maintenance Facilities	12	3.21	0%	25%
Parking/Passenger Facilities	7	4.01	0%	30%

## Chapter 4: Investment Prioritization

A transit provider's ranking of capital projects is to achieve or maintain a state of good repair based on financial resources from all sources a transit provider reasonably anticipates is available over the Sponsored Group TAM Plan horizon period. The investment prioritization is to link information gained from the asset inventory, condition assessment, and the management

### Risk Management

Risk Management is the identification, assessment, and prioritization of risks followed by coordinated and economical resources to minimize, monitor, and control the probability and/or impact of unfortunate events. Further evaluation may be considered on whether or not each asset class is beyond the SGR or imposing a risk factor.

- Risk factors included are not limited to the following:
  - Condition – failures and malfunctions
  - Outdated/expired equipment or an unacceptable safety risk
  - Preventive maintenance not being conducted
  - Pre and post trip inspection not being conducted
- Mitigation Strategies
  - Dispose of vehicles that pose a safety risk or has exceeded the ULB
  - Rebuild, reconstruct, replace bus and bus facilities and or equipment that pose an irreparable unacceptable safety risk
  - Preventive maintenance schedule
  - Oversight and Compliance Reviews

### Disposal Strategy

MoDOT's Transit Division implements its own disposition procedures, following FTA's guidelines, to ensure vehicles are used until the end of their useful life. In the event a vehicle must be disposed beforehand due to an unacceptable safety risk, the vehicle may be disposed upon MoDOT's approval.

# **Transit Asset Management**

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## **Preventive Maintenance Strategies**

Preventive Maintenance is set on a schedule based on calendar dates or usage, often at the recommendation of the manufacturer. Each agency adheres to their written facility/vehicle maintenance programs to ensure assets:

- Are maintained, at a minimum, in accordance with their manufacturer’s service guidelines
- Have pre and post trip inspections
- Do not pose a safety risk

## **Oversight and Compliance**

When an agency accepts FTA funding assistance through a transit grant project, whether for a capital project, such as a bus/van, facilities, or for public transit operating assistance, there are terms and conditions (federal requirements) that continue for the life of the project. FTA requires MoDOT – Transit to ensure compliance with these requirements, includes, but is not limited to the following:

- Onsite visits (tri-annual)
- Promotion of good practices
- Technical assistance
- Documentation review
  - Procurement files
  - Maintenance records
  - Training records
  - Drug /Alcohol testing results
- Implementation of corrective actions

## **Funding Source**

FTA funding allocations to Missouri is crucial to the continued operation of public transportation services throughout the State. MoDOT – Transit initiates an application process to identify the applicant’s capital needs. The capital needs and the funding availability is analyzed in the decision making for awarded projects.

## Transit Asset Management

FTA Funding Source / Recipients	MoDOT Transit's Projected Funding for Capital Assets				
5311 Subrecipients	2023	2024	2025	2026	2027
5339 – Bus and Bus Facilities Rural	\$2,315,728	\$2,362,043	\$2,409,284	\$2,457,470	\$2,506,619
5339 – Bus and Bus Facilities Discretionary	\$5,200,000	\$0	\$0	\$0	\$0
<b>Small Urban recipients</b>					
5339 – Bus and Bus Facilities Cape Girardeau	\$269,763	\$275,158	\$283,413	\$289,081	\$294,863
5339 – Bus and Bus Facilities City of Columbia	\$511,695	\$521,929	\$537,587	\$548,339	\$559,305
5339 – Bus and Bus Facilities City of Jefferson	\$293,165	\$299,028	\$307,999	\$314,159	\$320,442
5339- Bus and Bus Facilities Springfield	\$325,350	\$331,857	\$341,813	\$348,649	\$355,622
<b>Total Projected Funding</b>	<b>\$8,915,701</b>	<b>\$3,790,015</b>	<b>\$3,880,096</b>	<b>\$3,957,698</b>	<b>\$4,036,851</b>

### Proposed Investments

The Investment Prioritization step is iterative because there are many tradeoffs to balance when determining the optimal priorities for the group. Some of the considerations include the tradeoffs between asset condition and costs of projects, the balancing of funding and needs among diverse participants, the balancing of project or funds among asset categories and classes and the ability to impact conditions of varying assets with the funds available. By analyzing the data collected and utilizing the TERM Rating Scale and the ULB, the proposed investments for the Sponsored Group TAM Plan are as follows: (See Appendix “D” for a detailed listing)

### Approving the Plan

MoDOT – Transit will collaborate with participants in determining investment prioritization and other TAM decision-making. The Accountable Executive of each participating agency does approve the Sponsored Group TAM Plan and is ultimately responsible for implementation of the Group TAM Plan at the level of the participating agency. MoDOT – Transit will share the Sponsored Group TAM Plan with its partners and stakeholders.

# Transit Asset Management

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## Recordkeeping and Reporting

- National Transit Database (NTD) - annual reporting.
- Maintain records and documents that support the MoDOT Sponsored Group TAM plan.
- Maintain documents on changes made throughout the year.

## Timeline

March 18, 2022	MoDOT email to Tier II small urban agencies requesting notification on participation in state TAM plan or developing/updating their own.
April 20, 2022	MoDOT holds educational webinar with FTA, MPOs, Tier I, Tier II and 5311 providers on 2022 TAM Plan to discuss targets updates, performance measures and coordination process.
June 2022	MoDOT staff compiles annual fiscal year inventory and facility condition assessment for each performance measure.
July 2022	Meet with MoDOT Executive Team on recommended TAM targets and assumptions.
August 8, 2022	MoDOT shares draft targets with transit agencies, MPOs and FTA with discussion on target assumptions in partner collaboration call.
September 16, 2022	MoDOT submits transit targets to FTA Region VII.
October 3, 2022	MoDOT submits TAM Plan to FTA Region VII.
By Oct. 31, 2022	MoDOT submits annual targets in the National Transit Database (NTD).

## RESOURCES

MoDOT Website: <http://www.modot.org>

Federal Transit Administration: [www.transit.dot.gov](http://www.transit.dot.gov)

National Rural Transit Assistance Program (RTAP): <http://nationalrtap.org/>

## *Transit Asset Management*

### Appendix “A” Vehicle Inventory Summary / Benchmark Useful Life

Asset Category	Year	Fleet Type	Asset Class	Count	Benchmark Useful Life	Exceeding Benchmark in Years	Estimate Replacement Cost / Value
Revenue Vehicles	2001	International	Bus BU	3	14	7	\$ 500,000.00
Revenue Vehicles	2002	Gillig	Bus BU	1	14	6	\$ 240,000.00
Revenue Vehicles	2003	Ford	Cutaway CU	1	10	9	\$ 125,000.00
Revenue Vehicles	2004	Ford	Cutaway CU	1	10	8	\$ 125,000.00
Revenue Vehicles	2004	Chevy	Minivan MV	1	10	8	\$ 65,000.00
Revenue Vehicles	2005	Chevy	Cutaway CU	3	10	7	\$ 375,000.00
Revenue Vehicles	2005	Gillig	Bus BU	5	14	3	\$ 400,000.00
Revenue Vehicles	2006	Combined Assets	Van VN	7	14	2	\$ 455,000.00
Revenue Vehicles	2006	Gillig	Bus BU	1	14	8	\$ 165,000.00
Revenue Vehicles	2006	Ford	Cutaway CU	13	10	7	\$ 1,625,000.00
Revenue Vehicles	2007	Ford	Minivan MV	3	8	7	\$ 195,000.00
Revenue Vehicles	2008	Ford	Cutaway CU	22	10	4	\$ 2,750,000.00
Revenue Vehicles	2008	Ford	Auto AO	2	8	6	\$ 45,000.00
Revenue Vehicles	2008	Ford	Van VN	3	8	6	\$ 195,000.00
Revenue Vehicles	2008	Kia	Minivan MV	3	8	6	\$ 195,000.00
Revenue Vehicles	2009	Combined Assets	Cutaway CU	97	10	3	\$ 12,125,000.00
Revenue Vehicles	2009	Dodge	Minivan MV	26	8	5	\$ 1,690,000.00
Revenue Vehicles	2009	Combined Assets	Van VN	11	8	5	\$ 715,000.00
Revenue Vehicles	2010	Gillig	Bus BU	5	14	0	\$ 2,250,000.00
Revenue Vehicles	2010	Combined Assets	Cutaway CU	9	10	2	\$ 1,125,000.00
Revenue Vehicles	2010	Combined Assets	Minivan MV	8	8	4	\$ 520,000.00
Revenue Vehicles	2010	Ford	Van VN	1	8	4	\$ 65,000.00
Revenue Vehicles	2010	Gillig	Bus BU	4	14	0	\$ 1,250,000.00
Revenue Vehicles	2011	Combined Assets	Van VN	2	8	3	\$ 130,000.00
Revenue Vehicles	2011	Combined Assets	Minivan MV	17	8	2	\$ 1,105,000.00
Revenue Vehicles	2011	Combined Assets	Cutaway CU	51	10	1	\$ 6,375,000.00
Revenue Vehicles	2011	Combined Assets	Bus BU	3	14	0	\$ 1,200,000.00
Revenue Vehicles	2012	Combined Assets	Auto AO	8	8	2	\$ 360,000.00
Revenue Vehicles	2012	Combined Assets	Cutaway CU	77	10	0	\$ 9,625,000.00
Revenue Vehicles	2012	Combined Assets	Bus BU	6	14	0	\$ 400,000.00
Revenue Vehicles	2012	Combined Assets	Minivan MV	28	8	2	\$ 1,820,000.00
Revenue Vehicles	2012	Combined Assets	Van VN	6	8	2	\$ 390,000.00
Revenue Vehicles	2013	Combined Assets	Cutaway CU	14	8	1	\$ 1,750,000.00
Revenue Vehicles	2013	Elkhart	Bus BU	2	14	0	\$ 800,000.00
Revenue Vehicles	2014	Combined Assets	Cutaway CU	61	10	0	\$ 7,625,000.00
Revenue Vehicles	2014	Combined Assets	Minivan MV	49	8	0	\$ 2,626,000.00



## **Transit Asset Management**

<b>Asset Category</b>	<b>Year</b>	<b>Fleet Type</b>	<b>Asset Class</b>	<b>Count</b>	<b>Benchmark Useful Life</b>	<b>Exceeding Benchmark in Years</b>	<b>Estimate Replacement Cost / Value</b>
Revenue Vehicles	2014	Combined Assets	Van VN	6	8	0	\$ 390,000.00
Revenue Vehicles	2014	Chevy Malibu	Auto AO	2	8	0	\$ 90,000.00
Revenue Vehicles	2015	Combined Assets	Auto AO	7	8	0	\$ 455,000.00
Revenue Vehicles	2015	Combined Assets	Cutaway CU	32	10	0	\$ 4,000,000.00
Revenue Vehicles	2015	Combined Assets	Minivan MV	28	8	0	\$ 1,820,000.00
Revenue Vehicles	2015	Combined Assets	Van VN	3	8	0	\$ 195,000.00
Revenue Vehicles	2015	Gillig	Bus BU	2	14	0	\$ 1,000,000.00
Revenue Vehicles	2016	Dodge	Minivan MV	20	8	0	\$ 1,300,000.00
Revenue Vehicles	2016	Combined Assets	Cutaway CU	99	10	0	\$ 12,375,000.00
Revenue Vehicles	2016	Ford	Van VN	5	8	0	\$ 325,000.00
Revenue Vehicles	2017	Combined Assets	Cutaway CU	46	10	0	\$ 5,750,000.00
Revenue Vehicles	2017	Combined Assets	Minivan MV	35	8	0	\$ 2,275,000.00
Revenue Vehicles	2017	Combined Assets	Van VN	23	8	0	\$ 1,495,000.00
Revenue Vehicles	2017	Combined Assets	Bus BU	2	14	0	\$ 400,000.00
Revenue Vehicles	2018	Ford Taurus	Auto AO	2	8	0	\$ 90,000.00
Revenue Vehicles	2018	Combined Assets	Cutaway CU	62	10	0	\$ 7,750,000.00
Revenue Vehicles	2018	Combined Assets	Minivan MV	20	8	0	\$ 1,300,000.00
Revenue Vehicles	2018	Combined Assets	Van VN	4	8	0	\$ 260,000.00
Revenue Vehicles	2018	Ford	Bus BU	13	14	0	\$ 42,000,000.00
Revenue Vehicles	2019	Combined Assets	Cutaway CU	95	10	0	\$ 11,875,000.00
Revenue Vehicles	2019	Combined Assets	Minivan MV	24	8	0	\$ 1,560,000.00
Revenue Vehicles	2019	Combined Assets	Van VN	37	8	0	\$ 1,850,000.00
Revenue Vehicles	2019	Combined Assets	Bus BU	2	14	0	\$ 800,000.00
Revenue Vehicles	2020	Combined Assets	Minivan MV	13	8	0	\$ 845,000.00
Revenue Vehicles	2020	Combined Assets	Van VN	3	8	0	\$ 200,000.00
Revenue Vehicles	2020	Gillig	Bus BU	5	14	0	\$ 2,000,000.00
Revenue Vehicles	2021	Combined Assets	Cutaway CU	4	10	0	\$ 500,000.00
Revenue Vehicles	2021	Combined Assets	Minivan MV	6	8	0	\$ 390,000.00
Revenue Vehicles	2021	Gillig	Bus BU	4	14	0	\$ 1,200,000.00
Revenue Vehicles	2021	Combined Assets	Minivan MV	5	8	0	\$ 320,000.00
Revenue Vehicles	2021	Combined Assets	Van VN	2	8	0	\$ 130,000.00
Revenue Vehicles	2022	Toyota	Minivan MV	3	8	0	\$ 195,000.00
Revenue Vehicles	2022	Ford	Van VN	1	8	0	\$ 65,000.00

# Transit Asset Management

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## Appendix “B” Facility Inventory / Asset Condition Data (Term Scale Rating)

Asset Category	Asset Class	Average Term Scale Rating	Estimated Replacement Cost
Facility - Count 19	Administration	3.35	\$ 125,865,000.00
Facility - Count 12	Maintenance	3.21	\$ 95,000,000.00
Facility - Count 7	Parking/Passenger	4.01	\$ 1,200,000.00

## Appendix “C” Proposed Investments

Project	Project Year				
	2023	2024	2025	2026	2027
<b>Asset Type</b>					
<b>Facilities</b>					
Administration	0	0	0	0	0
Maintenance	0	0	0	0	0
Parking/ Passenger	0	0	0	0	0
<b>Revenue Vehicles</b>					
# Automobiles	0	2	8	3	3
# Buses	5	5	4	2	3
# Cutaways	150	100	99	105	29
# Minivans / Vans	0	50	30	34	58
<b>Projected Need</b>	<b>\$18,750,000.00</b>	<b>\$26,250,000.00</b>	<b>\$18,500,000.00</b>	<b>\$20,500,000.00</b>	<b>\$26,400,000.00</b>

# Transit Asset Management

## Appendix "D Transit Asset Condition Rating Scale

Transit Asset Condition Rating Scale						
Description	Asset Condition	Asset Performance	Asset Level of Maintenance Required	Rating	Scoring	Rating Range
Asset is new or nearly new 75% - 100%	Asset is new or like new	Asset meets or exceeds all performance and reliability metrics, industry standards	Asset requires routine preventative maintenance according to scheduled maintenance cycles	5	Excellent	4.8 - 5.0
Asset is nearing its mid-point 50% - 75%	Asset is showing minimal signs of wear and deterioration	Asset generally meets performance and reliability, based on manufacturer's performance standards	Asset needs some minor repairs for minor subcomponents between maintenance cycles	4	Good	4.0 - 4.7
Asset has passed its midpoint 25% - 50%	Asset is showing moderately signs of defective or deteriorated components	Asset's performance and reliability may decrease and cause service interruption for non-schedule maintenance	Asset needs more frequent minor repairs on subcomponents	3	Adequate	3.0 - 3.9
Asset nearing or at end of its ULB 0% - 25%	Asset's major subcomponents needs to be rebuilt or replaced	Asset performance and reliability is becoming more substantial but does not pose a safety risk	Asset's maintenance has significantly increased in repairs between preventative maintenance cycles	2	Marginal	2.0 - 2.9
Asset passed its ULB	Asset is no longer serviceable	Asset does not meet performance standards and would pose a safety hazard if put in service	Major component failures	1	Poor	1.0 - 1.9

# Transit Asset Management

## Appendix "D" Facility Assessment Score Card

Facilities Assessment								
Agency Name:								
Address/Location/City								
Inspection Date:					Phone Number			
Inspector:								
Please print name above and signature of inspector.								
Administration		Maintenance		Passenger		Parking		
Please indicate above the facility being assessed								
Rating Scale								
Condition	Description							
5 - Excellent	No visible defects, new or near new condition, may still be under warranty if applicable							
4 - Good	Good condition, but no longer new, may be slightly defective or deteriorated, but is overall functional							
3 - Adequate	Moderately deteriorated or defective; but has not exceeded useful life							
2 - Marginal	Defective or deteriorated in need of replacement, exceeded useful life							
1 - Poor	Critically damaged or in need of immediate repair; well past useful life							
Assessment - Rating								
<b>Foundation</b>		Rating of Condition	Total Pts	Score	Overall Replacement Cost	Avg Weighted Rating		
(Please enter number from Rating Scale)	walls		0	0.00		\$ -		
	Columns							
	Pilings							
<b>Basement</b>		Rating of Condition	Total Pts	Score	Overall Replacement Cost	Avg Weighted Rating		
(Please enter number from Rating Scale)	Materials		0	0.00		\$ -		
	Insulation							
	Floor							
<b>Conveyance</b>		Rating of Condition	Total Pts	Score	Overall Replacement Cost	Avg Weighted Rating		
(Please enter number from Rating Scale)	Elevators		0	0.00	\$ -	\$ -		
	Escalators							
	Lifts							

# Transit Asset Management

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Shell		Rating of Condition	Total Pts	Score	Overall Replacement Cost	Avg Weighted Rating
(Please enter number from Rating Scale)	Columns,		0	0.00		\$ -
	Pillars					
	Walls					
	Roof - tiles, shingles					
	Gutters					
	Eaves					
	Skylights					
	Chimney Surrounds					
	Downspouts					
	Windows					
	Doors					
	All Finishes - paint masonry					
	Balconies					
	Fire Escapes					
Interiors		Rating of Condition	Total Pts	Score	Overall Replacement Cost	Avg Weighted Rating
(Please enter number from Rating Scale)	Partitions		0	0.00	\$ -	\$ -
	Walls					
	Interior Doors					
	Fittings					
	Signage					
	Stairs					
	Interior Stairs					
	Landings					
	Finishes - walls, floors and ceilings					
	Windows					
	Doors					
All Finishes - paint masonry						

## Transit Asset Management

Plumbing		Rating of Condition	Total Pts	Score	Overall Replacement Cost	Avg Weighted Rating
(Please enter number from Rating Scale)	Fixtures		0	0.00	\$ -	\$ -
	Water Distribution					
	Sanitary Waste					
	Rainwater Drainage					
HVAC		Rating of Condition	Total Pts	Score	Overall Replacement Cost	Avg Weighted Rating
(Please enter number from Rating Scale)	Energy Supply		0	0.00	\$ -	\$ -
	Heat Generation and Distribution System					
	Testing, balancing, controls and instrumentation					
	Chimneys and Vents					
	Housing					
	Drains					
	Wiring					
Fire Protection		Rating of Condition	Total Pts	Score	Overall Replacement Cost	Avg Weighted Rating
(Please enter number from Rating Scale)	Sprinklers		0	0.00	\$ -	\$ -
	Standpipes					
	Hydrants / Other					
Electrical		Rating of Condition	Total Pts	Score	Overall Replacement Cost	Avg Weighted Rating
(Please enter number from Rating Scale)	Electrical Service and Distribution		0	0.00	\$ -	\$ -
	Lighting/Branch Wiring					
	Communication / Security					
	Generators / Emergency lighting					

## Transit Asset Management

Equipment		Rating of Condition	Total Pts	Score	Overall Replacement Cost	Avg Weighted Rating
(Please enter number from Rating Scale)	Name		0	0.00	\$ -	\$ -
	Name					
	Name					
	Name					
<b>Overall Replacement Cost</b>						\$ -

Site		Rating of Condition	Total Pts	Score	Overall Replacement Cost	Avg Weighted Rating
(Please enter number from Rating Scale)	Roadway Signage, Markings		0	0.00	\$ -	\$ -
	Parking Lots - Signage, Markings					
	Pedestrian Areas - Signage and Markings					
	Fences, Walls, Misc. Structures					
	Landscaping					
	Irrigation					
	Site utilities					

Overall Assessment (Avg Weighted Rating/Replacement Cost)		
Asset	Replacement Cost	Avg Weighted Rating
Foundation	\$ -	\$ -
Basement	\$ -	\$ -
Conveyance	\$ -	\$ -
Shell	\$ -	\$ -
Interiors	\$ -	\$ -
Plumbing	\$ -	\$ -
HVAC	\$ -	\$ -
Fire Protection	\$ -	\$ -
Electrical	\$ -	\$ -
Equipment	\$ -	\$ -
Site	\$ -	\$ -
<b>Total</b>	\$ -	\$ -