

MoDOT Statewide Safety Targets

August 2022 (reported in HSP and HSIP)

Targets based on 5-year rolling average from CY 2019-2023:

Performance Measure	Crash Data				5-Year Rolling Average Baseline (2017-2021)	5-year Rolling Average Statewide Target CY2023
	2020 Final	2021 Preliminary	2022 Interim Target	2023 Target		
Number of Fatalities*	987	1016	963	894	947.4	948.2
Fatality Rate per 100 Million VMT*	1.369	1.282	1.203	1.106	1.239	1.212
Number of Serious Injuries*	4,489	4,777	4,538	4,299	4,722.4	4,848.7
Serious Injury Rate per 100 Million VMT^	6.643	6.646	6.234	5.830	6.311	6.205
Number of Non-Motorized Fatalities and Serious Injuries^	536	542	513	483	499.2	~499.2

*Performance Measures were reported in the 2022 Highway Safety Plan.

^Performance Measures were reported in the 2022 Highway Safety Improvement Program Annual Report.

Methodology: Targets are based on Zero by 2030 fatality reduction, Zero by 2040 serious injury reduction, 1% VMT increase, and non-motorized reduction based on overall fatality and serious injury reductions. An exception is made for instances where the baseline 5-year rolling average is less than the calculated target using the parameters previously described. When this occurs, the baseline will be used as the target.

~The Number of Non-Motorized Fatalities and Serious Injuries using the target setting methodology resulted in a target above the baseline. Therefore, the baseline was used for the target.

MoDOT Statewide Pavement and Bridge Targets

December 2022

Performance Measure	2021 Baseline	2023 Target	2025 Target
Percentage of NHS Bridges in Good Condition	27.2%	22.8%	19.2%
Percentage of NHS Bridges in Poor Condition	7.1%	7.7%	7.8%
Percentage of Interstate Pavements in Good Condition	79.9%	77.5%	77.5%
Percentage of Interstate Pavements in Poor Condition	0.0%	0.1%	0.1%
Percentage of non-Interstate NHS Pavements in Good Condition	61.3%	61.1%	61.1%
Percentage of non-Interstate NHS Pavements in Poor Condition	0.9%	1.0%	1.0%

MoDOT Statewide System Performance Targets

December 2022

Performance Measure	2021 Baseline	2023 Target	2025 Target
Interstate Travel Time Reliability Measure: Percent of Reliable Person-Miles Traveled on the Interstate	98.4%	87.1%	86.0%
Non-Interstate Travel Time Reliability Measure: Percent of Reliable Person-Miles Traveled on the Non-Interstate NHS	95.5%	87.8%	87.0%
Freight Reliability Measure: Truck Travel Time Reliability Index	1.18	1.45	1.45

Transit Asset Management

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.

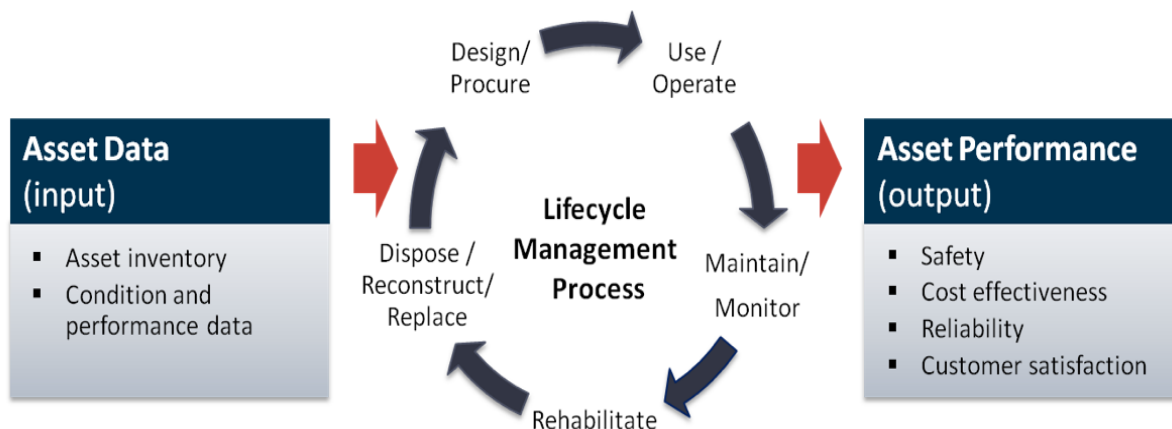
Chapter 3: Decision Support Tools - Management Approach

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 below 3.0 on FTA's TERM Scale	
Maintenance facilities	No more than 25% with a condition rating at or below 3.0 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

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.

3. Safety Performance Targets

Safety Performance Targets							
Mode of Transit Service	Fatalities (Total)	Fatalities (per 250k mi)	Injuries (Total)	Injuries (per 250k mi)	Safety Events (Total)	Safety Events (per 250k mi)	System Reliability (VRM/failures)
Bus Fixed-Route (MB)	0	0	4	1	7	2	14,000
	Fatalities (Total)	Fatalities (Rate)	Injuries (Total)	Injuries (Rate)	Safety Events (Total)	Safety Events (Rate)	System Reliability (VRM/failures)
ADA Paratransit (DR)	0	0	0	0	0	0	30,000
Annual Review and Update of the Safety Performance Targets							
							

The Safety Performance Targets were based on a 3-year average from FY2019-2021 and will be evaluated annually in July.

Safety Performance Target Coordination		
The Accountable Executive shares our Agency Safety Plan, including safety performance targets, with the Ozark Transportation Organization (OTO) and the Missouri Department of Transportation each year, or when changes are made to the plan. Representatives of City Utilities are available to coordinate with the State and MPO in the selection of State and MPO safety performance targets upon request.		
Targets Transmitted to the State	State Entity Name	Date Targets Transmitted
	Missouri Department of Transportation	08/19/2022
Targets Transmitted to the Metropolitan Planning Organization(s)	Metropolitan Planning Organization Name	Date Targets Transmitted
	Ozarks Transportation Organization	08/19/2022

Risk Reduction Program

City Utilities certifies that we have established a comprehensive agency safety plan that includes a risk reduction program to:

- Improve safety by reducing the number and rates of accidents, injuries, and assaults on transit workers based on data submitted to the national transit database.
- Reduce vehicular and pedestrian accidents involving buses, including measures to reduce visibility impairments for bus operators that contribute to accidents, including retrofits to buses in revenue service and specifications for future procurements that reduce visibility impairments.
- Mitigate assaults on transit workers, including the deployment of assault mitigation infrastructure and technology on buses, including barriers to restrict unwanted entry of individuals and objects into the workspace of bus operators when it is determined that such barriers would reduce assaults on transit workers and injuries to transit workers.