CITY OF JOPLIN

TRANSIT ASSET MANAGEMENT PLAN

APRIL 29, 2024

Daniel Johnson date 5-1-24

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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 (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.

INTRODUCTION

Pursuant to 49 U.S.C. 5301 et seq., the City of Joplin is the designated recipient and the agency responsible for administering the Federal Transit Administration (FTA) Sections 5307 and 5339 formula grant programs for our small urbanized area. The City of Joplin 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; administering and monitoring contracts; and ensuring compliance with federal requirements by all subrecipients.

The City of Joplin is committed to a safe, mobility focused, public transportation program that promotes economic growth and opportunity for its citizens. Public transportation is a vital part of Joplin'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. 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 complied 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 in one 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's Sponsored Group TAM Plan.

The City of Joplin elected to opt-out of MoDOT's Sponsored Group TAM Plan and create a Transit Asset Management (TAM) Plan unique to Joplin. The City of Joplin TAM plan will be updated every four years and the designated Accountable Executive for Joplin's TAM Plan is the Director of Public Works.

Transit Asset Management Plan

The purpose of the City of Joplin TAM Plan is to aid the Transit Division in achieving and maintaining a SGR for all City of Joplin public transportation assets. SGR is the condition in which a capital asset operates at a full level of performance.

This means the asset:

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

The TAM final rule requires that every transit provider's TAM Plan must contain the following 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.

Chapter 1: Asset Inventory

The Asset Inventory is a register of the City of Joplin's Transit related capital assets. 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.

Equipment: Classified as non-revenue support-service vehicles. The threshold for equipment is in the amount of $50,000 at the time of purchase. Currently, there is no equipment in excess of $50,000 and therefore, requirements for performance measures will not apply to the City of Joplin's TAM Plan.

Rolling Stock: Classified as revenue vehicles for public transportation. There are four asset classes of rolling stock: automobiles, buses, cutaways, and minivans/vans.

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

Infrastructure: The City of Joplin is a Tier II agency; therefore, Joplin has no infrastructure assets. The infrastructure requirements and performance measure do not apply to the City of Joplin's TAM Plan.

Asset Register/Inventory Summary

Asset Category/Class	# of Units
Rolling Stock	15
Facilities	3
Equipment	0
Infrastructure	0

Appendix "A" Asset Register-Inventory Summary List

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.

The City of Joplin utilizes the following templates provided by FTA:

TAM Plan Template for Small Providers (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: The City of Joplin uses the guidance from FTA for ULB. FTA has provided guidance to determine the maximum age of an asset- or 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 operating environment or the acceptable period of use in service. The ULB takes into account a provider's unique operating environment such as geography and service frequency. For the purposes of this plan, the City of Joplin utilizes the default ULB as criteria in determining the condition of an asset (Appendix B1). Inventory is evaluated annually and updated accordingly within the TAM Plan.

Useful Life Benchmark:

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

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 sub categories into a Score Card example (Appendix C). 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.

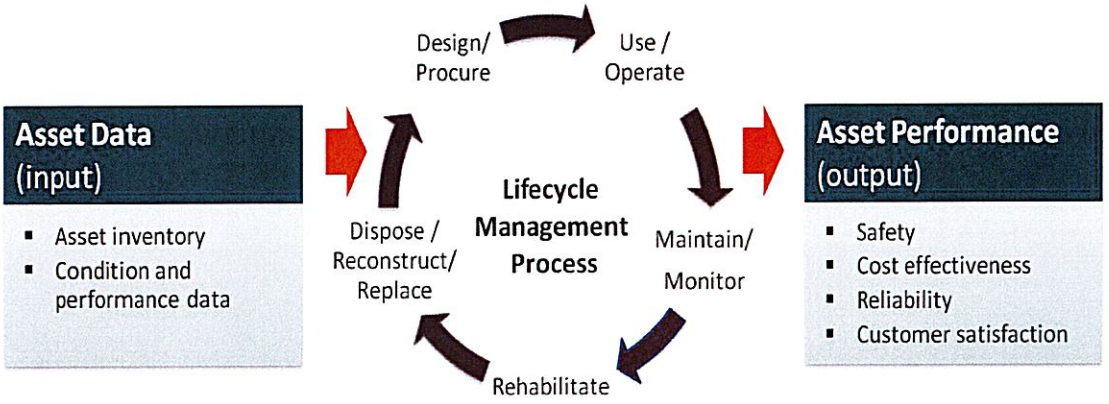
Appendix "B2"- Asset Condition Data- Facilities List

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 City of Joplin.

The City of Joplin utilizes Capital Optimization Support Tool (COST), the analysis tool provided by FTA, which breaks out the information supporting Joplin's TAM Plan including: inventory, condition, investment prioritization, and documentation.

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.

The City of Joplin is responsible for collecting data, monitoring, and decision making. Our ultimate goal is maintaining the assets at or below the established targets and in a SGR. The Transportation Coordinator will be responsible for collecting, monitoring, and maintaining data required for the 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 Joplin's TAM Plan Fiscal Year 2024-2027 Targets:

City of Joplin's TAM Plan Fiscal Year 2023 Targets (November 1, 2024-October 31, 2027)		
Equipment: Non-revenue support-service & maintenance vehicles (exceeding $50,000)		N/A
Rolling stock: Revenue vehicles by mode and ULB:		
Automobiles, Minivans, Vans	8 years	N/A
Cutaways	10 years	80%
Buses	14 years	80%
Facilities		
Administrative, passenger stations (buildings) and parking garages	100% with a condition rating > 3.0 on FTA's TERM Scale	
Maintenance facilities	N/A	
Infrastructure		
Only rail fixed-guideway, track, signals and systems		N/A

It is important to identify what factors are taken into account when setting performance measure and targets. The City of Joplin implements the analysis tools provided by FTA to assist with this process.

The goal for rolling stock is to maintain a SGR percentage of less than 80% for revenue vehicles. Less than 20% of the City of Joplin rolling stock will exceed the FTA's ULB established by mode.

Rolling Stock- existing inventory

Asset Type	# of Units	FTA's ULB	% > ULB	Target
Cutaways	14	10	7.1%	< 20%
Buses	1	14	0%	< 20%
Automobiles	0	8	0%	N/A
Vans/Minivans	0	8	0%	N/A

Facilities- current condition

Based on the TERM Rating Scale for facilities, the goal is to maintain a condition rating at "3" or above on the TERM Rating Scale.

Asset Type	# of Units	Avg TERM Condition	% < 3.0 TERM Scale	Target
Parking Facilities	2	4	0%	0%
Administrative Facilities	1	4	0%	0%
Maintenance Facilities	0	0	0%	N/A

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 will be available over the City of Joplin's TAM Plan horizon period. The investment prioritization is to link information gained from the asset inventory, condition assessment, and the management approach to actual investment priorities.

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 taken into account on whether or not each asset class is beyond the SGR or imposing a risk factor.

Risk factor 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 have 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

The City of Joplin'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 FTA's approval.

Preventive Maintenance Strategies

Preventive Maintenance is set on a schedule based on usage rates in compliance with the manufacturer's recommendations. The City of Joplin adheres to its written facility/vehicle maintenance programs to ensure assets:

Are maintained, at a minimum, in accordance with 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 rant project, whether for a capital project, such as a bus/van, or for public transit operating assistance, there are terms and conditions (federal requirements) that continue for the life of the project. FTA requires compliance with these requirements. Oversight and Compliance includes but is not limited to the following:

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

Funding Source

FTA funding allocations to the City of Joplin are crucial to the continued operation of public transportation services. The City of Joplin analyzes its capital needs annually and those capital needs are procured based on the funding availability.

Funding Source	Project Year-Funding for Capital Assets				
	2024	2025	2026	2027	Total
Local Sales Tax	$1,599,542	$1,646,184	$1,692,989	$1,743,779	$6,682,949
Fare Revenue	$130,000	$131,000	$132,000	$133,000	$526,000
State Revenue	$11,334	$11,334	$11,334	$11,334	$45,336
Local & State (Subtotal)	$1,740,876	$1,788,518	$1,836,323	$1,888,113	$7,2543,830
FTA 5307 (O&M Revenue)	$799,771	$823,092	$846,495	$871,889	$3,341,247
Total Local, State, Federal Revenue available for O&M	$2,540,647	$2,611,610	$2,682,818	$2,760,002	$10,595,077
Operations and Maintenance	$1,599,542	$1,646,184	$1,692,989	$1,743,779	$6,682,494
Projected Funding	$941,105	$965,426	$989,829	$1,016,223	$3,912,583

Proposed Investments

The Investment Prioritization step is iterative because there are many contributing factors to consider when determining the optimal priorities for asset management practices. 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 projects 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 City of Joplin's TAM Plan are as follows:

Project	Project Year				
Asset Type	2024	2025	2026	2027	Totals
Facilities					
Administration	0	0	0	0	0
Maintenance	0	0	0	0	0
Passenger	0	0	0	0	0
Rolling Stock					
Cutaways	3	2	2	2	9
Buses	0	0	0	0	0
Projected Need	$420,000	$280,000	$280,000	$280,000	$1,260,000

*See Appendix "B1" AND "B2" for detailed listingS

Approving the Plan

The City of Joplin will collaborate with the Missouri Department of Transportation (MoDOT) and the Joplin Area Transportation Study Organization (JATSO) in determining investment prioritization and other TAM decision-making using the established Transportation Improvement Plan (TIP) process. The City of Joplin's Transportation Coordinator gives final approval of the TAM Plan and is ultimately responsible for plan implementation. The of Joplin will share its TAM Plan with MoDOT, JATSO, and it's regional planning partners/stakeholders.

Appendix "A" Asset Register-Inventory Summary List

Asset Category	City ID #	ASSET CLASS	ASSET DISCRIPTION	VIN #	PUR. DATE	PUR. PRICE	IN SERVICE DATE	USEFUL LIFE
Revenue Vehicle	2400	BU-Bus	2014 ELDORADO EZ-RIDER II	1N9MMACL8EC084088	4/29/2014	$390,115.00	7/7/2014	12 years/500,000 miles
Revenue Vehicle	2659	CU-Cutaway Bus	2019 World Trans E24	1FDFE4FS9KDC17243	3/28/2019	$67,600.00	6/1/2019	5 years/150,000 miles
Revenue Vehicle	2574	CU-Cutaway Bus	2017 Ford World Trans E24 Cutaway	1FDFE4FSXHDC64094	9/25/2017	$60,707.00	12/1/2017	5 years/150,000 miles
Revenue Vehicle	2475	CU-Cutaway Bus	2016 Elkhart Coach 23' C/A	1FDFE4FS4GDC32059	3/18/2016	$ 60,173.00	4/1/2016	5 years/150,000 miles
Revenue Vehicle	2271	CU-Cutaway Bus	2012 FORD ELKHART 23' C/A	1FDEE3FL5CDA39184	2/22/2012	$54,034.00	5/1/2012	5 years/150,000 miles
Revenue Vehicle	2463	CU-Cutaway Bus	2016 Goshen Coach 28' cut-a-way	1FDGF4GY5GEB34172	1/14/2016	$80,361.00	5/1/2016	5 years/150,000 miles
Revenue Vehicle	2474	CU-Cutaway Bus	2016 Elkhart Coach 23' C/A	1FDTE4FSOGDC32060	3/18/2016	$ 60,173.00	4/1/2016	5 years/150,000 miles
Revenue Vehicle	2510	CU-Cutaway Bus	2017 Elkhart Coach 23' C/A	1FDFE4FS9HDC26520	1/25/2017	$61,719.00	2/9/2017	5 years/150,000 miles
Revenue Vehicle	2511	CU-Cutaway Bus	2017 Elkhart Coach 23' C/A	1FDFE4FS2HDC26519	1/25/2017	$61,719.00	2/24/2017	5 years/150,000 miles
Revenue Vehicle	2657	CU-Cutaway Bus	2019 World Trans E24	1FDFE4FS5KDC17188	3/28/2019	$62,477.00	6/1/2019	5 years/150,000 miles
Revenue Vehicle	2658	CU-Cutaway Bus	2019 World Trans E24	1FDFE4FS3KDC17187	3/28/2019	$62,477.00	6/1/2019	5 years/150,000 miles
Revenue Vehicle	2748	CU-Cutaway Bus	2021 Star Trans	1FDFF4FN7MD36354	3/9/2021	$74,243.00	6/1/2021	5 years/150,000 miles
Revenue Vehicle	2749	CU-Cutaway Bus	2021 Star Trans	1FDFE4FN9MDC36355	3/9/2021	$74,243.00	6/1/2021	5 years/150,000 miles
Revenue Vehicle	2757	CU-Cutaway Bus	2021 EL DORADO	1FDFE4FN5MDC40743	7/20/2021	$81,470.00	11/1/2021	5 years/150,000 miles
Revenue Vehicle	2758	CU-Cutaway Bus	2021 EL DORADO	1FDFE4FN3MDC40742	7/20/2021	$81,470.00	11/1/2021	5 years/150,000 miles
Revenue Vehicle	2953	CU-Cutaway Bus	2024 Starcraft Allstar	1FDFE4RN4RDD02866	9/13/2023	$129,782.00	5/1/2024	5 years/150,000 miles
Revenue Vehicle	2954	CU-Cutaway Bus	2024 Starcraft Allstar	1FDFE4FN3RDD02907	9/13/2023	$124,616.00	5/1/2024	5 years/150,000 miles
Revenue Vehicle	2955	CU-Cutaway Bus	2024 Starcraft Allstar	1FDFE4FN2RDD02896	9/13/2023	$124,616.00	5/1/2024	5 years/150,000 miles
Revenue Vehicle	2968	CU-Cutaway Bus	2024 Glaval Universal	1FDFE4FN7RDD43640	4/3/2024	$136,702.00	8/14/2024	5 years/150,000 miles
Revenue Vehicle	2969	CU-Cutaway Bus	2024 Glaval Universal	1FDFE4FN3RDD43506	4/3/2024	$131,527.00	8/14/2024	5 years/150,000 miles
Revenue Vehicle	2970	CU-Cutaway Bus	2024 Glaval Universal	1FDFE4FN6RDD43564	4/3/2024	$131,527.00	8/14/2024	5 years/150,000 miles

Facilities		Administrative	MAPS Office- 123 S. Main, Joplin		8/1/2007	$901,000.00	12/20/2008	20 years
Facilities		Garage-Storage	MAPS BARN- 1301 W. 2nd, Joplin		11/1/2002	$159,000.00	11/1/2002	40 years
Facilities		Garage-Storage	TROLLEY BARN-130 N. Porter Ave		10/25/2011	$318,391.00	10/25/2011	40 years

Appendix "B1" Vehicle Asset Condition

2024

Asset Category	City ID #	ASSET CLASS	Purchase date	Replacement Cost/Value	ULB Years	Current Age (years)	ULB (Years) Remaining	Past ULB
Revenue Vehicle	2400	BU-Bus	2014	$410,000	14	10	4	No
Revenue Vehicle	2659	CU-Cutaway Bus	2019	$65,000	10	5	5	No
Revenue Vehicle	2574	CU-Cutaway Bus	2017	$65,000	10	7	3	No
Revenue Vehicle	2475	CU-Cutaway Bus	2016	$65,000	10	8	2	No
Revenue Vehicle	2271	CU-Cutaway Bus	2012	$65,000	10	12	-2	Yes
Revenue Vehicle	2463	CU-Cutaway Bus	2016	$70,000	10	8	2	No
Revenue Vehicle	2474	CU-Cutaway Bus	2016	$65,000	10	8	2	No
Revenue Vehicle	2510	CU-Cutaway Bus	2017	$65,000	10	7	3	No
Revenue Vehicle	2511	CU-Cutaway Bus	2017	$65,000	10	7	3	No
Revenue Vehicle	2657	CU-Cutaway Bus	2019	$65,000	10	5	5	No
Revenue Vehicle	2658	CU-Cutaway Bus	2019	$65,000	10	5	5	No
Revenue Vehicle	2748	CU-Cutaway Bus	2021	$74,243.00	10	3	7	No
Revenue Vehicle	2749	CU-Cutaway Bus	2021	$74,243.00	10	3	7	No
Revenue Vehicle	2757	CU-Cutaway Bus	2021	$81,470.00	10	3	7	No
Revenue Vehicle	2758	CU-Cutaway Bus	2021	$81,470.00	10	3	7	No
Revenue Vehicle	2953	CU-Cutaway Bus	2024	$129,782	10	0	10	No
Revenue Vehicle	2954	CU-Cutaway Bus	2024	$124,616	10	0	10	No
Revenue Vehicle	2955	CU-Cutaway Bus	2024	$124,616	10	0	10	No
Revenue Vehicle	2968	CU-Cutaway Bus	2024	$136,702	10	0	10	No
Revenue Vehicle	2969	CU-Cutaway Bus	2024	$131,527	10	0	10	No
Revenue Vehicle	2970	CU-Cutaway Bus	2024	$131,527	10	0	10	No

Appendix "B2" Facilities Asset Condition

2024

Asset Category	City ID #	ASSET CLASS	TERM Scale Condition	Replacement Cost/Value	TERM < 3
Facilities	123 S. Main	Administrative	4	$1,480,439	No
Facilities	1301 W. 2nd	Garage-Storage	4	$467,514	No
Facilities	130 Porter Ave.	Garage-Storage	4	$577,183	No