MaineDOT Low-No Grant Application

## Attachment C

## **Vehicle Roster and State Transit Plans**



#### Public Transportation to Connect Maine to a Cleaner Future Project Federal Transit Administration's FY 2024 Low or No Emission Grant Program Attachment C

Agency	Count	Total Vehicles Past Retirement Age by 2024*			
		Vehicle Type	Fuel Type	Procurement Year	
Bangor	2	Gillig 35'	Diesel	2011	
	1	Gillig 35'	Diesel	2011	
	2	_Gillig 35'	Diesel	2011	
	5				
BSOOB	1	MCI Coach	Diesel	2002	
	3	Loring Low Floor	Diesel	2003	
	2	Gillig 40'	Diesel	2006	
	4	Eldorado Low Floor	Diesel	2010	
	10				
Metro	7	Gillig Phantom Transit Bus	Diesel	2011	
	5	_Gillig Phantom Transit Bus	CNG	2014	
	12				
YCCAC	6	Ford Molly Trolley	Diesel	2009	
	6	Chevy Arboc	Diesel	2010-2011	
	1	Chevy Arboc	Diesel	2012	
	3	Dodge Mini-Van	Diesel	2014-2015	
	3	Chevy Glaval	Diesel	2017	
	9	Ford E-450	Diesel	2019	
	28				
	55	= Combined Agency Vehicles Past Retirement	t Age in 2024		

\*Based on assessments conducted for each agency's Transition Plan in 2021-2024



## TRANSIT ASSET MANAGEMENT SYSTEM TAMS Transit Asset Management Plan (TAMP) Tier II

October 1, 2021 - September 30, 2025

## **Revision History**

Agency Name:	City of Bangor, Community Connector					
Accountable Executive:		Laurie Linscott, Bus Superintendent				
Initial	Adoption	n Date: 10/1/2018				
Original Effective	e Date:	10/01/2021-9/30/2025 (updated every 4 years)				

Last Modified By (Name):	Last Modified (Date):
Laurie Linscott	10/1/2018
Laurie Linscott	12/3/2018
Laurie Linscott	2/10/2020
Laurie Linscott	9/20/2020
Laurie Linscott	10/29/2021
Laurie Linscott	2/2/2022

## TABLE OF CONTENTS

Revision History	. 2
TABLE OF CONTENTS	. 3
NTRODUCTION	. 4
BACKGROUND	.4
DEFINITIONS	. 7
TIER II TRANSIT SYSTEM	11
VEHICLE CLASSIFICATIONS	11
ASSET INVENTORY	12
Data Collection	12
CONDITION ASSESSMENTS	13
Rolling Stock and Equipment	13
Facilities	14
DECISION SUPPORT TOOLS	15
SGR TARGET SETTING METHODOLOGY	15
SGR PERFORMANCE TARGETS & MEASURES	16
NVESTMENT PRIORITIZATION LIST	17
Investment Priority Table, Equipment FY 2023	17
Investment Priority Table, Facilities FY 2023	17
Revenue Vehicles Condition Table and Asset Register	19
Equipment Condition Table and Asset Register	20
Facilities Condition Table and Asset Register	21
Approved and Proposed Investment Project list	22

## INTRODUCTION

In 2016, the Federal Transit Administration (FTA) published a rule, 49 CFR Part 625, to require public transit providers that receive Federal transit assistance to undertake certain transit asset management activities. <u>Transit asset management is 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. Asset management is a cornerstone of effective performance management. Asset management is a process of resource allocation, optimization, and utilization. By leveraging data to improve investment decision-making, asset management improves reliability, safety, cost management, and customer service.</u>

#### BACKGROUND

Maintaining transit assets, such as rolling stock, infrastructure, equipment, and facilities, in a state of good repair is essential to maintaining safety, ensuring system reliability, and reducing long-term maintenance costs. In its 2010 National State of Good Repair Assessment, FTA found that more than 40% of bus assets and 25% of rail transit assets were in marginal or poor condition. There is an estimated backlog of \$50–\$80 billion in deferred maintenance and replacement needs, a backlog that continues to grow. Transit agency customers, policymakers, and public agencies are holding agency management practices. The magnitude of these capital needs, performance expectations, and increased accountability requires agency managers and accountable executives to become better asset managers.

MAP-21 required the establishment of a National Transit Asset Management (TAM) System that would include a definition of "state of good repair;" requirements that recipients and sub recipients of federal transit funding develop transit asset management plans; state of good repair performance measure and reporting requirements; and annual reporting requirements.

To ensure compliance with the requirements of MAP-21, the FTA published a final rule on TAM planning requirements on July 26, 2016. The final rule included a transitspecific asset management framework for managing assets individually and as a portfolio of assets that comprise an integrated system. Within that framework, the FTA has identified three potential roles in transit asset management planning: *Tier I Provider* is a recipient that owns, operates, or manages either (1) one hundred and one 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 I providers must develop their own, individual TAM plan. *Tier II Provider* is a recipient that owns, operates, or manages (1) one hundred 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 sub recipient under the 5311 Rural Area Formula Program, (3) or any American Indian tribe. Tier II providers can develop their own individual TAM plan or can be included in a group plan developed by a sponsor agency.

**Sponsor Agency** is a State, a designated recipient, or a direct recipient that develops a group TAM for at least one tier II provider.

Asset management processes are ongoing and involve evaluating and managing the relationships between costs, risks, and performance over the asset's lifecycle. Smaller agencies that are constantly challenged to do more with less, ensuring that assets are cost-effectively managed to deliver the service needed becomes critical. The core intent of assess management is to help you take steps to ultimately maximize the utilization of your capital assets, cost-effectively plan for long-term capital investment needs while balancing service/operational needs and requirements, and, to the extent possible, minimize your lifecycle costs.

Having a good asset management plan in place can help you see the long term investment needed to maintain your assets and as such might also assist you in making investment decisions regarding the services you can sustain. This systematic approach to managing assets can add value across your organization. The fundamental concepts of asset management are straightforward; however, implementing the changes required to become a mature asset management organization requires careful planning and execution.

#### TRANSIT ASSET MANAGEMENT PLAN REQUIREMENTS for Tier II

As a Tier II public transportation provider, City of Bangor, Community Connector has developed a Transit Asset Management Plan in accordance with the guidelines established by the FTA. Specifically, §625.25 requires that all TAM plans must include:

1. An inventory of the number and type of capital assets. All capital assets a transit provider owns, operates or manages, including those acquired without FTA funds. The inventory must include all capital assets that the transit provider

owns, except equipment with an acquisition value under \$50,000 that is not a service vehicle.

- 2. A condition assessment of those inventoried assets for which a transit provider has direct capital responsibility. A condition assessment must generate information in a level of detail sufficient to monitor and predict the performance of the assets and to inform the investment prioritization. Direct capital responsibility means you have a line item in your budget.
- 3. A description of analytical processes or **decision-support tools** used to estimate capital investment needs over time.
- 4. A project-based prioritization of investments

The FTA TAM requirements, each transit operator receiving FTA funding shall designate an "Accountable Executive" to implement the TAM Plan. The Authority'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 TAM Plan is to be updated every four years. Amendments are to be made in the plan whenever there is a significant change to asset inventory, condition assessment or investment prioritization that was not anticipated when the plan was developed.

Starting in FY 2019, Triennial Reviews and State Management Reviews will include TAM as a part of the FTA's oversight review program. FTA is in the process of developing oversight standards for TAM activities and will make guidance available when it is complete. Oversight reviews will reflect objective compliance with the TAM rule. Other oversight tools such as Enhanced Review Modules and Technical Assistance are also being developed to provide more specified TAM oversight. Adhering to the TAM requirements is also incorporated into the master agreement for direct recipient of FTA grants and in the Certifications and Assurances process. The oversight process verifies the information each recipient certified.

<u>Transit agencies are required to set performance targets and report them on the NTD</u> report. They are also required on an annual basis to report on the performance of meeting these targets to the Metropolitan Planning Organization (MPO) and the Maine Department of Transportation (MEDOT).</u>

#### DEFINITIONS

<u>Accountable Executive</u> 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.

<u>Asset category</u> 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.

<u>Asset class</u> 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.

<u>Asset inventory</u> means a register of capital assets. All capital assets a transit provider owns, operates or manages, including those acquired without FTA funds.

<u>Capital asset</u> means a unit of rolling stock, a facility, a unit of equipment, or an element of infrastructure used for providing public transportation.

<u>Decision support tool</u> means an analytic process or methodology used to make investment prioritization.

(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.

<u>Direct recipient</u> 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.

<u>Exclusive-use maintenance facility</u> 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.

#### FTA - Federal Transit Administration

*<u>Full level of performance</u>* means the objective standard established by FTA for determining whether a capital asset is in a state of good repair.

<u>Group TAM plan</u> means a single TAM plan that is developed by a sponsor on behalf of at least one tier II provider.

<u>Horizon period</u> means the fixed period of time within which a transit provider will evaluate the performance of its TAM plan.

<u>Implementation strategy</u> means a transit provider's approach to carrying out TAM practices, including establishing a schedule, accountabilities, tasks, dependencies, and roles and responsibilities.

<u>Infrastructure</u> means the underlying framework or structures that support a public transportation system.

<u>Investment prioritization</u> 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.

<u>Key asset management activities</u> 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.

<u>MEDOT</u> Maine Department of Transportation

<u>Participant</u> means a tier II provider that participates in a group TAM plan.

<u>Performance Measure</u> 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).

<u>Performance target</u> 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).

<u>Public Transportation</u> is defined at 49 U.S.C. 5302 and means regular, continuing shared-ride surface transportation services that are open to the general public or open to a segment of the general public defined by age, disability, or low income.

<u>Public transportation system</u> means the entirety of a transit provider's operations, including the services provided through contractors.

<u>Public transportation agency safety plan</u> means a transit provider's documented comprehensive agency safety plan that is required by 49 U.S.C. 5329.

<u>Recipient</u> means an entity that receives Federal financial assistance under 49 U.S.C. Chapter 53, either directly from FTA or as a sub recipient.

<u>*Rolling stock*</u> means a revenue vehicle used in providing public transportation, including vehicles used for carrying passengers on fare-free services.

<u>Service vehicle</u> 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.

<u>Sponsor</u> means a State, a designated recipient, or a direct recipient that develops a group TAM for at least one tier II provider.

<u>State of good repair (SGR)</u> means the condition in which a capital asset is able to operate at a full level of performance. The asset can perform its designed function and does not pose unacceptable safety risk to users.

FTA is required to set <u>SGR performance measures</u> that provide a basis for agencies to determine whether assets are in a condition sufficient to operate at a full level of performance. FTA's SGR performance measures are set by asset class.

Performance Measures:

Rolling Stock	AGE	% of asset class that met or exceed ULB
Equipment	AGE	% of asset that have met or exceeded ULB
Facilities	CONDITION	% of facilities with a condition rating below
3.0(TERM)		_

<u>Sub recipient</u> means an entity that receives Federal transit grant funds indirectly through a State or a direct recipient.

<u>TERM scale</u> 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.

<u>*Tier I provider*</u> 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.

<u>*Tier II provider*</u> 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 sub recipient under the 5311 Rural Area Formula Program, (3) or any American Indian tribe.

<u>*Transit asset management (TAM)*</u> 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.

<u>*Transit asset management plan (TAMP)*</u> 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.

<u>Transit asset management policy</u> 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. Required of a Tier I provider.

<u>*Transit asset management strategy*</u> means the approach a transit provider takes to carry out its policy for TAM, including its objectives and performance targets.

<u>*Transit asset management system*</u> means a strategic and systematic process of operating, maintaining, and improving public transportation capital assets effectively, throughout the life cycles of those assets.

<u>Transit provider means</u> a recipient or sub recipient of Federal financial assistance under 49 U.S.C. chapter 53 that owns, operates, or manages capital assets used in providing public transportation.

<u>Useful life</u> means either the expected life cycle of a capital asset or the acceptable period of use in service determined by FTA.

<u>Useful life benchmark (ULB)</u> 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.

## TIER II TRANSIT SYSTEM

The City of Bangor, Community Connector, is the public transit system that serves the communities of Bangor, Brewer, Hampden, Old Town, Orono, and Veazie as well as the University of Maine at Orono. Community Connector operates within Penobscot County and serves the urbanized area of these six communities comprised of a 2017 estimated population of 69,001. The Community Connector's 10 bus routes are within walking distance of 95 percent of the six communities.

The City of Bangor, Community Connector, is a Tier II transit system as defined by the Federal Transit Administration (FTA) TAM rule, 49 CFR 625. Transit Asset Management or TAM, is a business model that priorities funding based on condition of transit assets to achieve a State of Good Repair (SGR) for all transit assets. The TAM Plan enables a transit agency to monitor and manage their transit assets, improve safety, increase reliability and performance, and establish performance measures in order to keep the transit system operating smoothly and efficiently.

The Tier II provider is 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. The City of Bangor, Community Connector, will participate in their own individual TAM plan to be compliant with FTA 49 CFR Part 625.

#### **VEHICLE CLASSIFICATIONS**

City of Bangor, Community Connector, procures vehicle types to meet the identified need, service geography, and ability to maintain the vehicle. Vehicle sub classes range from minivans to large heavy-duty transit buses. Each vehicle sub class is designated with a minimal useful life taken from FTA Circular 5010.1E.

Below, the table shows the criteria used by Maine DOT to classify rolling stock and apply useful life benchmarks and useful mileage performance measures. Community Connector will also use this same criteria to apply useful life benchmark for performance measures.

Classification	Description	Useful Life (yrs)	Useful Miles
Class 1	Vans, Sedans, Minivan, Modified Van 6,000-14,000 GVW	4	100,000
Class 2	Light Duty Mid-Small Bus, Small Body on Chassis, Cutaways 25-35' 10,000-16,000 GVW	5	150,000
Class 3	Medium Duty Transit Bus < 30', trolley-like bus, Purpose-Built Bus 35-35' (Med-duty is built on truck chassis) 16,000-26,000 GVW	7	200,000
Class 4	Medium Size Heavy Duty transit bus 30'-35' 26,000-33,000 GVW (Heavy Duty Bus is built as a bus)	10	350,000
Class 5	Large Heavy Duty Transit Bus 35'-40' Commuter Coach, Articulated Bus (Heavy Duty Bus is built as a bus) 33,000-40,000 GVW	12	500,000
Class 6	Ferry Boats	40	

#### Rolling Stock Classifications FTA Circular 5010.1E (effective Feb 2017)

#### **ASSET INVENTORY**

#### **Data Collection**

<u>The City of Bangor, Community Connector evaluates and maintains rolling stock and equipment data for TAM/Program Management purposes once a year</u>. Beginning in 2018, the City of Bangor, Community Connector, will also be responsible for data collections of the facilities required under 49 CFR Part 625. <u>The City of Bangor, Community Connector uses a spreadsheet designed specifically to track and account for all assets.</u>

Once data is collected, City of Bangor, Community Connector will compute the performance measures for each of the three Tier II categories; Rolling Stock, Equipment, and Facilities using a Spreadsheet program with formulas relative to the criteria for State of Good Repair.

#### **CONDITION ASSESSMENTS**

#### **Rolling Stock and Equipment**

The City of Bangor, Community Connector, will combines system assessments for rolling stock, equipment, and facilities. Rolling Stock (revenue or support vehicle) will have their condition assessments rated against age, mileage, and overall condition of the asset. Equipment will have their condition assessments rate on age and overall condition. Community Connector will set a condition target of 3 or higher for rolling stock, equipment, and facilities.

Community Connector will use a modified Transit Economic Recovery Model (TERM) assessment for conditions for rolling stock, equipment and for facilities.

The Condition Assessment Rating Scale is used to reference the description for scores of 1-5. This scale is taken from FTA's Transit Economic Requirements Model (TERM) scale, used primarily for facilities but can be used for rolling stock and equipment.

		Condition Assessment Rating Scale (TERM)
Rate	Condition	Description
4.8-5.0	Excellent	No Visible defects, new or near new condition, may still be under warranty if applicable
4.0-4.7	Good	Defective or deteriorated component(s), but it overall functional
3.0-3.9	Adequate	Moderately deteriorated or defective components; but has not exceeded useful life
2.0-2.9	Marginal	Defective or deteriorated component(s) in need or replacement; exceeded useful life
1.0-1.9	Poor	Critically damage component(s) or in need of immediate repair; well past useful life

#### Facilities

All Community Connector facilities condition assessments are done by using a modified Transit Economic Recovery Model (TERM) assessment. The rating systems uses a 1-5 rating scale as required by FTA. Facility assessments will be conducted every other year unless City of Bangor, Community Connector, has reason to conduct the assessments more often.

All facility assessments will be documented and entered in a data table to also include useful life data on each facility. Currently, City of Bangor, is using the standard 40-year useful life for facilities. Facility types include any building or structure used in providing public transportation, including passenger stations, operations, maintenance, and administrative facilities. <u>Condition assessments are only done if you have direct capital responsibility.</u>

You do NOT have direct capital You have direct capital responsibility responsibility You own the asset You do not own the asset AND you are not responsible for replacing, overhauling, refurbishing, or conducting major repairs on that asset, or the costs of those activities are not itemized as a capital line items in your budget. You jointly own the asset with another entity You are responsible for replacing, overhauling, refurbishing, or conducting major repairs on the asset, or the costs of those activities are itemized as a capital line items in your budget.

Capital responsibility is defined as the following:

#### For Maintenance and Administrative facilities:

♦ Any maintenance or administration facility under 100 square-ft. does not need to be included (e.g. security guard shack, stand-alone restroom, storage shelter in which no work is performed) in either of your inventories.

• If your vehicles are the only vehicles that the maintenance facility services, then it is considered an "exclusive use" facility and thus must be inventoried in your TAM plan.

♦ If the administrative office is in a building that has only incidental transit use (e.g. city hall), then it is not required to be included in either of your inventories.

#### For Passenger and Parking facilities:

♦ All passenger facilities must be inventoried in your TAM plan and reported to the NTD regardless of ownership.

♦ You must inventory all parking facilities for which you have direct capital responsibility, and that are immediately adjacent to a passenger facility (e.g. a park-and-ride lot or a garage).

#### **DECISION SUPPORT TOOLS**

In an effort to determine the State of Good Repair (SGR), which is defined as the condition at which a capital asset is able to operate at "full performance"; <u>City of Bangor,</u> <u>Community Connector, uses age to determine SGR for rolling stock and equipment.</u> Setting the Useful Life benchmark (ULB) for the SGR will be defined as the FTA standard as outlined in the 5010.1E circular and in this document.

City of Bangor, Community Connector, will identify rolling stock and equipment that have exceeded or met its useful life benchmark (ULB) which is then used in determining priority replacement. When developing the **Investment Priority List**, City of Bangor, Community Connector, identifies any vehicle that has exceeded or met its useful life benchmark (ULB) and or has a condition rating of 2.0 or below would be on the list.

In determining the State of Good Repair (SGR) for Facilities, City of Bangor, Community Connector, uses condition assessment based on a FTA TERM scale to determine SGR for facilities. <u>City of Bangor, Community Connector will identify facilities that have an SGR of 3.0 or below and will prioritizes it for replacement and or repair</u>.

City of Bangor, Community Connector, will need to determine the SGR annual performance targets to be submitted to FTA as part of the NTD reporting cycle.

### SGR TARGET SETTING METHODOLOGY

Rolling Stock AGE	% of asset class that met or exceed ULB
Equipment AGE	% of asset that have met or exceeded ULB
Facilities CONDITION	% of facilities with a condition rating below 3.0 (TERM)

City of Bangor, Community Connector – Tier II TAM Plan

15

## SGR PERFORMANCE TARGETS & MEASURES

Asset Category Performance Measure	Asset Class	FY 2021 Targets	FY 2021 Performance	FY 2022 Targets	FY 2023 Targets	FY 2024 Targets	FY 2025 Targets
Age- % of Revenue	Revenue Vehicles Buses Only	22/5	22/5	22/0	22/3	24/3	24/3
Vehicles within A particular	BU-Bus	23%	23%	0%	14%	13%	13%
asset Class that have met or exceeded Their useful life Benchmark (ULB)	MV-Mini Van RT-Rubber Tire Vintage Trolley	0% 100% 2/2	0% 100% 2/2	0% 100% 2/2	0% 100% 2/2	0% 100% 2/2	80% 5/4 100% 2/2
	ALL VEHICLES	4%	4%	7%	17%	16%	29%
Age % of vehicles That have met Or exceeded Their useful life Benchmark (ULB)	N/A						
Condition-% of Facilities with a Condition rating Below 3.0 on	Facilities Administration Building and Maintenance 3/1	33%	33%	33%	33%	33%	33%
the FTA Term scale	Passenger Facilities 1/1 Total Facilities	N/A 33%	N/A 33%	0%	0%	0% 25%	0%

## **INVESTMENT PRIORITIZATION LIST**

<u>City of Bangor, Community Connector, generates a listing of capital assets in need of replacement or rehabilitation.</u> In an effort to achieve an increased level of State of Good Repair (SGR) and assure transit riders and transit employees and the vehicles they are riding or operating are safe and reliable, <u>City of Bangor, Community Connector, will annually generate the prioritization list to provide guidance for future investment projects.</u>

#### Investment Priority Table, Rolling Stock FY 2023

VIN #	Fleet # and Status	Asset Class	Vehicle Classifi cation	Year	Useful Life Bench mark	Condition Rating 2021	Past useful Life Benchmark

#### Investment Priority Table, Equipment FY 2023

#### Investment Priority Table, Facilities FY 2023

Passenger Facilities	Transit Center	N/A
Maintenance	Bus Barn-Cold	1

City of Bangor, Community Connector – Tier II TAM Plan

17

FY 2021 Revenue Vehicles Condition Table and Asset Register											
Conditions	Conditions as of 6/30/2021										
**Age is the surrogate performance measure for condition as determined by the FTA.			To determine condition Community Connector uses age, mileage, and overall condition. The TERM scale as the condition assessment rating scale.				*End of Life rehab adds on 4 years to ULB	**Midlife rehab adds on 4 years to ULB			
Asset Category	Asset Class and Vehicle Classification	Asset Name/ Year	Condition and Condition Rating	ID/Serial No.	Age (Yrs)	Vehicle Mileage	Replacement Cost/Value	Useful Life Benchmark (Yrs)	Past Useful Life Benchmark		
Rolling Stock	BU–Bus 4	B0445 2004	Marginal-2	15GCA211341112345	17	133,490	\$469,000	10/2014	Yes		
Rolling Stock	BU – Bus 5	B0321 2003	Poor-1	5FYD2GL013U024921	18	489,267	\$560,000	16*/2020	Yes		
Rolling Stock	BU – Bus 5	B0325 2003	Poor-1	5FYD2GLO93UO24925	18	376,765	\$560,000	16*/2020	Yes		
Rolling Stock	BU – Bus 5	B0329 2003	Poor-1	5FYD2GLO63UO24929	18	644,265	\$560,000	16*/2020	Yes		
Rolling Stock	BU – Bus 5	B0330 2003	Poor-1	5FYD2GLO23UO24930	18	811,313	\$560,000	16*/2020	Yes		
Rolling Stock	BU – Bus 5	B1046 2011	Good-4	15GGB2716B1178620	10	452,130	\$560,000	16**/2027	No		
Rolling Stock	BU – Bus 5	B1047 2011	Good-4	15GGB2718B1178621	10	439,487	\$560,000	16**/2027	No		
Rolling Stock	BU – Bus 5	B1048 2011	Good-4	15GGB271XB1178622	10	324,553	\$560,000	12/2023	No		
Rolling Stock	BU – Bus 5	B1049 2011	Good-4	15GGB2711B1178623	10	344,114	\$560,000	12/2023	No		
Rolling Stock	BU – Bus 5	B1050 2011	Good-4	15GGB2713B1178624	10	311,637	\$560,000	12/2023	No		

Rolling	BU – Bus 4	B1743	Excellent-5	15GGE2719H3093243	4	134,581	\$469,000	10/2027	No
Rolling	BU – Bus 4	B1744	Excellent-5	15GGE2710H3093244	4	139,616	\$469,000	10/2027	No
Stock		2017			•	100,010	¢ 100,000		
Rolling	BU – Bus 4	B1858	Excellent-5	15GGE2710J3093459	3	92,231	\$469,000	10/2028	No
Stock		2018							
Rolling	BU – Bus 4	B1859	Excellent-5	15GGE2712J3093459	3	101,470	\$469,000	10/2028	No
Stock		2018			_		<b>.</b>	4.0/0000	
Rolling	BU – Bus 4	B1960	Excellent-5	15GGE2717K3093460	2	89,638	\$469,000	10/2028	NO
Bolling	BII – Buc A	2019 B1061	Excollont-5	15CCE2710K2002461	2	79.027	\$460.000	10/2028	No
Stock	B0 - Bus 4	2019	Excellent-5	1366E27 19K3093401	2	10,021	<b>\$409,000</b>	10/2020	NO
Rolling	BU – Bus 4	B1962	Excellent-5	15GGE2710K3093462	2	72.655	\$469.000	10/2029	No
Stock		2019			-	,	<b>+</b> 100,000		
Rolling	BU – Bus 4	B1985	Excellent-5	15GGE2719K3093685	2	66,491	\$469,000	10/2029	No
Stock		2019				-	-		
Rolling	BU – Bus 4	B1986	Excellent-5	15GGE2710K3093686	2	66,491	\$469,000	10/2029	No
Stock		2019							
Rolling	BU-Bus 4	B1987	Excellent-5	15GGE2712K3093687	2	64,074	\$469,000	10/2029	No
Stock	DII Due 4	2019 D4000	Eventuent E	45005074482002000	2	50 544	¢400.000	40/2020	No
Rolling	BU-BUS 4	D1988	Excellent-5	15GGE2/14K3093688	2	59,544	\$469,000	10/2029	NO
Rolling	BH-Bus 4	2019 B1080	Excellent-5	15GGE2716K3093689	2	59.833	\$469.000	10/2029	No
Stock	D0-D03 4	2019	Excement-5	130022/1003035005	2	33,033	φ+05,000	10/2023	
Rolling	RT - Rubber-tire	B9965	Adequate-4	1GBLP37J2X3302265	22	111.806	\$200,000	7/2006	Yes
Stock	Vintage Trolley 3	1999	•				. ,		
Rolling	RT - Rubber-tire	B0004	Adequate-4	1C9S2HFS8YW535204	17	92,964	\$250,000	7/2011	Yes
Stock	Vintage Trolley 3	2004							
Rolling	MV-Minivan 1	V1965	Excellent-5	2C7WDGBG7KR727665	2	5,597	\$65,000	4/2025	No
Stock		2019			_				
Rolling	MV-Minivan 1	V1966	Excellent-5	2C7WDGBG9KR727666	2	6,887	\$65,000	4/2025	NO
Bolling	MV Miniyon 1	2019	Excellent 5	2C4PC11 7X IP248200	2	2 155	\$65,000	4/2025	No
Stock		2018	Excellent-5	204NU1L/AJK240390	3	3,100	\$0 <b>0,000</b>	4/2023	UPI
Rolling	MV-Minivan 1	V1889	Excellent-5	2C4RC1L73JR248389	3	3,888	\$65,000	4/2025	No
Stock		2018							
Total	22 BUSES/1								
	TROLLEY/4 VAN								

#### FY 2021 Equipment Condition Table and Asset Register

\*\*Age is the surrogate performance measure for condition as determined by the FTA.

To determine condition Community Connector uses age and overall condition. The TERM scale as the condition assessment rating scale.

Asset Category	Asset Class	Asset Name	Count	ID/Serial No.	Age (Yrs)	Vehicle Mileage	Replacement Cost/Value	Useful Life Benchmark (Yrs)	Past Useful Life Benchmark
No Equipment									

#### FY 2021 Facilities Condition Table and Asset Register

Conditions as of 6/30/2021

The TERM scale as the condition assessment rating scale.

Asset Category	Asset Class	Asset Name	Asset Owner	% Asset Responsibility		Year and Age (Yrs)	TERM Scale Condition	Replacement Cost/Value
Facilities	Administration	Office	City of Bangor / Community Connector is responsible	100%	2018	2	5	\$350,000.00
Facilities	Maintenance	Bus Barn-Cold	City of Bangor /Community Connector is responsible	100%	1980	41	1	\$1,645,000.00
Facilities	Maintenance	Bus Barn-Heated	City of Bangor / Community Connector is responsible	100%	2004	17	4	\$472,500.00
Facilities	Maintenance	Bus Wash	City of Bangor and Community Connector is NOT responsible	0%	2004	16		\$3,028,900.00
Facilities	Maintenance	Fleet Maintenance	City of Bangor Community Connector is NOT responsible	0%	1970	48		\$3,000,000.00
Facilities	Passenger	Bus Depot	Torn Down 5/2019					

#### Approved Investment Project List

Project Year	Project Name	Asset/Asset Class	Cost	Priority
EV 2021-2022	FY 2019 5339 Bus and Bus	Facilities	\$2.4 Million	High/Eundod
FT 2021-2022	5339 Bus and Bus Fac.	raciiities	\$3.4 WIIIIOII	nigh/Fundeu
	Formulas Funds	Bus Support		
FY 2021-2022	Bus Technology Project	Equipment	375,000	High/Funded
	FY 20 5339 Bus and Bus Fac	Bus Support and		
FY 2022-2023	Bus Stop Project	Equipment	496,000	High/Funded
FY 2024	FY 18 Bus and Bus Fac Grant	2 Buses	1 million	Ordered
Proposed Ir	nvestment Project List			
	New Roof and Furnace -			
FY 2023	Warm Bus Barn	Facilities	100,000	High
FY 2023	Service Vehicles	Equipment	50,000	High
		Bus Support		
FY 2023-2024	Add more Bus Technology	Equipment	250,000	High
FY 2024-2030	Rehab the Cold Bus Barn	Facilities	5.0 Million	High
	Add More Bus Stops and	Bus Support		
FY 2024-2025	Shelters	Equipment	350,000	High
FY 2025-2030	Move to Electrification			



## Tier II Transit Asset Management Plan

State of Maine Group Plan for Rural Transit Providers

Effective October 1, 2018 (Revised October 1, 2022)

Final

#### **TABLE OF CONTENTS**

4
4
5
6
11
16
16
17
23
27

#### **TABLES**

Table 1 Rolling Stock Classifications	7
Table 2 Rolling Stock and Non-Revenue Vehicle by Provider	8
Table 3 Facility Maintenance Procedures by Asset Type and Responsible Party	10
Table 4 MaineDOT Rolling Stock and Non-Revenue Vehicle Information Request Form	13
Table 5 MaineDOT Facility Information Request Form	13
Table 6 MaineDOT Ferry Vessel Information Request Form	13
Table 7 Rolling Stock Condition Scale	14
Table 8 MaineDOT Facility Conditional Assessment Tool	16
Table 9 MaineDOT Conditional Assessment Tool – Ferry Infrastructure	17
Table 10 MaineDOT Conditional Assessment Tool – Ferry Transfer Bridges	18
Table 11 Facility Condition Assessment Rating Scale and Assessor Information	19
Table 12 Condition Rating Scale for Ferry Vessels	20
Table 20 MaineDOT Targets	27

**TABLES – Separate Documents** 

Table 13 Fleet Summary VAN Table 14 Fleet Summary LDB Table 15 Fleet Summary SMDB Table 16 Fleet Summary MHDB (Not Applicable for this version of the TAM Plan] Table 17 Fleet Summary SHDB (Not Applicable for this version of the TAM Plan] Table 18 Equipment – Non-Revenue Vehicles (NRV) Table 19 Fleet Summary Ferry Table 21 Investment Priority Table, Rolling Stock 2021 Table 22 Investment Priority Table – Rolling Stock by Type (projected over 2-5 years) Table 23 Investment Priority Table – Equipment (projected over 2-5 years) Table 24 Investment Priority Table – Ferry and Rescue Boats (projected over 2-5 years)

**APPENDICES – Separate Documents** 

Appendix 1 Rolling Stock Inventory Appendix 2 Facility Inventory by Subrecipient Appendix 3 Accountable Executive List

#### **INTRODUCTION**

In 2016, the Federal Transit Administration (FTA) published a rule, 49 CFR Part 625, to require public transit providers that receive Federal transit assistance to undertake certain transit asset management activities. Transit asset management is 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. Asset management is a cornerstone of effective performance management. By leveraging data to improve investment decision-making, asset management improves reliability, safety, cost management, and customer service.

#### BACKGROUND

Maintaining transit assets, such as rolling stock, infrastructure, equipment, and facilities, in a state of good repair is essential to maintaining safety, ensuring system reliability, and reducing long-term maintenance costs. In its 2010 National State of Good Repair Assessment, FTA found that more than 25% of rail transit assets and 40% of bus assets were in marginal or poor condition. There is an estimated backlog of \$50–\$80 billion in deferred maintenance and replacement needs—a backlog that continues to grow. Transit agency customers, policymakers, and public agencies hold agency management accountable for performance and increasingly expect more business-like management practices. The magnitude of these capital needs, performance expectations, and increased accountability requires agency managers and accountable executives to become better asset managers.

In 2012, Congress passed the Moving Ahead for Progress in the 21st Century Act (MAP-21) that required the establishment of a National Transit Asset Management (TAM) System that would include a definition of "state of good repair;" requirements that recipients and subrecipients of Federal transit funding develop transit asset management plans; state of good repair performance measure and reporting requirements; and annual reporting requirements. This rule was continued under the Bipartisan Infrastructure Law, without change, signed into law by President Biden in 2021.

To ensure compliance with the requirements of MAP-21, FTA published a final rule on TAM planning requirements on July 26, 2016. The final rule included a transit-specific asset management framework for managing assets individually and as a portfolio of assets that comprise an integrated system. Within that framework, FTA has identified three potential roles in transit asset management planning:

*Tier I Provider* is 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 I providers must develop their own, individual TAM plan.

*Tier II Provider* is 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. Tier II providers can develop their own individual TAM plan or can be included in a group plan developed by a sponsor agency. *Sponsor Agency* is a state, a designated recipient, or a direct recipient that develops a group TAM for at least one Tier II provider.

Asset management processes are ongoing and involve evaluating and managing the relationships between costs, risks, and performance over the asset's lifecycle. The transit asset management framework has three categories of business processes:

- Asset Management Vision and Direction agency-wide processes that establish the organization-wide asset management policy and strategy and drive resource allocation.
- Lifecycle Management the processes involved in the lifecycle management of individual asset classes; these include managing the data (inventory), monitoring the assets' condition and performance, and developing lifecycle management plans.
- Cross-Asset Planning and Management agency-wide processes that consider information from all asset classes to support the capital programming and operations and maintenance budgeting process.

The fundamental concepts of asset management are straightforward; however, implementing the changes necessary to become a mature asset management organization requires careful planning and execution. In recognition of the potential administrative and planning burden facing small participating organizations, FTA established new guidelines and planning requirements for State Departments of Transportation.

Specifically, §625.27 requires that states, acting as sponsors, develop a group TAM plan for all subrecipients under the Rural Area Formula Program (Section 5311), including American Indian tribes. The sponsor is responsible for setting unified targets for the plan participants and sharing that information with Metropolitan Planning Organizations (MPOs) that house their participating providers.

The Maine group plan will include all Tier II provider subrecipients, except those subrecipients that also are direct recipients under the Urbanized Area Formula Program authorized under 49 U.S.C. 5307. Tier II providers may only participate in one group plan and must provide written notification to Maine Department of Transportation (MaineDOT) if they choose to opt-out and develop their own plan. Participants must also provide MaineDOT with any information necessary and relevant to completing the original plan and any future revisions.

#### TRANSIT ASSET MANAGEMENT PLAN REQUIREMENTS

MaineDOT has developed this Maine Statewide Tier II Transit Asset Management Plan in accordance with the guidelines established by the FTA. Specifically, §625.25 requires that all TAM plans must include:

• An inventory of the number and type of capital assets (see Appendices). The inventory must include all capital assets that the provider owns, except equipment with an acquisition

value under \$50,000 that is not a service vehicle. The inventory also must include thirdparty owned or jointly procured exclusive-use maintenance facilities, passenger station facilities, administrative facilities, rolling stock, and guideway infrastructure used by a provider in the provision of public transportation. The asset inventory must be organized at a level of detail commensurate with the level of detail in the provider's program of capital projects.

- A condition assessment of those inventoried assets for which a provider has direct capital responsibility (see Appendices). A condition assessment must generate information in a level of detail sufficient to monitor and predict the performance of the assets and to inform the investment prioritization.
- A description of analytical processes or decision-support tools used to estimate capital investment needs over time.
- A project-based prioritization of investments.

In addition to required elements noted above, group plan sponsors, such as Maine, must ensure the following:

- The plan development is coordinated with each Tier II provider's Accountable Executive.
- The completed group plan is made available to all participants in an easily accessible format.

#### DEFINITIONS

*Accountable Executive* - 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* - A grouping of asset classes, including a grouping of equipment, rolling stock, infrastructure, and facilities. See Appendix 1.

*Asset class* - 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. See Appendix 1 to this part.

Asset inventory - A register of capital assets and information about those assets.

*Capital asset* - A unit of rolling stock, a facility, a unit of equipment, or an element of infrastructure used for providing public transportation.

*Decision support tool* - 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* - An entity that receives Federal financial assistance directly from the Federal Transit Administration (FTA).

*Equipment* - An article of nonexpendable, tangible property having a useful life of at least one year.

*Exclusive-use maintenance facility* - A maintenance facility that is not commercial and either owned by a transit provider or used for servicing their vehicles.

Facility - A building or structure that is used in providing public transportation.

FTA - The Federal Transit Administration.

*Full level of performance* - The objective standard established by FTA for determining whether a capital asset is in a state of good repair.

*Group TAM plan* - A single Transit Asset Management (TAM) plan that is developed by a sponsor on behalf of at least one Tier II provider.

*Horizon period* - The fixed period of time within which a transit provider will evaluate the performance of its TAM plan.

*Implementation strategy* - A transit provider's approach to carrying out TAM practices, including establishing a schedule, accountabilities, tasks, dependencies, and roles and responsibilities.

*Infrastructure* - The underlying framework or structures that support a public transportation system.

*Investment prioritization* - 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* - A list of activities that a transit provider determines are critical to achieving its TAM goals.

*Life-cycle cost* - The cost of managing an asset over its whole life.

*MaineDOT* – The Maine Department of Transportation.

*Participant* – A Tier II provider that participates in a group TAM plan.

*Performance Measure* - 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* - A quantifiable level of performance or condition, expressed as a value for the measure, to be achieved within a time period required by FTA.

*Public transportation system* - The entirety of a transit provider's operations, including the services provided through contractors.

*Public transportation agency safety plan* - A transit provider's documented comprehensive agency safety plan that is required by 49 U.S.C. 5329.

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

*Rolling stock* - A revenue vehicle used in providing public transportation, including vehicles used for carrying passengers on fare-free services.

*Service vehicle* - A unit of equipment used primarily to support maintenance and repair work for a public transportation system or to deliver materials, equipment, or tools.

*Sponsor* - A state, a designated recipient, or a direct recipient that develops a group TAM for at least one Tier II provider.

*State of good repair (SGR)* - The condition in which a capital asset is able to operate at a full level of performance.

*Subrecipient* - An entity that receives Federal transit grant funds indirectly through a state or direct recipient.

*TERM scale* - The five category rating system used in FTA'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* - A recipient that owns, operates, or manages either (1) one hundred and one 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* - A recipient that owns, operates, or manages (1) one hundred 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)* - 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* - 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* - A transit provider's documented commitment to achieving and maintaining a state of good repair for all 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* - The approach a transit provider takes to carry out its policy for TAM, including its objectives and performance targets.

*Transit asset management system* - 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)* - 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* - Either the expected life cycle of a capital asset or the acceptable period of use in service determined by FTA.

*Useful life benchmark (ULB)* - 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.

#### MaineDOT Transit Asset Management Plan

#### TAM PLAN INCLUSION

MaineDOT is a direct recipient of FTA 5310 and 5311 funds and oversees 13 Tier II transit systems as defined by the Federal Transit Administration (FTA) who own, operate or manage public transportation capital assets used in the provision of public transportation. Each system was invited to training sessions in September 2017 and July 2018 as part of the State's education and outreach process and has requested to participate in the MaineDOT Plan to ensure compliance with FTA 49 CFR Part 625.

There are five tribal governments operating within the State. Of these, the Houlton Band of Maliseets is the only recipient of FTA funds and has elected to prepare its own TAM Plan.

#### **ASSET INVENTORY**

Transit assets included within this plan may be considered in two overall classifications: (1) facilities and (2) rolling stock and equipment. These are then further delineated by whether they are in service to land- or water-based transit operations. Within land-based rolling stock, there are further sub-classifications that are used for comparing and prioritizing investment among like asset types.

#### **Facilities**

Transit facilities included in this Plan include buildings, parking lots, piers, transfer bridges and related ferry service support equipment (such as hoists). Facility data are relatively static and included in asset inventories held by the facility owner. Data were collected as required for inclusion in this Plan from participating providers. As facilities are added, deleted or substantially changed, they will be reported to the MaineDOT Transit Asset Manager. An annual reminder will be sent out to all participating providers along with the appropriate Facility Assessment Tool(s) to be used for inspections and condition assessments (see Table 8, 9 and 10).

#### Water-Based Rolling Stock

Ferries have a relatively long useful life and are few compared with land-based transit rolling stock. The Maine State and Isle au Haut Ferry Services manage their respective fleet data and will keep the MaineDOT Transit Asset Manager updated on an annual basis.

#### Land-Based Rolling Stock and Equipment

The vast majority of inventory intensively managed within this Plan are transit vans and buses owned by MaineDOT subrecipients. MaineDOT requires grant subrecipients to submit rolling stock data for TAM/Program Management purposes once a year for buses and vans. MaineDOT uses a Microsoft Access Database designed specifically to track and account for transit rolling stock and uses a Public Transit Management System (PTMS) Form to collect asset management data. An example of the PTMS Form is listed below in Table 4. A full listing of all 2021 assets is located in Appendices 1 and 2.

#### **Rolling Stock and Equipment Classifications**

MaineDOT procures vehicle types to meet the identified need for the vehicle, service geography, and ability to maintain the vehicle. Vehicle categories range from Van to Ferry Boat. Each vehicle category is designated with a minimal useful life taken from FTA Circular 5010.1E. Below, Table 1 shows the criteria used by MaineDOT to classify Rolling Stock and Non-Revenue Vehicle Equipment applying Useful Life and Useful Mileage performance measures.

Vehicle Class	Description	Minimum Useful Life	Minimum Useful Miles
V	Van	4	100000
LDB	Light Duty Bus	5	150000
SMDB	Small Medium Duty Bus	7	200000
MHDB	Medium Heavy Duty Bus	10	350000
SHDB	Standard Heavy Duty Bus	12	500000

#### **Table 1 Rolling Stock Classifications**

Vehicle Class	Description	Minimum Useful Life	Minimum Useful Miles
NRV	Auto	4	100000
NRV	Service Vehicle	4	200000

Vehicle Class	Description	Minimum Useful Life
F	Ferry - MSFS	30
F	Ferry - Isle au Haut	50
RB	Rescue Boat	20

The systems listed in Table 2 vary from demand response, flex route, ferry, and intercity feeder service modes. The Maine State Ferry Service (MSFS) is owned and managed by MaineDOT. The 12 other participating systems are sub-recipients of FTA 5311 funds and include all MaineDOT FTA 5310 sub-recipients. In addition, MaineDOT owns docking assets used by the Casco Bay Island Transit District (CBITD), which is a direct recipient of FTA funds. The State-owned assets are included in this Plan; all other CBITD assets are included in a separate Plan. A detailed listing of all capital assets included in this plan is located in Appendix 1.

#### Table 2 Rolling Stock and Non-Revenue Vehicles by Provider

ROLLING STOCK									
Provider /Vehicle Type	V	LDB	SMDB	MHDB	SHDB	FERRY	Total		
ARTS	6	5	10	0	0	0	21		
BATH	0	3	0	0	0	0	3		
DCP	14	9	4	0	0	0	27		
DTI	6	0	35	25	2	0	68		
КVСАР	22	18	7	0	0	0	47		
PENQUIS	23	3	0	0	0	0	26		
RTP	10	14	2	0	0	0	26		
WCAP	22	8	0	0	0	0	30		
WEST'S	1	2	4	0	0	0	7		
WMTS	7	31	3	5	0	0	46		
YCCAC	3	16	13	0	0	0	32		
ISLE AU HAUT	0	0	0	0	0	2	2		
MSFS	0	0	0	0	0	7	7		
TOTAL	114	109	78	30	2	9	342		

#### Table 2 Rolling Stock and Non-Revenue Vehicles by Provider

EQUIPMENT - NON-REVENUE VEHICLES										
Provider /Vehicle Type	AUTO	SERVICE VEHICLE	Rescue Boats	TOTAL						
ARTS	0	1	0	1						
DTI	2	0	0	2						
WMTS	0	2	0	2						
MSFS	0	0	6	6						
TOTAL	2	3	6	11						

#### **Facility Classifications**

MaineDOT owns a number of buildings, parking lots, piers, docks, transfer bridges, hoists and associated equipment used to support public transportation services. Other than the Maine State Ferry Service, which is owned and operated by MaineDOT, all other transit services are provided by FTA Section 5311 subrecipients, direct recipients, or private sector providers. In several cases, facilities are leased to transit providers. In addition, facilities are varied and require oversight by people with specialized expertise. Thus, the responsibility for asset management, particularly maintenance, is distributed in many cases among multiple parties. Facilities owned
by MaineDOT are managed by the MaineDOT Bureau of Maintenance and Operations. Transit facilities owned by FTA Section 5311 subrecipients are managed entirely by the subrecipients who, as participants in this Plan, transmit their condition assessments to MaineDOT's Transit Asset Manager in the Bureau of Planning.

**Table 3** outlines maintenance procedures and assigned responsibility for assets by type, ownership and operator. A brief description of the facilities managed by subrecipients follows.

Essility Type	Owner	Operator	Maintenance	Responsibility	Broossa Notos
Гаспиу гуре	Owner	Operator	Lead	Assist	FICESS NOLES
		Maine State Ferry Service (MaineDOT)	M&O Multimodal Transportation Operations Managers	MSFS Staff MSFS contracts for winter maintenance	MaineDOT performs biennial facility inspections
Building (e.g. passenger terminal, garage, administrative office)	MaineDOT	Subrecipient transit provider	Specified in lease on case- by-case basis	MaineDOT M&O Region Office does biennial inspection and addresses minor capital repairs from annual budget	Beginning in 2019, a joint biennial walk-thru of each facility will be scheduled in the April – July timeframe with report compiled by Region staff and shared with provider and Transit Asset Manager
	Subrecipient transit provider	Subrecipient transit provider	Subrecipient transit provider	N/A	A biennial condition assessment will be submitted to the Transit Asset Manager
	MainaDOT	Maine State Ferry Service (MaineDOT)	Region office	MSFS Staff watch on daily basis	MaineDOT performs biennial inspections
Parking Lot	Wallie DO T	Subrecipient transit provider	Specified in lease on case- by-case basis		Review parking lot condition as part of biennial joint building inspection
	Subrecipient transit provider	Subrecipient transit provider	Subrecipient transit provider	N/A	
Ferry Transfer Bridge (including integral equipment e.g. hoists)	MaineDOT	Maine State Ferry Service (MaineDOT)	Region bridge maintenance staff	MSFS operators observe daily	Monthly, quarterly, semi-annual and annual maintenance services performed; Biennial inspections performed by MaineDOT to ID needs.

Table 3 Facility Maintenance Procedures by Asset Type and Responsible Party

	Subrecipient transit provider	Subrecipient transit provider	Subrecipient transit provider	N/A	A biennial condition assessment will be submitted to the Transit Asset Manager
Wharves, piers and docking facilities	MaineDOT	Maine State Ferry Service (MaineDOT)	MSFS issues contract for annual evaluation ??	Contractor performs underwater assessment	Biennial inspections performed by MaineDOT to ID needs
		Casco Bay Islands		Informed by Casco Bay Island Transit District staff	Joint Annual inspection performed on MaineDOT owned assets.
	Subrecipient transit provider	Subrecipient transit provider	Subrecipient transit provider	N/A	A biennial condition assessment will be submitted to the Transit Asset Manager

#### **MaineDOT-Owned Facilities under Lease to Subrecipients**

The Aroostook Regional Transportation System leases its maintenance and administrative building from the MaineDOT. The Executive Director is responsible for implementing the System's written facility maintenance plan. The Mechanic performs inspections with Management to assure plan is followed. Problems are addressed once they are found during an inspection. Inspection checklists are used based on a daily, monthly, semi-annual, annual, or 5year basis.

MaineDOT owns and leases the maintenance and administrative facility known as Acadia Gateway Center to Downeast Transportation, Inc. (DTI). MaineDOT is responsible for the major repairs and DTI is responsible for the minor repairs as outlined in the lease agreement.

#### **Subrecipient-Owned and Operated Facilities**

Using private funds, Western Maine Transportation Services, Inc. (WMTS) built a maintenance and administrative facility in 2006, and is in the process of being renovated using Federal Funds. The facility presently maintains and supports rural and urban operations and provides additional parking for Concord Coach as needed. The General Manager is responsible for implementation of the written facility maintenance plan; presently the plan consists of completing and maintaining monthly checklists of the facility and grounds and the facility systems. The Maintenance Supervisor oversees the performance of inspections done by maintenance staff to assure plan is followed. Problems are addressed once they are found during an inspection. Inspection checklists are used based on a monthly, semi-annual, or annual basis.

Regional Transportation Program finalized construction of its new administration and maintenance buildings in 2022. The facility was completed using a combination of FTA funds, USDA funds and RTP local funds. The facility maintenance plan is in the process of being completed; presently the proposed plan consists of completing and maintaining monthly checklists of the facility, grounds and the facility systems. The Executive Director will be responsible for implementation of the plan. The Manager of Transit Operations oversees the performance of inspections done by maintenance staff to assure the plan is followed. Problems are addressed once they are found during an inspection. Inspection checklists are used based on a monthly, semiannual, or annual basis.

West's Transportation used private funds to build its administrative building in 1985. The Manager is responsible for implementing its written facility maintenance plan. Inspection checklists are used based on a bi-weekly, monthly, semi-annual and annual basis. Problems are addressed once found during inspection.

Isle Au Haut's Facilities Committee is responsible for a long-term plan recommending repairs and improvements for its assets. Repairs, in particular, are categorized either as needed for immediate safety and performance, for routine maintenance, and for desirable upgrades. Routine maintenance is part of the normal budgeting process. Items needed immediately for safety and performance are normally handled directly by management with notification to the Board. Longer term upgrades are subject to Board oversight.

#### **Risk Management**

All assets which are owned by MaineDOT are insured with the State Office of Risk Management.

#### **DATA COLLECTION**

Data are reported to the Transit Asset Manager annually using the forms displayed in Tables 4, 5, and 6.

# Table 4 MaineDOT Rolling Stock and Non-Revenue Vehicle Information Request Form(PTMS)

1	2	3	4	5	6	7	8	9	10	11	12	
VIN	Fleet # and Status*	Vehicle Type **	Make, Model	Year	Fuel Type	Fuel Use – 12 months	Mileage	12-month Mileage	Repair Cost - 12 months	Repair frequency 12 months***	Vehicle appearance - interior	Vehicle appearance exterior
13					14					15	16	17
ADA Accessibili ty:	Equipped/ Working	Tie Down	Announce ment System	Signage and Stops	Passenger Amenities	Air Conditioni ng	Working Heater	Tinted Windows	Padded Seats	Type of fare collection system	Date of Inspection	Inspector's Name:
* A (Activ	e); I (Inactive	); SP (Spare);	D (Disposed)	; Sold (Sold)								
** SHDB (5	Standard Heav	vy Duty Bus);	MHDB (Med	lium Heavy D	uty Bus); SM	DB (Small Me	edium Duty B	Bus); LDB (Lig	ght Duty Bus)	; V (Van).		
*** Repair F	requency: (1)	- Routine Pro	eventive Main	tenance; (2) N	Ainor Repairs	(vehicle not ta	iken out of se	rvice); (3) Ma	jor Repairs			

#### **Table 5 MaineDOT Facility Information Request Form**

Mainte	Aaintenance and Administration Facility (A-10)																	
		Mark "X"																
		if line																
		item is					Primary	Administrative										
		section					Mode	and	Year Built or			Transit Agency	Estimated			NOT	Date of	
	Facility	of larger	Street			Zip	Served at	Maintenance	Reconstructed	Year	Square	Capital	Useful Life	Condition	AVG	SGR	Condition	
NTD ID	Name	facility	Address	City	State	Code	Facility	Facility Type	(as new)	Rehabilitated	Feet	Responsibility	Scale	Assessment	SGR	(<=3)	Assessment	Notes

#### Table 6 MaineDOT Ferry Vessel Information Request Form

#### MaineDOT Ferry Vessel Information Request Form

SYSTEM	ASSET	ASSET	ASSET NAME/	MAKE/	ID NO.	IN SERVICE YFAR	LAST REPOWER /REHAB	USEFUL	ORIGINAL	REPLACEMENT		
SISILI	CATEGORI	CLASS	LOCATION	MODLE		ILAN	TREITAD		6051	6051		

#### **CONDITION ASSESSMENTS**

#### Land-Based Transit Systems

#### **Rolling Stock and Equipment**

Rolling stock assessments are based on the following premise in Table 4 and are conducted by transit management or operations supervisors using a scale of 1 to 5. To conduct a proper vehicle assessment, the inspector is required to not only assess the physical vehicle, but also review the maintenance file. The reviewer will identify preventive maintenance inspections as well as maintenance repairs classified as minor or major repairs. Major repairs include substantial work to engine, transmission, and rear end. Minor repairs might include brakes, alignment, minor lift repairs, and other lower cost repairs not associated with preventive maintenance.

Appearance is also taken into consideration when assessing the vehicle condition. As part of the Public Transportation Management System (PTMS), exterior and interior condition is reported by providers annually. The appearance condition is converted into a score of 1-5 and averaged with the score derived from Table 7 to give an average condition assessment score.

Equipment assessments are completed by the subrecipient using the same premise as the rolling stock assessment. This requires transit systems to maintain proper records of each piece of equipment used in the support of public transit service. Only equipment with an acquisition value greater than \$50,000 must be included in TAM data. The exception is non-revenue service vehicles where value is not a factor. Examples of equipment include non-revenue vehicles, non-

permanent facility equipment—moveable bus wash system, portable lift systems, tire changing stations, digital bus arrival boards, and other major equipment components not part of the facility.

#### **Table 7 Rolling Stock Condition Scale**

Rolling Stock Condition Ranking							
5 - Excellent - brand new - no major problems exist - only routine maintenance							
4 - Good - elements are in good working order - requiring only nominal or infrequent minor repairs (greater than six months between repairs)							
<b>3- Fair -</b> requires frequent minor repairs (less than six months between repairs) or frequent major repairs (more than six months between major repairs)							
2- Poor - requires frequent major repairs (less than 6 months between major repairs)							
1 - Bad - in poor condition that continued use presents potential problems							

### **Facilities**

As mentioned in the beginning of this section, all facility assessments are conducted by MaineDOT staff, its subrecipients or its sub-contractors, using a modified Transit Economic Recovery Model (TERM) assessment form developed by MaineDOT. The form includes 10 areas of concentration with sub-sections for each area. Sub-sections are rated separately (e.g. a roof may need replacement but the rest of a building is sound) and then averaged to produce a composite score for the entire facility. The rating system uses a 1-5 rating scale as required by FTA. Facility assessments will be conducted every other year unless MaineDOT has reason to conduct the assessments more often. Specialized ferry support facilities such as transfer bridges, piers and docks have their own assessment forms. The assessment tools are shown in Table 9 and 10.

All facility assessments will be documented and entered in a data table to also include useful life data on each facility. Currently, MaineDOT uses the standard 40-year useful life for its facilities. Subrecipients are required to report data for facilities where they have capital responsibility. Facility types include any building or structure used in providing public transportation, including passenger stations, operations, maintenance, ferry amenities (such as parking lots, piers, docks, transfer bridges and hoists) and administrative facilities. Capital responsibility is defined as the following:

Direct capital responsibility	No direct capital responsibility
Plan member owns the asset.	Plan member does not own the asset AND is not responsible for replacing, overhauling, refurbishing, or conducting major repairs on that asset, or the costs of those activities are not itemized as a capital line item in member's budget.
Plan member jointly own the asset with another entity.	
Plan member is responsible for replacing, overhauling, refurbishing, or conducting major repairs on that asset, or the costs of those activities are itemized as a capital line item in member's budget.	

For Maintenance and Administrative facilities:

- Any maintenance or administration facility under 100 square-ft. does not need to be included (e.g. security guard shack, stand-alone restroom, storage shelter in which no work is performed).
- If transit vehicles are the only vehicles that the maintenance facility services, then it is considered an "exclusive use" facility and thus must be inventoried in the provider's TAM plan.
- If the administrative office is in a building that has only incidental transit use (e.g. city hall), then it is not required to be included.

#### For Passenger and Parking facilities:

- All passenger facilities must be inventoried in the TAM plan and reported to the National Transit Databases (NTD) regardless of ownership.
- TAM Plan must inventory all parking facilities for which there is direct capital responsibility, and that are immediately adjacent to a passenger facility (e.g. a park-and-ride lot or a garage).

#### **Table 8 MaineDOT Facility Condition Assessment Tool**

This table is to be used for completion of the facility assessment. It includes 10 inspection areas requiring ratings (see Table 11) for each subcategory. The score will automatically calculate the State of Good Repair (SGR) score for the facility based on weighted averages of each inspection area.

Maintenance and Administrative Facility Condition Assessment	SCORE	Assessor
Inspection Area		Intls.
Substructure		
Foundations: Walls, columns, pilings other structural components		
Basement: Materials, insulation, slab, floor underpinnings		
Shell		
Superstructure/structural frame: columns, pillars, walls		
Roof: Roof surface, gutters, eaves, skylights, chimney surrounds		
Exterior: Windows, doors, and all finishes (paint, masonry)		
Shell appurtenances: Balconies, fire escapes, gutters, downspouts		
Interiors		
Partitions: Walls, interior doors, fittings such as signage		
Stairs: Interior stairs and landings		
Finishes: Materials used on walls, floors and ceilings		
This component covers all interior spaces, regardless of use		
Conveyance (Elevators and Escalators)		
Elevators		
Escalators		
Lifts: any other such fixed apparatuses for the movement of goods or people		
Plumbing		
Fixtures		
Water distribution		
Sanitary Waste		
Rain water drainage		
HVAC (Heating, ventilation, and air conditioning)		
Energy supply		
Heat Generation and distribution systems		
Cooling generation and distribution systems		
Testing, balancing, controls and instrumentation		
Chimneys and vents		
Fire Protection		
Sprinklers		
Standpipes		
Hydrants and other fire protection specialties		
Electrical		
Electrical service and distribution	1	
Lighting & branch wiring (interior and exterior)		
Communications and security		
Other electrical system-related pieces such as lighting protection, generators, and		
emergency lighting		
Equipment/Fare Collection		
service equipment		
For clarity, includes items valued above \$10,000 and related to facility function		
Site		
Roadways/driveways and associated signage, markings and equipment		
Parking lots and associated signage, markings and equipment		
Pedestrian areas and associated signage, markings, and equipment		
Site development such as fences, walls, and miscellaneous structures		
Site Utilities		
Overall Assessment Score	#DIV/0!	

#### Water-Based Transit Systems

Ferry service providers comply with U.S. Coast Guard in their inspection and condition requirements for vessels.

Tables 9 and 10 represent the assessment forms that will be used for water-based transit facilities.

	Ferry	y Pier Condition Ass	sessment	Form 20	18	
Location						
Date						
Discipline	System	Component	Priority	Rating 1-5	Insp. Intls.	Date of Insp
Piers	Structural	Deck	A		-	
Piers	Structural	Deck Surface	С			
Piers	Structural	Firewalls	C			
Piers	Structural	Pile Caps	A			
Piers	Structural	Piles and Bracing	A			
Discipline	e Sub Total	•				
Piers	Fender	Buffer	В			
Piers	Fender	Facing	В			
Piers	Fender	Piles and Bracing	В			
Piers	Fender	Wales and Chocks	В			
Piers	Fender	Piles	В			
Discipline	e Sub Total					
Bulkheads	Structural	Relieving platform top	A			
Bulkheads	Structural	Rip rap	Α			
Bulkheads	Structural	Sheet piles	C			
Bulkheads	Structural	Wales	Α			
Bulkheads	Structural	Coping	Α			
Bulkheads	Structural	Facing	C			
Bulkheads	Structural	Gravity wall	C			
Bulkheads	Structural	Pile supported wall	Α			
Bulkheads	Structural	Piles and Bracing	Α			
Discipline	e Sub Total					
Bulkheads	Backfill	Surface	Α			
Bulkheads	Backfill	Fill	В			
Discipline	e Sub Total					
Bulkheads	Fender	Wales and Chocks	В			
Bulkheads	Fender	Buffer	В			
Bulkheads	Fender	Facing	В			
Bulkheads	Fender	Piles	В			
Discipline	e Sub Total	-				
	Tot	al		#DIV/0!		

#### Table 9 MaineDOT Condition Assessment Tool - Ferry Infrastructure

# Table 10 MaineDOT Condition Assessment Tool – Ferry Transfer Bridges

	Ferry Termi	nal Transfe	er Bridge Inspec	tion Sheet	<u>I</u>
Location					
Date					Assessor
*Only con	nplete blank	cells - do	not fill colored	cells*	Intis.
Approach	(L	and and W	/ater)	Score	
Na	vigation Lig	nts			
	Search Lights	5			
	Street Lights	5			
Pave	ement condi	tion			
	Guard Rail				
Bridge Ho	ist Machine	ry			
	<b>Right Angle</b>	Reducers			
	Planetary R	educers			
	, Parallel Sha	ft Reduce	rs		
	Hoist Drum				
	Wire Rope	and Defleo	tor Sheaves		
	Electric Mo	tors			
	Disc Brakes				
Bridge Co	unterweight	t System			
	Bearings				
	Turnbuckle				
	Guide Rails				
	Guide Brack	kets			
	Counterwe	ight Box			
Apron Ho	ist Machiner	'V			
	Pedestal Re	ducer			
	<b>Right Angle</b>	Reducer			
	Wire Rope	and Defleo	tor Sheaves		
	Disc Brakes				
	Electric Mo	tor			
	Miscellane	ous			
		Apron Hin	ge		
		Articulatir	ng Hinge		
		Apron Piv	ot		
		Sliding Pla	ate		
		Disconnet	Coupling		
Apron Co	unterweight	System			
	Swivel and	Snatch Blo	ock		
	Guide Rails				
	Guide Brack	kets			
	Counterwe	ight Box			
	(	Overall Ass	sessment Score		#REF!

### **Condition Rating Scales for all Facility Assessments**

Each Facility Assessment Form includes the following two charts. The below Condition Assessment Rating Scale is used to reference the description for scores of 1-5. This scale is taken from FTA's Transit Economic Requirements Model (TERM) scale, used primarily for land and water-based facilities.

	Condition Assessment Rating Scale							
Rating	ating Condition Description							
4.8-5.0	Excellent	No visible defects, new or near new condition, may still be under warranty if applicable						
4.0-4.7	Good	defective or deteriorated component(s), but is overall functional						
3.0-3.9	Adequate	Moderately deteriorated or defective components; but has not exceeded useful life						
2.0-2.9	Marginal	Defective or deteriorated component(s) in need or replacement; exceeded useful life						
1.0-1.9	Poor	Critically damaged component(s) or in need of immediate repair; well past useful life						

#### Table 11 Facility Condition Assessment Rating Scale and Assessor Information

The form is to be completed to include the individual(s) who assess each component of the Facility Assessment form. A column on the form requires initials of the person completing that section of the assessment along with date, full name, and title.

Date	Transit System Assessor	Title

ASSET	Asset Age	Asset Condition	Asset Performance	Level of Maintenance
RATING SCORE	(Percent of useful life remaining)	(Quality, Level of Maintenance Required)	(Reliability, Safety, Meets Industry Standards)	(Level of Preventative and Corrective Maintenance)
5 Excellent	Asset new or nearly new 75% - 100%	Asset new or like new, no visible defects	Asset meets or exceeds all performance and reliability metrics, industry standards	No unfunded or deferred maintenance activities
4 Good	Asset nearing or at its midlife point 50% - 75%	Asset showing minimal signs of wear; some slight defects or deterioration	Asset general meets performance and reliability metrics, industry standards	Corrective maintenance increasing, no skipped preventive or corrective maintenance
3 Adequate	Asset has passed its midlife point 25% - 50%	Some moderately defective or deteriorated components; expected maintenance needs	Occasional performance and reliability issues; may be substandard in some areas	More frequent corrective maintenance required and some minor component failures
2 Marginal	Asset nearing or at end of its useful life 0% - 25%	Increasing numbers of defects; deteriorating components; growing maintenance needs	Performance and reliability problems becoming more frequent; sub- standard elements	Frequent corrective maintenance activities; major components needing replacement or rehab
1 Poor	Asset passed its useful life	Asset in need of replacement or restoration; may have critically damaged components	Frequent performance and reliability problems; does not meet industry standards	Major Component failures or does not pass Coast Guard Certification
0		Asset Non-Ope	rable or Unsafe	

**Table 12 Condition Rating Scale for Ferry Vessels** 

### **DECISION SUPPORT TOOLS BY ASSET CLASS**

#### Land Based Transit Systems

#### **Rolling Stock and Non-Revenue Vehicles**

In an effort to determine the State of Good Repair (SGR) that truly reflects the condition of the asset, MaineDOT uses a three-factor analysis to determine SGR for rolling stock and equipment (non-revenue vehicles). The factors include useful life, useful mileage and condition assessment. Each factor uses a 1-5 scale and uses the useful life and miles taken from Table 1 in the beginning of this plan. Taking an average of the three factors allows MaineDOT to identify

rolling stock or equipment that may not have met its useful life, but due to extremely high mileage or adverse operating conditions may not be fit for its intended purpose. Conversely, a vehicle exceeding its useful life may have low mileage and is in good condition and is fit for its intended purpose.

In consultation with our subrecipients, MaineDOT uses the three-factor analysis on each asset in Rolling Stock and Equipment resulting in an average which is then used in determining replacement priority. Repair costs and other relevant factors may be considered in determining priorities. The analysis is summarized by each sub-class and is listed below in Tables 13-18. Each sub-class is summarized.

### **Table 13 Fleet Summary VAN**

Subrecipients have 114 vans and minivans (4 years or 100,000 miles) during the 2021 reporting period. Of these vans, there are 32 vans (or 28%) that have a state of good repair ranking of less than 2.0 using the three-factor condition assessment and are a priority to be replaced. (See Table 13).

### Table 14 Fleet Summary LDB

Subrecipients have 109 light duty bus (5 years or 150,000 miles) during the 2021 reporting period. Of these cutaways, there are 5 cutaways (or 5%) that have a state of good repair ranking of less than 2.0 using the three-factor condition assessment and are a priority to be replaced. (See Table 14).

### **Table 15 Fleet Summary SMDB**

Subrecipients have 78 small medium duty buses (7 years or 200,000 miles) during the 2021 reporting period. Of these buses, there are 22 buses (or 28%) that have a state of good repair ranking of less than 2.0 using the three-factor condition assessment and are a priority to be replaced. (See Table 15).

## **Table 16 Fleet Summary MHDB**

Subrecipients have 30 medium heavy-duty buses (10 years or 350,000 miles) during the 2021 reporting period. Of these buses, there are no buses that have a state of good repair ranking of less than 2.0 using the three-factor condition assessment. Therefore, no data generated for this revision of the report.

### **Table 17 Fleet Summary SHDB**

Subrecipients have 2 standard heavy-duty buses (12 years or 500,000 miles) during the 2021 reporting period. Of these buses, there are no buses that have a state of good repair ranking of less than 2.0 using the three-factor condition assessment. Therefore, no data generated for this revision of the report.

#### Table 18 - Equipment - Non-Revenue Vehicles (NRV)

Subrecipients have 5 non-revenue vehicles during the 2021 reporting period. Of these non-revenue vehicles, there are 2 of these vehicles (or 40%) have a state of good repair ranking of less than 2.0 using the three-factor condition assessment and are a priority to be replaced. (See Table 18).

#### WATER-BASED TRANSIT SYSTEMS

In an effort to determine the State of Good Repair (SGR) that truly reflects the condition of the asset, MaineDOT uses a two-factor analysis to determine SGR for rolling stock (ferries) and equipment (rescue boats). The factors include useful life and condition assessment. Each factor uses a 1-5 scale and uses the useful life taken from Table 1 in the beginning of this plan.

MaineDOT uses the two-factor analysis on each asset in Rolling Stock and Equipment resulting in an average which is then used in determining replacement priority. The analysis is summarized by each sub-class and is listed below in Tables 19. Each sub-class is summarized.

#### **Table 19 Fleet Summary Ferry**

One Subrecipient has 2 ferries (50 years) and Maine State Ferry Service has 7 ferries (30 years) during the 2021 reporting period. Of these ferries, there is 1 ferry (or 11%) that have a state of good repair ranking of less than 2.0. (See Table 19).

Maine State Ferry Service has 6 rescue boats that are classified as Equipment under Service – Truck and Other Rubber Tire category for NTD purposes. None of these rescue boats have a state of good repair ranking of less than 2.0 using the two-factor condition assessment.

#### **Facility SGR Rating Process**

In determining the State of Good Repair (SGR) for Facilities, MaineDOT combines the Condition Assessment Score (see Table 10 above) with a rating of its Useful Life in Years. The two factors are equally rated and averaged to determine a composite SGR rating.

The Land-Based Facility Useful Life Rating Scale (below) shows the formula MaineDOT uses to determine, on a scale of 1-5, the useful life of a facility based on a 40-year useful life.

Land	Land Based Facility Useful Life Rating Scale					
5	Excellent	Facility is less than 20 years old				
4	Good	Facility is 21 - 30 years old				
3	Adequate	Facility is 31 - 40 years old				
2	Marginal	Facility is 41 - 50 years old				
1	Poor	Facility is 50 years + old				

In 2018, MaineDOT entered into Metropolitan Planning Agreements for Cooperative, Comprehensive and Continuing Transportation Planning and Programing. These Agreements remain in effect unless and until the time it is superseded by Amendment or Termination. MaineDOT develops SGR targets each year as a resource that is used to report targets in the National Transit Database.

ROLLING STOCK			ACTUAL	2021	TARGETS	2022
	USEFUL	USEFUL	TOTAL		TOTAL	
VEHICLE TYPE	LIFE	MILES	VEHICLES	SGR %	VEHICLES	SGR %
V	4	100,000	114	69%	114	80%
LDB	5	150,000	109	95%	111	95%
SMDB	7	200,000	78	72%	76	72%
MHDB	10	350,000	30	100%	30	100%
SHDB	12	500,000	2	100%	6	100%
FERRY MSFS	30	N/A	7	85%	7	85%
FERRY IAHBS	50	N/A	2	100%	2	100%
		TOTAL	342			

#### **Table 20 MaineDOT SGR Targets**

EQUIPMENT/NON-REVENUE VEHICLES		ACTUAL 2021		TARGETS 2022		
	USEFUL	USEFUL	TOTAL		TOTAL	
EQUIP TYPE	LIFE	MILES	VEHICLES	SGR %	VEHICLES	SGR %
Service - Auto	4	100,000	1	0%	1	0%
Service - Truck	4	100,000	4	75%	4	75%
Service - Truck &						
Other Rubber Tire	4	100,000	6	100%	6	100%
(Rescue Boats)						
		TOTAL	11			

FACILITY	<b>ACTUAL 2021</b>		TARGETS 2022	
	TOTAL		TOTAL	
FACILITY TYPE	FACILITIES	SGR %	FACILITIES	SGR %
Combined Administrative and	2	1000/	Λ	1000/
Maintenance Facility	3	100%	4	100%
Administrative Office / Sales Office	1	100%	1	100%
Pier	7	63%	7	75%
Terminal	7	86%	7	86%
Surface Parking Lot	1	100%	1	100%
Transfer Bridge	10	80%	10	80%
General Purpose Main. Facility/Depot	1	100%	1	100%
Total	30		31	

# **INVESTMENT PRIORITIZATION**

#### **Decision-Making Process**

MaineDOT uses a Multimodal Committee to review capital and operating/maintenance needs and prioritize investment decisions for the upcoming four years. The Transit Operations Section of the Bureau of Planning makes requests for capital funding for rolling stock and facility investment needs based on a review of bus condition assessments and projections, transit provider requests and anticipated federal funding to be matched. The Maine State Ferry Service makes requests for ferry vessel and associated infrastructure investments. The Committee's recommendations are ultimately reviewed and finalized by the MaineDOT Commissioner and included in the State Transportation Improvement Program (STIP).

#### Land-Based Transit Systems

#### Rolling Stock and Equipment (Non-revenue Vehicles)

Through the process laid out in earlier sections of this plan, MaineDOT is able to generate a listing of capital assets in need of replacement or rehabilitation. In an effort to achieve an increased level of State of Good Repair (SGR) and assure transit riders and transit employees the vehicles they are riding or operating are safe and reliable, MaineDOT annually generates the list in Table 21 to provide guidance for future investment projects by MaineDOT and subrecipients.

Other factors may have an impact on the ability to replace the assets on this list, but because of the list MaineDOT is able to plan more effectively for the next fiscal year.

Table 21 shows a list of capital assets scoring the lowest score based on the three-factor analysis. Rolling stock assets include any vehicle with an average score of 2 or below.

#### Table 21 Priority Investment by Average SGR

Subrecipients have 59 buses and vans on the priority investment list for replacement that are ranked lowest to highest based on their average State of Good repair ranking below 2.0. and are a priority to be replaced (See Table 21)

#### Table 22 Investment Priority Table - Rolling Stock by Type (projected over 2-5 years)

The Investment Priority tables outline the Average State of Good Repair for rolling stock and nonrevenue vehicles starting with the 2021 data then over a 5-year period until 2025. The projected miles for each year thereafter are based on an average of miles since the vehicle was placed into service over the course of its service life as of 2021.

MaineDOT reserves the right to replace any rolling stock that is beyond its useful life in years and/or miles and takes into account any maintenance costs that would decrease its state of good repair.

#### SHDB (12 year or 500,000 miles)

The subrecipients have 2 buses under the SHDB category. None of these buses show an SGR status <2.0 over this 5-year period. (See Table 22 - SHDB)

#### MHDB (10 years or 350,000 miles)

The subrecipients have 30 buses under the MHDB category. None of these buses show an SGR status <2.0 in 2021. However, this number does increase to a total of 3 in 2023 and each thereafter until the end of the 5-year period ending in 2025. (See Table 22 – MHDB)

#### SMDB (7 years or 200,000 miles)

The subrecipients have 78 cutaways/buses under the SMDB category. There are 22 of these buses show an SGR status <2.0 in 2021. However, this number does increase to an additional 15 until the end of the 5-year period ending in 2025. (See Table 22 – SMDB)

#### LDB (5 Years or 150,000 miles)

The subrecipients have 109 cutaways under the LDB category. There are 10 of these buses show an SGR status <2.0 in 2021. However, this number does increase to an additional 3 until the end of the 5-year period ending in 2025. (See Table 22 – LDB)

#### Van (4 years or 100,000 miles)

The subrecipients have 114 vans under the Van category. There are 32 of these buses that show an SGR status <2.0 in 2021. However, this number does increase to an additional 15 until the end of the 5-year period ending in 2025. (See Table 22 – SMDB)

### Table 23 Investment Priority Table - Equipment - Non-Revenue Vehicles

The Investment Priority tables outline the Average State of Good Repair for non-revenue vehicles starting with the 2021 data then over a 5-year prior until 2025. The projected miles for each year thereafter are based on an average of miles since the vehicle was placed into service over the course of its service life as of 2021.

#### Non-Revenue Vehicles (NRV) – Equipment (Automobiles and Service Vehicles)

The subrecipients have 2 automobiles under the Non-Revenue Vehicle category. These 2 automobiles show an SGR status of ,2.0 in 2021.

The subrecipients have 3 service vehicles under the Non-Revenue Vehicle category. There are 2 of these service vehicles that show an SGR status of <2.0 in 2021. There is no change over the 5-year period ending in 2025. (See Table 23 – NRV – Automobiles and Service Vehicles)

#### Water-Based Transit Systems

The Maine State Ferry Service and Multimodal Committee uses the aforementioned decisionsupport tools among other factors, including ferry capacity, passenger and freight needs and Coast Guard requirements, to prioritize and program rehabilitations and replacements. The trend toward increasing ferry sizes causes need to rebuild cribs, berthing spaces and related facilities and equipment so the trend must be considered in tandem. Locations being served by new ferries must be prepared to receive them before they can be put to service.

Vessel Being	Year to be	Estimated	Funding Source
Replaced	Delivered	Cost	
Governor Curtis	May 2022	NA	Replaced by the Charles Philbrook
Charles Philbrook	May 2022	\$12 million	2018 Bond
Everett Libby	2024	\$10 million	Bond
Henry Lee	2024	\$18 million	FTA 5311 and state funds
Margaret Chase Smith	2027	\$30 million	TBD
Neal Burgess	2029	\$14 million	TBD

Several ferries are being programmed for replacement in the near future:

#### **Rolling Stock - Ferry**

Maine State Ferry Service has 7 ferry vessels under this category. One ferry vessel shows an SGR Status <2.0 in 2021. The subrecipient has 2 ferry vessels. None of these ferry vessels show an SGR status <2.0 over the 5-year period. (See Table 24 – Ferry Vessels)

### Non-Revenue Vehicles (NRV) – Equipment (Rescue Boats)

The Maine State Ferry Service has 6 rescue boats under the Non-Revenue Vehicle category. None of these rescue boats have an SGR ranking <2.0. (See Table 24 – Rescue Boats)

# **APPENDIX 1 ROLLING STOCK INVENTORY**

#### LAND-BASED SUBRECIPIENTS – INVENTORY LISTS\*

Aroostook Regional Transportation System (ARTS) City of Bath Downcast Community Partners (DCP) Downcast Transportation Inc., (DTI) Kennebec Valley Community Action Program (KVCAP) Penquis CAP (Penquis) Regional Transportation Program (RTP) Waldo Community Action Partners (WCAP) West's Transportation (West's) Western Maine Transportation Services (WMTS) York County Community Action Corp (YCCAC)

#### WATER-BASED SUBRECIPIENTS - INVENTORY LIST\*

Isle au Haut

#### MaineDOT WATER- BASED PROVIDER - Inventory List\*

Maine State Ferry Service

\*See Separate Documents

# **APPENDIX 2 FACILITY INVENTORY BY SUBRECIPIENT**

#### LAND-BASED FACILITIES

Aroostook Regional Transportation System Acadia Gateway Center Regional Transportation Program West Bus Service Western Maine Transportation Services

#### WATER-BASED FACILTIIES

Isle au Haut – Stonington Facility

Pier

Isle au Haut – Stonington Facility

#### Transfer Bridge

Surface Parking Lot

Vinalhaven Isleboro Lincolnville Matinicus Bass Harbor Swans Island Frenchboro Rockland Transfer Bridge 1 Rockland Transfer Bridge 2 North Haven Transfer Bridge \_\_\_\_\_0

Rockland

**Terminal** 

Rockland Vinalhaven North Haven Lincolnville Isleboro Bass Harbor Swans Island

\*See Separate Document

# **APPENDIX 3 ACCOUNTABLE EXECUTIVE**

Drovidor	Abbre-	Accountable	Email	Tala Na
Aroostook Pogional		David Dioppo	Elliali	764 1200
Transportation	ANTS	Executive Director	org	704-1290
System				
City of Bath	Bath	Michael Peabody.	mpeabody@CityofBath.co	443-8365
		Facilities Dir.	<u>m</u>	
Downeast	DCP	Cheryl Robbins,	cheryl.robbins@Downeast	610-5932
Community Partners		Transportation	CommunityPartners.org	
		Director		
Downeast	DTI	Phyllicia Jordan,	pjordan@exploreacadia.co	667-5796
Transportation		Operations &	<u>m</u>	
		Facilities Mgr		
Kennebec Valley	KVCAP	Suzanne Walsh,	suzannew@kvcap.org	859-1579
Community Action		CEO		
Program				
Penquis Community	Penqui	Steven Richard,	srichard@penquis.org	973-3512
Action Program	s	Transportation		
		Director		
Regional	RTP	Jack DeBeradinis,	jackd@rtprides.org	615-0093
Transportation		Executive Director		
Program				
Waldo Community	WCAP	Michael	MHallundbaek@MidCoastC	930-7901
Action Partners		Hallundbaek,	onnector.org	
		Director		
West's	West's	Emory West,	westbus@ymail.com	546-2823
Transportation		Manager		
Western Maine	WMTS	Sandy Buchanan,	<u>SBuchanan@westernmaine</u>	333-6972 x207
Transportation		General Manager	trans.org	
Services	NCCAC	Tama Daina a sa	Therese Deine and Original	450 2020
York County	YCCAC	Tom Reinauer,	Inomas.Reinauer@yccac.o	459-2930
Community Action		i ransportation	rg	
				(516) 659 2020
ISIE AU HAUT	ISIE AU	Brosident	gw.cole@verizon.net	8282-820 (912)
	naut			506 5400
MaineDOT, Ferry	MSFS	Mark Higgins, Ferry	Mark.A.Higgins@maine.gov	596-5422
Service		Service Manager		
Maine Department	Maine	Rick Dubois,	rick.dubois@maine.gov	624-3312
of Transportation	DOT	Multimodal		
		Operations		
		Director		

### **Getting Started**

The following information is for reference purposes and document control. Please be sure to complete these fields before proceeding with the tool.



#### **Related Documents**

As a first step, there are a number of documents that may be helpful in facilitating development of your TAM plan, if you have them. Please indicate below by using the dropdown menus where this information is available. While your agency may not have the specifically named reports, you may have the information stored in other formats. If not available, the information can be collected through workshops or conversations with staff.

Select a response from the drop down menu:

Asset register or inventory information including for spare parts or equipment	Have
Routine checklist for inspections or other preventive maintenance activities	Have
Reports or information on asset condition	Have
Original Equipment Manufacturer (OEM) Manual	Have
Warranty information for any asset types	Have
Fleet management plan or documentation on how you manage your fleet	Have
Facilities management plan or documentation on how you manage your facilities	Have
Work plans or schedules (preventive maintenance schedules and/or reports)	Have
Trouble log (information on asset defects, faults, and/or unplanned maintenance)	Have
Any documentation related to risks and/or risk management	Do Not Have
Standard operating procedures (SOPs)	Have
Asset transition (or hand over) protocol or policy	Have

#### Introduction

\*\*BASIC\*\*

Provide a brief overview of/introduction to your agency. You may include general information including state geography, demographics, interdependencies between asset classes, etc.:

agreement among the Cities of Biddeford and Saco and the Town of Old Orchard Beach. The Transit Committee was established in 1978 to provide a fixed-route, public transportation service, known as ShuttleBus, to the three municipalities. The Transit Committee consists of nine governing members—three persons appointed by each municipal Council that includes one Councilor Manager-level member from each community. The Transit Committee is empowered to execute contracts and obtain and dispense funds for the purpose of providing public transportation. It currently employs an Executive Director, ten administrative staff, twelve full-time drivers, twenty-seven part-time drivers, three cleaning staff and four full-time mechanics.

Performance Targets & Measures: What are the annual targets set for the FTA performance measures? Refer to Part I of the Guide for definitions of the performance measures and information on how to set targets. Provide your targets in the table below. If you have other asset classes to include, specify the asset class in the yellow cells labeled 'Custom'.

For Group TAM Plan Sponsors: You may set targets for your subrecipients. If you choose to do so, click the "Hide Targets" button below before you send the template out. You may leave this question to obtain input from subrecipients on appropriate targets.

Asset Category - Performance Measure	Asset Class	2024 Target	2025 Target	2026 Target	2027 Target	2028 Target
REVENUE VEHICLES						
Age - % of revenue	AB - Articulated Bus	n/a				
vehicles within a	AO - Automobile	n/a				
particular asset class	BR - Over-the-road Bus	33%	0%	0%	0%	0%
that have met or	BU - Bus	50%	25%	8%	42%	14%
exceeded their Useful	CU - Cutaway Bus	100%	100%	100%	100%	100%
Life Benchmark (ULB)	DB - Double Decked Bus	n/a				
	FB - Ferryboat	n/a				
	MB - Mini-bus	n/a				
	MV - Mini-van	n/a				
	RT - Rubber-tire Vintage Trolley	n/a				
	SB - School Bus	n/a				
	SV - Sport Utility Vehicle	n/a				
	TB - Trolleybus					
	VN - Van	100%	100%	100%	100%	50%
	Custom 2					
	Custom 3					
EQUIPMENT						
Age - % of vehicles	Non Revenue/Service Automobile	33%	100%	100%	66%	66%
that have met or	Steel Wheel Vehicles					
exceeded their Useful	Trucks and other Rubber Tire Vehicles	0%	80%	60%	60%	40%
Life Benchmark (ULB)	Vehicle Maintenance Equipment	1%	1%	1%	1%	33%
	Bus Washing Equipment	50%	50%	50%	50%	0%
	Vehicle Fueling System	1%	1%	1%	1%	1%
FACILITIES						
Condition - % of	Administration	5%	5%	5%	5%	5%
facilities with a	Maintenance	5%	5%	5%	5%	5%
condition rating below	Parking Structures					
3.0 on the FTA Transit	Passenger Facilities					
Economic	Admin/Maintenance	0%	0%	0%	0%	0%
Requirements Model	Custom 2					
(TERM) Scale	Custom 3					

You may provide text explaining the methods used in setting the targets here:

We used useful life for equipment with predefined lifespan, we used our experience and maintenance requirements for other equipment.

\*\*These buttons are for Group TAM Plan Sponsor use only\*\*

#### \*\*COMPREHENSIVE\*\*

For Group TAM Plan Sponsors: You may establish the following foundational pieces (vision, state of good repair policy, goals, and objectives) for all subrecipients but this should be done in collaboration with them. Consider their needs as well as their ability to achieve and/or comply. If you choose to establish them for your subrecipients, use the "Hide" and "Show" buttons as necessary.

TAM Vision: What do you ultimately hope to achieve with your TAM system? What is the broader goal?

We hope to achieve a replacement schedule to be funded properly so we are not in the position of paying high maintenance cost yet in the position to fund new equipment saving time, energy, and personell cost in maintenance.

\*\*These buttons are for Group TAM Plan Sponsor use only\*\*

TAM and SGR Policy: What is your agency's TAM and/or State of Good Repair (SGR) policy? Here, you can document expectations for your employees and demonstrate executive-level direction to support the goals of the TAM system. This can be a short statement or a detailed policy. You may also attach a policy document in the appendix of the TAM plan.

Our Policy is to give our satff direction and replacement scheduling to meet their expectations and goals. We expectour employees to keep us informed on the actual condition of equipment and vehicles that will be inported into the TAM plan as updates. This will keep maintenance cost at a minimum freeing up more dollars to make capital purchases.

\*\*These buttons are for Group TAM Plan Sponsor use only\*\*

TAM Goals and/or Objectives: Based on your vision, what are your specific, measurable, achievable, realistic, and time-bound (S.M.A.R.T.) goals? What measurable steps (objectives) will you take to achieve the goals? This should be written in tabular format as shown below. The table includes an example goal and associated objectives. Use the buttons shown on the right.

Goals	Objectives
Increase customer satisfaction score by 20 percent in	Respond to customer feedback from past survey by mid-fiscal year.
fiscal year.	Respond to customer complaints (through 511) within one week of complaint.
Modernize and update fleet	Secure appropriate funding
	Develop specifications on buses to match our routes including GPS destination signage and stop announcement
Enhance facility and asset security	Fence in facility property with proximity access gates. Secure parking area for employees RFP Pending
	Install proximity card access points to facility Completed
Enhance security and ease of payment for our ridership	Purchase and install electronic fare system, video and GPS for all buses
	completed
Ridershin Surveys	Initiate ridership surveys on a regular basis
	evaluate data and utilize for planning process, implement changes as required
Improve customer communications	Investigate and implement off the shelf technology to better notify passengers of schedule interuptions and safety
	rfp pending

About the TAM Plan: Provide an overview of the TAM Plan describing the contents and structure. What time horizon does the document cover and what are the expected update and improvement timelines?

For Group TAM Plan Sponsors: You may specify TAM Plan contents, structure, and time horizon for subrecipients. If you choose to do so, hide this

The goals decribed are designed around our real needs. Fleet upgrade is critical to our continued success. Safety and security of our fleet and facility is needed and customer relations must continuously improve. This TAMS Plan spans over the next five years and we will develop specific measurable milestones for each goal and objective.

6

#### \*\*These buttons are for Group TAM Plan Sponsor use only\*\*

Roles and Responsibilities: What roles have been assigned to your employees to achieve the goals of the TAM system? Who owns the TAM Plan and is responsible for monitoring and updating it? Who is your accountable executive? <u>Click "Add More" only after all yellow cells are filled.</u>

For Tier II Providers: If you are developing an individual plan, you may ignore the third column in this table.

Department/Individual	Role (Title and/or Description)	Subrecipient	
Executive Director	Overall responsibility of updating and planning	N/A	
Deputy Director	Assist in planning and implementation of TAMS Plan	N/A	
Fleet Manager	Manage Fleet and Facilities according to plan	N/A	
Bus Driver Supervisor	Manage Complaint Process, share plan goals with	N/A	

#### \*\*BASIC\*\*

Asset Inventory Listing: To complete the inventory list, use the following steps:

1. On the table to the right, list all the capital assets that you own, operate, or manage that support the delivery of public transportation services. This should include leased assets, assets operated under contract, and all assets that would be included in a program of projects. You may include assets used in the provision of public transportation even if acquired without FTA funds. Complete the table and use the drop down menus where provided. An example is shown for guidance.

2. Click the "Add More" button only after some yellow cells are filled.

3. Be sure to click "Finish" when complete.

4. Click the "<u>Summarize</u>" button to populate the summary table.

5. Click "Continue" to proceed to the next sheet.

Asset Category/Class	Total Number	Avg Age	Avg Mileage	Avg Value
RevenueVehicles	23	7.3	179,492	\$417,826.09
AB - Articulated Bus	0	-	-	-

AO - Automobile	0	-	-	-
BR - Over-the-road Bus	3	2.3	114,902	\$650,000.00
BU - Bus	17	7.7	203,214	\$444,117.65
CU - Cutaway Bus	0	-	-	-
DB - Double Decked Bus	0	-	-	-
FB - Ferryboat	0	-	-	-
MB - Mini-bus	0	-	-	-
MV - Mini-van	2	9.5	115,305	\$35,000.00
RT - Rubber-tire Vintage Trolley	0	-	-	-
SB - School Bus	0	-	-	-
SV - Sport Utility Vehicle	0	-	-	-
TB - Trolleybus	0	-	-	-
VN - Van	1	11.0	98,376	\$40,000.00
	0	-	-	-
Custom 2	0	-	-	-
Custom 3	0	-	-	-
Equipment	18	11.6	44,938	\$60,111.11
Non Revenue/Service Automobile	0	-	-	-
Steel Wheel Vehicles	0	-	-	-
Trucks and other Rubber Tire Vehicles	2	12.5	44,938	\$62,500.00
Vehicle Maintenance Equipment	13	9.3	N/A	\$46,250.00
Bus Washing Equipment	2	7.5	N/A	\$15,500.00
Vehicle Fueling System	1	25.0	N/A	\$200,000.00
Facilities	1	39.0	N/A	\$1,000,000.00
Administration	0	-	N/A	
Maintenance	0		N/A	
Purking Structures	0		N/A	
Pussenger Facilities	1	- 20.0	N/A	- \$1,000,000,000
Custom 2	0		N/A	\$1,000,000.00
Custom 3	0	-	N/A	
custom s	U		IN/A	

#### Inventory Table

Asset Category	Asset Class	Asset Name	Make	Model	Count	ID/Serial No.	Asset Owner	Acquisition Year	Vehicle Mileage	Replacement Cost/Value
RevenueVehicles	BU - Bus	861/2008 Gillig BRT	Gillig	BRT	1	15GGB271981 079721	Agency	2008	554,545	\$450,000.00
RevenueVehicles	BR - Over-the-road Bus	3659/2015 MCI	MCI	D4500	1	1M8PDDMBAF P013659	Agency	2022	155,329	\$650,000.00
RevenueVehicles	BU - Bus	0554/2021 Proterra Electric	Proterra electric	ZX5+	1	7JZTG13JXMS0 00554	Agency	2021	9,151	\$1,100,000.00
RevenueVehicles	BU - Bus	0555/ 2021 Proterra Electric	Proterra Electric	ZX5+	1	7JZTG13J1MS0 00555	Agency	2021	18,021	\$1,100,000.00
RevenueVehicles	BU - Bus	17/Standard Size Heavy Duty Low-Floor (35-40 feet)	Eldorado	XHF	1	1N9HEACL6AC O84325	Agency	2010	364,498	\$450,000.00
RevenueVehicles	BU - Bus	26/Standard Size Heavy Duty Low-Floor (35-40	Eldorado	XHF	1	1N9HEACLXAC 084327	Agency	2010	417,641	\$450,000.00
RevenueVehicles	BU - Bus	29/Standard Size Heavy Duty Low-Floor (35-40 feet)	Eldorado	XHF	1	1N9HEACL1AC 084328	Agency	2010	558,486	\$450,000.00
RevenueVehicles	BU - Bus	24/Standard Size Heavy Duty Low-Floor (35-40 feet)	New Flyer	SR877	1	5FYD2GL043U 024931	Agency	2004	466,684	\$450,000.00
RevenueVehicles	BU - Bus	28/Standard Size Heavy Duty Low-Floor (35-40 feet)	New Flyer	SR877	1	5FYD2GL0X3U 024920	Agency	2004	721,579	\$450,000.00
RevenueVehicles	BU - Bus	35/Standard Size Heavy Duty Low-Floor (35-40 feet)	New Flyer	SR877	1	5FYD2GL033U 024922	Agency	2004	131,573	\$450,000.00
RevenueVehicles	BU - Bus	2159/Standard size medium duty Trolley	HomeTown/ Freightliner	Main Street	1	4UZABOFCOLC MD2159	Agency	2021	14,611	\$275,000.00
RevenueVehicles	BU - Bus	2161/Standard size medium duty Trolley	HomeTown/ Freightliner	Main Street	1	4UZABOFC9LC MD2161	Agency	2021	17,590	\$275,000.00
RevenueVehicles	BU - Bus	2162/Standard size medium duty Trolley	HomeTown/ Freightliner	Main Street	1	4UZAB0FC9LC MD2162	Agency	2021	19,314	\$275,000.00
RevenueVehicles	BU - Bus	2163/Standard size medium duty Trolley	HomeTown/ Freightliner	Main Street	1	4UZABOFCOM CMD2163	Agency	2021	25,879	\$275,000.00

RevenueVehicles	BU - Bus	2164/Standard size medium duty Trolley	HomeTown/ Freightliner	Main Street	1	4UZAB0FC2MC MD2164	Agency	2021	20,352	\$275,000.00
RevenueVehicles	BU - Bus	2165/Standard size medium duty Trolley	HomeTown/ Freightliner	Main Street	1	4UZAB0FC4MC MD2165	Agency	2021	57,651	\$275,000.00
RevenueVehicles	BU - Bus	2166/Standard size medium duty Trolley	HomeTown/ Freightliner	Main Street	1	4UZAB0FC6MC MD2166	Agency	2021	40,395	\$275,000.00
RevenueVehicles	BU - Bus	2671/Standard size medium duty Trolley	HomeTown/ Freightliner	Main Street	1	4UZAB0FC3LC MJ2671	Agency	2021	16,665	\$275,000.00
RevenueVehicles	BR - Over-the-road Bus	7752/Over-the-road bus (BR) (45ft)	Prevost	X3-45	1	4RKG33491M9 737752	Agency	2020	92,950	\$650,000.00
RevenueVehicles	BR - Over-the-road Bus	7753/Over-the-road bus (BR) (45ft)	Prevost	X3-45	1	4RKG33493M9 737753	Agency	2020	96,427	\$650,000.00
Facilities	Admin/Maintenance	Admin and Maintenance Bldg.	N/A	N/A	1	N/A	Agency	1984	N/A	\$1,000,000.00
Equipment	Vehicle Maintenance Equipment	Assorted tools and equipment other than vehicle lifts	Various	N/A	1	N/A	Agency	Various	N/A	\$50,000.00
Equipment	Vehicle Fueling System	Underground tank and fuel island equipment	Various	N/A	1	N/A	Agency	1998	N/A	\$200,000.00
Equipment	Vehicle Maintenance Equipment	Wireless mobile column lifts, set #1	Mach 4	MCHW418U10 0	4	HBD11K0017- 20	Agency	2011	N/A	\$45,000.00
Equipment	Bus Washing Equipment	Bus Pressure Washer	Hotsy	1.109-701.0	1	11097010- 00008	Agency	2013	N/A	\$10,000.00
RevenueVehicles	VN - Van	30/Van, 13 passenger, 2009	Ford	VN	1	1FTSS34L19DA 70377	Agency	2012	98,376	\$40,000.00
RevenueVehicles	MV - Mini-van	32/Van, 7 passenger, 2009	Dodge	MV	1	2D8HN44E39R 615695	Agency	2012	158,190	\$35,000.00
Equipment	Vehicle Maintenance Equipment	Wireless mobile column lifts, set #2	Mach 4	MCHW418U10 0	4	HBD13I0013- 16	Agency	2013	N/A	\$45,000.00
RevenueVehicles	MV - Mini-van	23/Van, 7 passenger, 2014	Dodge	MV	1	2C4RDGBG3ER 451936	Agency	2015	72,420	\$35,000.00
Equipment	Vehicle Maintenance Equipment	Wireless mobile column lifts, set #3	Mach 4	MCHW418U10 0	4	HBD17J001-4	Agency	2017	N/A	\$45,000.00
Equipment	Bus Washing Equipment	Power brush bus washer	Bitmec	101-BB	1	11822-900/3	Agency	2018	N/A	\$21,000.00
Equipment	Trucks and other Rubber Tire Vehicles	50/Pickup truck with plow, 2018	Chevrolet	Pickup truck	1	1GC2KUEG0JZ 203063	Agency	2018	38,563	\$50,000.00
Equipment	Trucks and other Rubber Tire Vehicles	54/Road service truck, 2003	GMC	Savannah	1	1GDJG31U541 205411	Agency	2003	51,313	\$75,000.00

#### Condition Assessment

\*\*BASIC\*\*

Asset Condition: What condition are your assets in to run the services required? How does the actual condition compare to the target set for the assets? The tables to the right are automatically populated based on your inventory on the previous sheet. There is one table for each asset category (three total). Scroll to the right to view all tables.

Complete the tables by filling in the input cells with the Useful Life Benchmark for each asset. Refer to Section 3.1.1 of Part I for an explanation of the Useful Life Benchmark.

Asset Condition Summary: Click the "Summarize" button to update the summary table to calculate the percent of assets past their Useful Life Benchmark.

Asset Category/Class	Count	Avg Age	Avg Mileage	Avg TERM Condition	Avg Value	% At or Past ULB
RevenueVehicles	22	8.5	188,128	N/A	\$472,727.27	45.45%
AB - Articulated Bus	0	-	-	N/A	-	-
AO - Automobile	0	-	-	N/A	-	-
BR - Over-the-road Bus	3	9.0	247,307	N/A	\$650,000.00	33.33%
BU - Bus	19	8.5	178,785	N/A	\$444,736.84	47.37%
CU - Cutaway Bus	0	-	-	N/A	-	-
DB - Double Decked Bus	0	-	-	N/A	-	-
FB - Ferryboat	0	-	-	N/A	-	-
MB - Mini-bus	0	-	-	N/A	-	-
MV - Mini-van	0	-	-	N/A	-	-
RT - Rubber-tire Vintage Trolley	0	-	-	N/A	-	-
SB - School Bus	0	-	-	N/A	-	-
SV - Sport Utility Vehicle	0	-	-	N/A	-	-
TB - Trolleybus	0	-	-	N/A	-	
VN - Van	0	-	-	N/A	-	-
	0	-	-	N/A	-	-
Custom 2	0	-	-	N/A	-	-
Custom 3	0	-	-	N/A	-	-
Equipment	21	12.8	80,048	N/A	\$52,166.67	28.57%
Non Revenue/Service Automobile	0	-	-	N/A	-	-
Steel Wheel Vehicles	0	-	-	N/A	-	-
Trucks and other Rubber Tire Vehicles	5	11.0	59,656	N/A	\$42,000.00	80.00%
Vehicle Maintenance Equipment	13	14.5	N/A	N/A	\$46,250.00	7.69%
Bus Washing Equipment	2	7.5	N/A	N/A	\$15,500.00	50.00%
Vehicle Fueling System	1	25.0	N/A	N/A	\$200,000.00	0.00%
Facilities	1	39.0	N/A	3.0	\$1,000,000.00	N/A
Administration	0	-	N/A	-	-	N/A
Maintenance	0	-	N/A	-	-	N/A
Parking Structures	0	-	N/A	-	-	N/A
Passenger Facilities	0	-	N/A	-	-	N/A
Admin/Maintenance	1	39.0	N/A	3.0	\$1,000,000.00	1.0
Custom 2	0	-	N/A	-	-	N/A
Custom 3	0	-	N/A	-	-	N/A

#### Revenue Vehicles Condition Table

\*\*Age is the surrogate performance measure for condition as determined by the FTA.

Asset Category	Asset Class	Asset Name	Count	ID/Serial No.	Age (Yrs)	Vehicle	Replacement	Useful Life	Past Useful Life
						willeage	Cost/Value	Delicillark (115)	Dencimark
RevenueVehicles	BR - Over-the-road Bus	18/2002 mci coach	1	1M8PDMRA02F	21	627,099	\$650,000.00	12	yes
RevenueVehicles	BR - Over-the-road Bus	7752/Over-the-road bus (	E 1	4RKG33491M97	3	59,745	\$650,000.00	12	No
RevenueVehicles	BR - Over-the-road Bus	7753/Over-the-road bus (	F 1	4RKG33493M97	3	55,076	\$650,000.00	12	No
RevenueVehicles	BU - Bus	0554/ 2021 Proterra Elect	r 1	7JZTG13JXMS00	2	15,000	\$1,100,000.00	12	No
RevenueVehicles	BU - Bus	0555/ 2021 Proterra Elect	r 1	7JZTG13J1MS00	2	7,000	\$1,100,000.00	12	No
RevenueVehicles	BU - Bus	16/Standard Size Heavy D	1	1N9HEACL8AC0	13	294,952	\$450,000.00	12	Yes
RevenueVehicles	BU - Bus	17/Standard Size Heavy D	1	1N9HEACL6ACC	13	350,770	\$450,000.00	12	Yes
RevenueVehicles	BU - Bus	2159/Standard size mediu	1	4UZABOFCOLC	2	13,415	\$275,000.00	12	No
RevenueVehicles	BU - Bus	2161/Standard size mediu	1	4UZABOFC9LCN	2	9,689	\$275,000.00	12	No
RevenueVehicles	BU - Bus	2162/Standard size mediu	1	4UZAB0FC9LCN	2	11,572	\$275,000.00	12	No
RevenueVehicles	BU - Bus	2163/Standard size mediu	1	4UZABOFC0MC	2	15,339	\$275,000.00	12	No
RevenueVehicles	BU - Bus	2164/Standard size mediu	1	4UZAB0FC2MCI	2	7,541	\$275,000.00	12	No
RevenueVehicles	BU - Bus	2165/Standard size mediu	1	4UZAB0FC4MCI	2	19,088	\$275,000.00	12	No
RevenueVehicles	BU - Bus	2166/Standard size mediu	1	4UZAB0FC6MCI	2	6,395	\$275,000.00	12	No
RevenueVehicles	BU - Bus	24/Standard Size Heavy D	ι 1	5FYD2GL043U0	19	448,049	\$450,000.00	12	Yes
RevenueVehicles	BU - Bus	26/Standard Size Heavy D	ı 1	1N9HEACLXAC0	13	403,212	\$450,000.00	12	Yes
RevenueVehicles	BU - Bus	2671/Standard size mediu	1	4UZAB0FC3LCN	2	6,767	\$275,000.00	12	No
RevenueVehicles	BU - Bus	28/Standard Size Heavy D	1	5FYD2GL0X3U0	19	692,373	\$450,000.00	12	Yes
RevenueVehicles	BU - Bus	29/Standard Size Heavy D	1	1N9HEACL1AC0	13	534,005	\$450,000.00	12	Yes
RevenueVehicles	BU - Bus	34/Medium Size Heavy Du	1	1BAGJBPA76W	17	306,493	\$450,000.00	12	Yes
RevenueVehicles	BU - Bus	35/Standard Size Heavy D	1	5FYD2GL033U0	19	109,752	\$450,000.00	12	Yes
RevenueVehicles	BU - Bus	861/2008 Gillig BRT	1	15GGB2719810	15	145,494	\$450,000.00	12	Yes

#### Equipment Condition Table

\*\*Age is the surrogate performance measure for condition as determined by the FTA.

Asset Category	Asset Class	Asset Name	Count	ID/Serial No.	Age (Yrs)	Vehicle	Replacement	Useful Life	Past Useful Life
						Mileage	Cost/Value	Benchmark (Yrs)	Benchmark
Equipment	Bus Washing Equipment	Bus Pressure Washer	1	11097010-0000	10	N/A	\$10,000.00	8	Yes
Equipment	Bus Washing Equipment	Power brush bus was	1	11822-900/3	5	N/A	\$21,000.00	10	No
Equipment	Trucks and other Rubber Tire Vehicles	23/Van, 7 passenger	1	2C4RDGBG3ER4	8	72,420	\$35,000.00	7	Yes
Equipment	Trucks and other Rubber Tire Vehicles	30/Van, 13 passenge	1	1FTSS34L19DA7	11	94,857	\$40,000.00	7	Yes
Equipment	Trucks and other Rubber Tire Vehicles	32/Van, 7 passenger,	1	2D8HN44E39R6	11	152,557	\$35,000.00	7	Yes
Equipment	Trucks and other Rubber Tire Vehicles	50/Pickup truck with	1	1GC2KUEG0JZ2	5	30,784	\$50,000.00	10	No
Equipment	Trucks and other Rubber Tire Vehicles	54/Road service truc	1	1GDJG31U5412	20	49,620	\$50,000.00	10	Yes
Equipment	Vehicle Fueling System	Underground tank ar	1	N/A	25	N/A	\$200,000.00	30	No
Equipment	Vehicle Maintenance Equipment	Assorted tools and e	1	N/A	30	N/A	\$50,000.00	30	Yes
Equipment	Vehicle Maintenance Equipment	Wireless mobile colu	4	HBD11K0017-2(	12	N/A	\$45,000.00	15	No
Equipment	Vehicle Maintenance Equipment	Wireless mobile colu	4	HBD13I0013-16	10	N/A	\$45,000.00	15	No
Equipment	Vehicle Maintenance Equipment	Wireless mobile colu	4	HBD17J001-4	6	N/A	\$45,000.00	15	No

16

#### Facilities Condition Table

Asset Category	Asset Class	Asset Name	Count	ID/Serial No.	Age (Yrs)	TERM Scale Condition	Replacement Cost/Value
Facilities	Admin/Maintenan	Admin and Maintenance Bldg.	1	N/A	39	3	\$1,000,000.00

# Decision Support

NOTE: Complete some yellow cells before clicking "Add More" under each question.

#### \*\*BASIC\*\*

Decision Support: List and briefly describe the processes and/or tools in place to support investment decision-making, including project selection and prioritization. Enter this information in the table below. Click the button to add more rows.

Process/Tool	Brief Description
Example Asset Condition Information	A software system that uses asset inventory and condition information to generate 5 to
System	10-year condition forecasts.
equipment life cycle	utilizing end of life along with maintenance, condition reports

Investment Prioritization: How do you determine what priority investments are needed in order to maintain a state of good repair? Describe your agency's investment prioritization process.

We try to replace the oldest most deteriated vehicles with High maintenance cost and Frequent breakdowns first

#### **\*\*COMPREHENSIVE**\*\*

Risk Management: Identify any risks faced to your assets or organization as a whole (particularly safety-related risks) and describe the mitigation strategies for each one. This can also include how scheduled maintenance can affect service delivery. As applicable, describe any planned changes or improvements to these processes. Enter this information in the table below. Click the button to add more rows.

Risk	Mitigation Strategy
Loss of significant amounts of federal funds	Decrease dependence on federal funds for capital
break downs of older equipment	Fleet replacement to minimize breakdown frequency

Maintenance Strategy: List your regularly-planned maintenance activities (e.g., inspections, routine preventive maintenance activities, etc). As applicable, describe any planned changes or improvements to these processes. Enter this information in the table below. Click the button to add more rows.

Asset Category	Asset Class	Maintenance Activity	Frequency	Avg Duration (Hrs)	Cost
RevenueVehicles	BU - Bus	Engine tune-up	Annual	3	\$1,000
RevenueVehicles	BU - Bus	pm-b	mileage	4 hr	\$600
Equipment	Vehicle Maintenance Equipment	inspections	annual	1	\$80
Facilities	Admin/Maintenance	inspections	on going	various	\$80
How does your agency address unplanned maintenance needs?

We address individually, secure funding, then make necessary repair

Overhaul Strategy: How and when do assets get overhauled or replaced? What activities take place during overhaul (e.g., mini, mid-life, or major overhaul)? As applicable, describe any planned changes or improvements to these processes. Enter this information in the table below. Click the button to add more rows.

Asset Category	Asset Class	Overhaul Strategy
RevenueVehicles	BU - Bus	Mid-life overhaul - rebuilds bus engine, transmission and electronics, replaces chassis parts and seats, and repaints the body, restoring the bus to an "as new" condition. Cost is about \$120,000 per bus.
RevenueVehicles	BU - Bus	we have found midlife overhauls not to be succesful, we will evaluate on an individual

Disposal Strategy: What is your agency's strategy for disposing of assets that are being renewed or replaced? Describe any approval processes and detail, including the procedures for physically removing the asset from the property. As applicable, describe any planned changes or improvements to these processes. Provide brief paragraphs describing the strategies in the table below. Click the button to add more rows.

Asset Category Asset Class

**Disposal Strategy** 

RevenueVehicles	BU - Bus	Buses at the end of their useful lives (15 years) are retired according to three options: (i) salvage sale; (ii) ready reserve fleet placement; and (iii) disposal. Buses designated for ready reserve fleet placement will be delivered to the storage lot and salvage sale buses will be prepared according to the "Scrap Bus Instructions". Buses for disposal will be scheduled for pick up by the Bus Disposal Group.
RevenueVehicles	BU - Bus	Buses at the end of their useful lives are retired according to three options: (i) salvage

Acquisition and Renewal Strategy: How do you determine when to initiate acquisition activities for your assets? Describe your long-term replacement strategy and how long-term renewal and improvement activities are assessed based on the asset's lifecycle. As applicable, describe any planned changes or improvements to these processes. Provide brief paragraphs describing the strategies in the table below. Click the button to add more rows.

Asset Category	Asset Class	Acquisition and Renewal Strategy
RevenueVehicles	BU - Bus	There is sound reasoning to strive for a fleet composed of 50% diesel-electric hybrid buses. Current fleet will be transitioned over a period of one year.
RevenueVehicles	BU - Bus	we use our 6 year capital replacement plan through our MPO

## **Investment Prioritization**

#### NOTE: Complete some yellow cells before clicking "Add More" under each question.

\*\*BASIC\*\*

Proposed Investments: Provide a list of the selected projects and programs prioritized based on your agency's criteria. Rank the projects and order them by year of planned implementation. Enter this information in the table below. Click the button to add more rows. The optional Fleet Replacement Module may be used to determine your fleet replacement projects - activate this by clicking on the button provided.

Project Year	Project Name	Asset Category	Asset Class	Cost	Priority
2021	trolley replacement	RevenueVehicles	TB - Trolleybus	\$1,000,000.00	High
2020	Fare Box technology	RevenueVehicles	BU - Bus	\$120,000.00	High
2021	telemetrics	RevenueVehicles	BU - Bus	\$120,000.00	High
2021	trolley replacement	RevenueVehicles	TB - Trolleybus	\$1,000,000.00	High
2022	electric buses	RevenueVehicles	BU - Bus	\$2,500,000.00	Medium
2024	electric buses	RevenueVehicles	BU - Bus	\$2,500,000.00	medium

### **\*\*COMPREHENSIVE\*\***

Capital Investment Activity Schedules: You may attach any work plans or schedules you have for capital investment activities as separate files when delivering this template. Provide the names of documents attached and their file formats in the table below. Click the button to add more rows.

Document Name	File Extension
Example - Bus Overhaul Schedule	MS Project
capital replacement plan	PDF

#### Fleet Retirement & Replacement Computation Module



This worksheet is built to inform your fleet replacement schedule. Follow the instructions in italics above each table going from left to right. After calculating the last table, enter your selected projects into the Investment Prioritization sheet by clicking on the tab names at the bottom. Clicking 'RESET' will clear all your data. Return to the previous sheet to finish your TAM Plan.

#### **Existing Fleet**

This is a listing of your revenue vehicle assets. Do not make any changes in this table.

Asset Category	Asset Class	Asset Name	Make	Model	Count	ID/Serial No.	Asset Owner	Acquisition Year	Replacement Cost/Value	Useful Life Benchmark (Yrs)	Fleet Type (Year/Make/Model)
RevenueVehicles	BU - Bus	857/2008 Gillig BRT	Gillig	BRT	1	15GGB271781 079717	Agency	2008	\$450,000.00	12	2008 Gillig BRT
RevenueVehicles	BU - Bus	861/2008 Gillig BRT	Gillig	BRT	1	15GGB271981 079721	Agency	2008	\$450,000.00	12	2008 Gillig BRT
RevenueVehicles	BR - Over-the-road Bus	18/2002 mci coach	мсі	D4500	1	1M8PDMRA0 2P054758	Agency	2002	\$650,000.00	12	2002 MCI D4500
RevenueVehicles	BU - Bus	0554/2021 Proterra Electric	Proterra electric	ZX5+	1	7JZTG13JXMS 000554	Agency	2021	\$1,100,000.00	12	2021 Proterra electric ZX5+
RevenueVehicles	BU - Bus	0555/2021 Proterra Electric	Proterra Electric	ZX5+	1	7JZTG13J1MS 000555	Agency	2021	\$1,100,000.00	12	2021 Proterra Electric ZX5+
RevenueVehicles	BU - Bus	16/Standard Size Heavy Duty Low- Floor (35-40 feet)	Eldorado	XHF	1	1N9HEACL8A C084326	Agency	2010	\$450,000.00	12	2010 Eldorado XHF
RevenueVehicles	BU - Bus	17/Standard Size Heavy Duty Low- Floor (35-40 feet)	Eldorado	XHF	1	1N9HEACL6A CO84325	Agency	2010	\$450,000.00	12	2010 Eldorado XHF
RevenueVehicles	BU - Bus	26/Standard Size Heavy Duty Low- Floor (35-40 feet)	Eldorado	XHF	1	1N9HEACLXA C084327	Agency	2010	\$450,000.00	12	2010 Eldorado XHF
RevenueVehicles	BU - Bus	29/Standard Size Heavy Duty Low- Floor (35-40 feet)	Eldorado	XHF	1	1N9HEACL1A C084328	Agency	2010	\$450,000.00	12	2010 Eldorado XHF
RevenueVehicles	BU - Bus	34/Medium Size Heavy Duty (30 feet)	BlueBird	L4RE	1	1BAGJBPA76 W100344	Agency	2006	\$450,000.00	12	2006 BlueBird L4RE
RevenueVehicles	BU - Bus	24/Standard Size Heavy Duty Low- Floor (35-40 feet)	New Flyer	SR877	1	5FYD2GL043U 024931	Agency	2004	\$450,000.00	12	2004 New Flyer SR877

RevenueVehicles	BU - Bus	28/Standard Size Heavy Duty Low- Floor (35-40	New Flyer	SR877	1	1 5FYD2GL0X3U 024920	Agency	2004	\$450 000 00	12	2004 New Flver SR877
RevenueVehicles	BU - Bus	35/Standard Size Heavy Duty Low- Floor (35-40 feet)	New Flyer	SR877	1	1 5FYD2GL033U 024922	Agency	2004	\$450,000.00	12	2004 New Flyer SR877
RevenueVehicles	BU - Bus	2159/Standard size medium duty Trolley	HomeTown/Fr eightliner	Main Street	1	1 4UZABOFCOL CMD2159	Agency	2021	\$275,000.00	12	2021 HomeTown/Freightlin er Main Street
RevenueVehicles	BU - Bus	2161/Standarc size medium duty Trolley	HomeTown/Fr eightliner	Main Street	1	1 4UZABOFC9LC MD2161	Agency	2021	\$275,000.00	12	2021 HomeTown/Freightlin er Main Street
RevenueVehicles	BU - Bus	2162/Standarc size medium duty Trolley	HomeTown/Fr eightliner	Main Street	1	1 4UZAB0FC9LC MD2162	Agency	2021	\$275,000.00	12	2021 HomeTown/Freightlin er Main Street
RevenueVehicles	BU - Bus	2163/Standarc size medium duty Trolley	HomeTown/Fr eightliner	Main Street	1	1 4UZABOFCOM CMD2163	Agency	2021	\$275,000.00	12	2021 HomeTown/Freightlin er Main Street
RevenueVehicles	BU - Bus	2164/Standarc size medium duty Trolley	HomeTown/Fr eightliner	Main Street	1	1 4UZAB0FC2M CMD2164	Agency	2021	\$275,000.00	12	2021 HomeTown/Freightlin er Main Street
RevenueVehicles	BU - Bus	2165/Standard size medium duty Trolley	HomeTown/Fr eightliner	Main Street	1	1 4UZAB0FC4M CMD2165	Agency	2021	\$275,000.00	12	2021 HomeTown/Freightlin er Main Street
RevenueVehicles	BU - Bus	2166/Standarc size medium duty Trolley	HomeTown/Fr eightliner	Main Street	1	1 4UZAB0FC6M CMD2166	Agency	2021	\$275,000.00	12	2021 HomeTown/Freightlin er Main Street
RevenueVehicles	BU - Bus	2671/Standarc size medium duty Trolley	HomeTown/Fr eightliner	Main Street	1	4UZAB0FC3LC MJ2671	Agency	2021	\$275,000.00	12	2021 HomeTown/Freightlin er Main Street
RevenueVehicles	BR - Over-the-road Bus	7752/Over-the road bus (BR) (45ft)	Prevost	X3-45	1	4RKG33491M 9737752	Agency	2020	\$650,000.00	12	2020 Prevost X3-45
RevenueVehicles	BR - Over-the-road Bus	7753/Over-the road bus (BR) (45ft)	Prevost	X3-45	1	4RKG33493M 9737753	Agency	2020	\$650,000.00	12	2020 Prevost X3-45

### Existing Fleet Remaining Per Year

This tables ages your existing fleet, showing	the numbe	r remaining in each of	the next five	years. Do	not make any cho	anges to thi	is table.		
Fleet Type (Year/Make/Model)	Number	Replacement Cost	Acquisition Year	ULB	2024	2025	2026	2027	2028
2010 Eldorado XHF	4	\$450,000.00	2010	12	0	0	0	0	0
2006 BlueBird L4RE	1	\$450,000.00	2006	12	0	0	0	0	0
2004 New Flyer SR877	3	\$450,000.00	2004	12	0	0	0	0	0
2008 Gillig BRT	2	\$450,000.00	2008	12	0	0	0	0	0
2002 MCI D4500	1	\$650,000.00	2002	12	0	0	0	0	0
2021 HomeTown/Freightliner Main Street	8	\$275,000.00	2021	12	8	8	8	8	8
2020 Prevost X3-45	2	\$650,000.00	2020	12	2	2	2	2	2
2021 Proterra electric ZX5+	2	\$1,100,000.00	2021	12	2	2	2	2	2

Grand Total

#### Fleet Required

In the cells shaded yellow, enter the peak number of vehicles scheduled and the spare factor (%) for each fleet for each year. <u>Note that the FTA has spare ratio requirements for revenue vehicles.</u> Click Calculate to calculate the number of vehicles required each year.

		2024			2025			2026			2027			2028	
Fleet Type (Year/Make/Model)	Peak Vehicles Scheduled	Spare Factor (%)	Vehicles Required												
2010 Eldorado XHF	1	. 0%	1	0	20%	0	0	20%	0	0	20%	0	0	20%	0
2006 BlueBird L4RE	1	. 20%	2	0	20%	0	0	20%	0	0	20%	0	1	20%	2
2004 New Flyer SR877	0	20%	0	0	20%	0	0	20%	0	0	20%	0	0	20%	0
2008 Gillig BRT	1	. 20%	2	0	20%	0	0	20%	0	0	20%	0	0	20%	0
2002 MCI D4500	1	. 0%	1	1	20%	2	1	20%	2	1	20%	2	1	20%	2
2021 HomeTown/Freightliner Main Street	0	20%	0	0	20%	0	0	20%	0	0	20%	0	0	20%	0
2020 Prevost X3-45	2	20%	3	2	20%	3	2	20%	3	2	20%	3	2	20%	3
2021 Proterra electric ZX5+	2	0%	2	2	20%	3	2	20%	3	2	20%	3	2	20%	3
	0	0%		0	20%		0	20%		0	20%		0	20%	
	0	0%		0	20%		0	20%		0	20%		0	20%	
	0	0%		0	20%		0	20%		0	20%		0	20%	

#### New Fleet

	i parenase j	er eden freet per ye	an opuate t	ine infration rate) if	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	and enery edicardice					
<u>Total in Current Year \$</u>	\$3,	550,000.00	\$1,750,000.00		\$0.00			Ş0.00	\$0.00		
Inflation Rate		0.0%		0.0%		0.0%		0.0%	0.0%		
Compounded Inflation		1		1		1		1	1		
<u>Total in Year of Expenditure</u>	\$3,550,000.00		\$1,750,000.00			\$0.00		\$0.00	\$0.00		
		2024		2025		2026		2027	2028		
Fleet Type (Year/Make/Model)	Number	Cost in 2023 \$	Number	Cost in 2023 \$	Number	Cost in 2023 \$	Number	Cost in 2023 \$	Number	Cost in 2023 \$	
2010 Eldorado XHF	1	\$450,000.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	
2006 BlueBird L4RE	2	\$900,000.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	
2004 New Flyer SR877	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	
2008 Gillig BRT	2	\$900,000.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	
2002 MCI D4500	1	\$650,000.00	1	\$650,000.00	0	\$0.00	0	\$0.00	0	\$0.00	
2021 HomeTown/Freightliner Main Street	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	
2020 Prevost X3-45	1	\$650,000.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	
2021 Proterra electric ZX5+	0	\$0.00	1	\$1,100,000.00	0	\$0.00	0	\$0.00	0	\$0.00	

This tables calculates the required purchase for each fleet per year. Update the inflation rate, if necessary, and click 'Calculate' to update the total expenditure.

# Biddeford Saco Old Orchard Beach Transit Transit Asset Management Plan

H. Rodney Carpenter, Accountable Executive

Last modified by H Rodney Carpenter on 03 Feb 23 at 13:24

#### Introduction

The Biddeford-Saco-Old Orchard Beach Transit Committee is a quasi-municipal governmental entity that originated through inter-local agreement among the Cities of Biddeford and Saco and the Town of Old Orchard Beach. The Transit Committee was established in 1978 to provide a fixed-route, public transportation service, known as ShuttleBus, to the three municipalities. The Transit Committee consists of nine governing members—three persons appointed by each municipal Council that includes one Councilor Manager-level member from each community. The Transit Committee is empowered to execute contracts and obtain and dispense funds for the purpose of providing public transportation. It currently employs an Executive Director, ten administrative staff, twelve full-time drivers, twenty-seven part-time drivers, three cleaning staff and four full-time mechanics.

ShuttleBus operates five (5) flex route transit routes serving several communities. The Tri-Town Local Route operates seven days per week serving the Cities of Biddeford and Saco and the Town of Old Orchard Beach with two buses. In the summer months ShuttleBus also runs a popular tourism-oriented trolley service along Saco Bay and inland to US Route One businesses.

Since September 2007, ShuttleBus has operated the Nor'easter Express route between University of New England's Hills Beach campus and downtown Biddeford/Saco. One bus serves the route during the academic year.

The Tri-Towns to Portland Intercity service, or "Portland" bus, runs daily from Biddeford to Portland with stops in Saco, Old Orchard Beach, Pine Point, Scarborough, and South Portland (primarily the Maine Mall).

The ZOOM Turnpike Express travels from Park & Ride lots in Biddeford and Saco, via the Maine Turnpike, to Congress Street and the University of Southern Maine, and back during morning and afternoon rush hours.

#### **Performance Targets & Measures**

Asset Category - Performance Measure	Asset Class	2024 Target	2025 Target	2026 Target	2027 Target	2028 Target
REVENUE VEHICLES				1	1	
	AB - Articulated Bus	N/A				
	AO - Automobile	N/A				
	BR - Over-the-road Bus	33%				
	BU - Bus	50%	25%	8%	42%	14%
	CU - Cutaway Bus	N/A				
	DB - Double Decked Bus	N/A				
Age - % of revenue vehicles	FB - Ferryboat	N/A				
within a particular asset class	MB - Mini-bus	N/A				
that have met or exceeded	MV - Mini-van	n/a				
their Useful Life Benchmark	RT - Rubber-tire Vintage Trolley	N/A				
(ULB)	SB - School Bus	N/A				
	SV - Sport Utility Vehicle	N/A				
	TB - Trolleybus	N/A				
	VN - Van	100%	100%	100%	100%	50%
	0	N/A				
	Custom 2	N/A				
	Custom 3	N/A				
EQUIPMENT			_			
	Non Revenue/Service Automobile	N/A				
Age - % of vehicles that have	Steel Wheel Vehicles	N/A				
met or exceeded their Useful	Trucks and other Rubber Tire Vehicles	60%	60%	60%	40%	40%
Life Benchmark (III B)	Vehicle Maintenance Equipment	1%	1%	1%	1%	33%
Life benchinark (OLD)	Bus Washing Equipment	50%	50%	50%	50%	
	Vehicle Fueling System	1%	1%	1%	1%	1%
FACILITIES			_			
	Administration	N/A	_			
Condition - % of facilities with	Maintenance	N/A	_			
a condition rating below 3.0	Parking Structures	N/A				
on the FTA Transit Economic	Passenger Facilities	N/A				
Requirements Model (TERM)	Admin/Maintenance	0%	0%	0%	0%	0%
Scale	Custom 2	N/A				
	Custom 3	N/A				

#### **Target Setting Methodology**

We used useful life for equipment with predefined lifespan, we used our experience and maintenance requirements for other equipment.

#### **TAM Vision**

We hope to achieve a replacement schedule to be funded properly so we are not in the position of paying high maintenance cost yet in the position to fund new equipment saving time, energy, and personell cost in maintenance.

#### TAM and SGR Policy

Our Policy is to give our satff direction and replacement scheduling to meet their expectations and goals. We expectour employees to keep us informed on the actual condition of equipment and vehicles that will be inported into the TAM plan as updates. This will keep maintenance cost at a minimum freeing up more dollars to make capital purchases.

#### TAM Goals and/or Objectives

Goals	Objectives					
	Secure appropriate funding					
Modernize and update fleet	Develop specifications on buses to match our routes including GPS destination					
	signage and stop announcement					
	Fence in facility property with proximity access gates. Secure parking area for					
Enhance facility and asset security	employees RFP Pending					
	Install proximity card access points to facility Completed					
Enhance security and ease of payment for our ridership	Purchase and install electronic fare system, video and GPS for all buses					
	completed					
Pidership Survey	Initiate ridership surveys on a regular basis					
Ridership Surveys	evaluate data and utilize for planning process, implement changes as required					
	Investigate and implement off the shelf technology to better notify passengers					
Improve customer communications	of schedule interuptions and safety notifications/blasts					
	rfp pending					

#### About the TAM Plan

The goals decribed are designed around our real needs. Fleet upgrade is critical to our continued success. Safety and security of our fleet and facility is needed and customer relations must continuously improve. This TAMS Plan spans over the next five years and we will develop specific measurable milestones for each goal and objective.

#### **Roles and Responsibilities**

Department/Individual	Role (Title and/or Description)	Subrecipient
Executive Director	Overall responsibility of updating and planning	N/A
Deputy Director	sist in planning and implementation of TAMS P	N/A
Fleet Manager	Manage Fleet and Facilities according to plan	N/A

## Capital Asset Inventory

Please see Appendix A (Asset Register) for the asset inventory listing.

#### Asset Inventory Summary

Asset Category	Total Number	Avg Age	Avg Mileage	Avg Value
RevenueVehicles	23	7.3	179,492	\$417,826.09
AB - Articulated Bus	0	-	-	-
AO - Automobile	0	-	-	-
BR - Over-the-road Bus	3	2.3	114,902	\$650,000.00
BU - Bus	17	7.7	203,214	\$444,117.65
CU - Cutaway Bus	0	-	-	-
DB - Double Decked Bus	0	-	-	-
FB - Ferryboat	0	-	-	-
MB - Mini-bus	0	-	-	-
MV - Mini-van	2	9.5	115,305	\$35,000.00
RT - Rubber-tire Vintage Trolley	0	-	-	-
SB - School Bus	0	-	-	-
SV - Sport Utility Vehicle	0	-	-	-
TB - Trolleybus	0	-	-	-
VN - Van	1	11.0	98,376	\$40,000.00
0	0	-	-	-
Custom 2	0	-	-	-
Custom 3	0	-	-	-
Equipment	18	11.6	44,938	\$60,111.11
Non Revenue/Service Automobile	0	-	-	-
Steel Wheel Vehicles	0	-	-	-
Trucks and other Rubber Tire Vehicles	2	12.5	44,938	\$62,500.00
Vehicle Maintenance Equipment	13	9.3	N/A	\$46,250.00
Bus Washing Equipment	2	7.5	N/A	\$15,500.00
Vehicle Fueling System	1	25.0	N/A	\$200,000.00
Facilities	1	39.0	N/A	\$1,000,000.00
Administration	0	-	N/A	-
Maintenance	0	-	N/A	-
Parking Structures	0	-	N/A	-
Passenger Facilities	0	-	N/A	-
Admin/Maintenance	1	39.0	N/A	\$1,000,000.00
Custom 2	0	-	N/A	-
Custom 3	0	-	N/A	-

## Condition Assessment

Please see Appendix B (Asset Condition Data) for individual asset condition listing.

#### Asset Condition Summary

Asset Category	Total Number	Avg Age	Avg Mileage	Avg TERM Condition	Avg Value	% At or Past ULB
RevenueVehicles	22	8.5	188,128	N/A	\$472,727.27	45%
AB - Articulated Bus	0	-	-	N/A	-	-
AO - Automobile	0	-	-	N/A	-	-
BR - Over-the-road Bus	3	9.0	247,307	N/A	\$650,000.00	33%
BU - Bus	19	8.5	178,785	N/A	\$444,736.84	47%
CU - Cutaway Bus	0	-	-	N/A	-	-
DB - Double Decked Bus	0	-	-	N/A	-	-
FB - Ferryboat	0	-	-	N/A	-	-
MB - Mini-bus	0	-	-	N/A	-	-
MV - Mini-van	0	-	-	N/A	-	-
RT - Rubber-tire Vintage Trolley	0	-	-	N/A	-	-
SB - School Bus	0	-	-	N/A	-	-
SV - Sport Utility Vehicle	0	-	-	N/A	-	-
TB - Trolleybus	0	-	-	N/A	-	0%
VN - Van	0	-	-	N/A	-	-
0	0	-	-	N/A	-	-
Custom 2	0	-	-	N/A	-	-
Custom 3	0	-	-	N/A	-	-
Equipment	21	12.8	80,048	N/A	\$52,166.67	29%
Non Revenue/Service Automobile	0	-	-	N/A	-	-
Steel Wheel Vehicles	0	-	-	N/A	-	-
Trucks and other Rubber Tire Vehicles	5	11.0	59,656	N/A	\$42,000.00	80%
Vehicle Maintenance Equipment	13	14.5	N/A	N/A	\$46,250.00	8%
Bus Washing Equipment	2	7.5	N/A	N/A	\$15,500.00	50%
Vehicle Fueling System	1	25.0	N/A	N/A	\$200,000.00	0%
Facilities	1	39.0	N/A	3.0	\$1,000,000.00	N/A
Administration	0	-	N/A	-	-	N/A
Maintenance	0	-	N/A	-	-	N/A
Parking Structures	0	-	N/A	-	-	N/A
Passenger Facilities	0	-	N/A	-	-	N/A
Admin/Maintenance	1	39.0	N/A	3.0	\$1,000,000.00	100%
Custom 2	0	-	N/A	-	-	N/A
Custom 3	0	-	N/A	-	-	N/A

# **Decision Support**

## **Investment Prioritization**

We try to replace the oldest most deteriated vehicles with High maintenance cost and Frequent breakdowns first

## **Decision Support Tools**

The following tools are used in making investment decisions:

Process/Tool	Brief Description
equipment life cycle	utilizing end of life along with maintenance, condition reports

## **Risk Management**

Risk	Mitigation Strategy
break downs of older equipment	Fleet replacement to minimize breakdown frequency

#### Maintenance Strategy

Asset Category	Asset Class	Maintenance Activity	Frequency	Avg Duration (Hrs)	Cost
RevenueVehicles	BU - Bus	pm-b	mileage	4 hr	\$600
Equipment	Vehicle Maintenance Equipment	inspections	annual	1	\$80
Facilities	Admin/Maintenance	inspections	on going	various	\$80

## **Unplanned Maintenance Approach**

We address individually, secure funding, then make necessary repair

## **Overhaul Strategy**

Asset Category	Asset Class	Overhaul Strategy
RevenueVehicles	BU - Bus	we have found midlife overhauls not to be succesful, we will evaluate on an individual basis

## **Disposal Strategy**

Asset Category	Asset Class	Disposal Strategy		
RevenueVehicles	BU - Bus	Buses at the end of their useful lives are retired according to three options: (i) salvage sale; (ii) ready reserve fleet placement; and (iii) disposal.		

## Acquisition and Renewal Strategy

Asset Category	Asset Class	Acquisition and Renewal Strategy
RevenueVehicles	BU - Bus	we use our 6 year capital replacement plan through our MPO

## **Investment Prioritization**

The list of prioritized investment projects is provided in Appendix C.

## Capital Investment Activity Schedules

Document Name	File Extension
capital replacement plan	PDF

## Appendices

Asset Register
Revenue Vehicle (Rolling Stock) Condition Data
Equipment Condition Data
Facilities Condition Data
Proposed Investment Project List
Fleet Replacement Module Output

### Appendix A: Asset Register

Asset Category	Asset Class	Asset Name	Make	Model	Count	ID/Serial No.	Asset Owner	Acquisition Year	Vehicle Mileage	Replacement Cost/Value
RevenueVehicles	BU - Bus	861/2008 Gillig BRT	Gillig	BRT	1	15GGB271981079721	Agency	2008	554,545	\$450,000.00
RevenueVehicles	BR - Over-the-road Bus	3659/2015 MCI	МСІ	D4500	1	1M8PDDMBAFP013659	Agency	2022	155,329	\$650,000.00
RevenueVehicles	BU - Bus	0554/ 2021 Proterra Electric	Proterra electric	ZX5+	1	7JZTG13JXMS000554	Agency	2021	9,151	\$1,100,000.00
RevenueVehicles	BU - Bus	0555/ 2021 Proterra Electric	Proterra Electric	ZX5+	1	7JZTG13J1MS000555	Agency	2021	18,021	\$1,100,000.00
RevenueVehicles	BU - Bus	16/Standard Size Heavy Duty Low-Floor (35-40 feet)	Eldorado	XHF	1	1N9HEACL8AC084326	Agency	2010	295,838	\$450,000.00
RevenueVehicles	BU - Bus	17/Standard Size Heavy Duty Low-Floor (35-40 feet)	Eldorado	XHF	1	1N9HEACL6ACO84325	Agency	2010	364,498	\$450,000.00
RevenueVehicles	BU - Bus	26/Standard Size Heavy Duty Low-Floor (35-40 feet)	Eldorado	XHF	1	1N9HEACLXAC084327	Agency	2010	417,641	\$450,000.00
RevenueVehicles	BU - Bus	29/Standard Size Heavy Duty Low-Floor (35-40 feet)	Eldorado	XHF	1	1N9HEACL1AC084328	Agency	2010	558,486	\$450,000.00
RevenueVehicles	BU - Bus	34/Medium Size Heavy Duty (30 feet)	BlueBird	L4RE	1	1BAGJBPA76W100344	Agency	2006	306,493	\$450,000.00
RevenueVehicles	BU - Bus	24/Standard Size Heavy Duty Low-Floor (35-40 feet)	New Flyer	SR877	1	5FYD2GL043U024931	Agency	2004	466,684	\$450,000.00
RevenueVehicles	BU - Bus	28/Standard Size Heavy Duty Low-Floor (35-40 feet)	New Flyer	SR877	1	5FYD2GL0X3U024920	Agency	2004	721,579	\$450,000.00
RevenueVehicles	BU - Bus	35/Standard Size Heavy Duty Low-Floor (35-40 feet)	New Flyer	SR877	1	5FYD2GL033U024922	Agency	2004	131,573	\$450,000.00
RevenueVehicles	BU - Bus	2159/Standard size medium duty Trolley	HomeTown/Freightliner	Main Street	1	4UZABOFCOLCMD2159	Agency	2021	14,611	\$275,000.00
RevenueVehicles	BU - Bus	2161/Standard size medium duty Trolley	HomeTown/Freightliner	Main Street	1	4UZABOFC9LCMD2161	Agency	2021	17,590	\$275,000.00
RevenueVehicles	BU - Bus	2162/Standard size medium duty Trolley	HomeTown/Freightliner	Main Street	1	4UZAB0FC9LCMD2162	Agency	2021	19,314	\$275,000.00
RevenueVehicles	BU - Bus	2163/Standard size medium duty Trolley	HomeTown/Freightliner	Main Street	1	4UZABOFC0MCMD2163	Agency	2021	25,879	\$275,000.00
RevenueVehicles	BU - Bus	2164/Standard size medium duty Trolley	HomeTown/Freightliner	Main Street	1	4UZAB0FC2MCMD2164	Agency	2021	20,352	\$275,000.00
RevenueVehicles	BU - Bus	2165/Standard size medium duty Trolley	HomeTown/Freightliner	Main Street	1	4UZAB0FC4MCMD2165	Agency	2021	57,651	\$275,000.00
RevenueVehicles	BU - Bus	2166/Standard size medium duty Trolley	HomeTown/Freightliner	Main Street	1	4UZAB0FC6MCMD2166	Agency	2021	40,395	\$275,000.00
RevenueVehicles	BU - Bus	2671/Standard size medium duty Trolley	HomeTown/Freightliner	Main Street	1	4UZAB0FC3LCMJ2671	Agency	2021	16,665	\$275,000.00
RevenueVehicles	BR - Over-the-road Bus	7752/Over-the-road bus (BR) (45ft)	Prevost	X3-45	1	4RKG33491M9737752	Agency	2020	92,950	\$650,000.00
RevenueVehicles	BR - Over-the-road Bus	7753/Over-the-road bus (BR) (45ft)	Prevost	X3-45	1	4RKG33493M9737753	Agency	2020	96,427	\$650,000.00
Facilities	Admin/Maintenance	Admin and Maintenance Bldg.	N/A	N/A	1	N/A	Agency	1984	N/A	\$1,000,000.00
Equipment	Vehicle Maintenance Equipment	Assorted tools and equipment other than vehicle lifts	Various	N/A	1	N/A	Agency	Various	N/A	\$50,000.00
Equipment	Vehicle Fueling System	Underground tank and fuel island equipment	Various	N/A	1	N/A	Agency	1998	N/A	\$200,000.00
Equipment	Vehicle Maintenance Equipment	Wireless mobile column lifts, set #1	Mach 4	MCHW418U100	4	HBD11K0017-20	Agency	2011	N/A	\$45,000.00

Asset Category	Asset Class	Asset Name	Make	Model	Count	ID/Serial No.	Asset Owner	Acquisition Year	Vehicle Mileage	Replacement Cost/Value
Equipment	Bus Washing Equipment	Bus Pressure Washer	Hotsy	1.109-701.0	1	11097010-00008	Agency	2013	N/A	\$10,000.00
Equipment	Trucks and other Rubber Tire Vehicles	30/Van, 13 passenger, 2009	Ford	Van	1	1FTSS34L19DA70377	Agency	2012	98,376	\$40,000.00
Equipment	Trucks and other Rubber Tire Vehicles	32/Van, 7 passenger, 2009	Dodge	Van	1	2D8HN44E39R615695	Agency	2012	158,190	\$35,000.00
Equipment	Vehicle Maintenance Equipment	Wireless mobile column lifts, set #2	Mach 4	MCHW418U100	4	HBD13I0013-16	Agency	2013	N/A	\$45,000.00
Equipment	Trucks and other Rubber Tire Vehicles	23/Van, 7 passenger, 2014	Dodge	Van	1	2C4RDGBG3ER451936	Agency	2015	72,420	\$35,000.00
Equipment	Vehicle Maintenance Equipment	Wireless mobile column lifts, set #3	Mach 4	MCHW418U100	4	HBD17J001-4	Agency	2017	N/A	\$45,000.00
Equipment	Bus Washing Equipment	Power brush bus washer	Bitmec	101-BB	1	11822-900/3	Agency	2018	N/A	\$21,000.00
Equipment	Trucks and other Rubber Tire Vehicles	50/Pickup truck with plow, 2018	Chevrolet	Pickup truck	1	1GC2KUEG0JZ203063	Agency	2018	38,563	\$50,000.00
Equipment	Trucks and other Rubber Tire Vehicles	54/Road service truck, 2003	GMC	Savannah	1	1GDJG31U541205411	Agency	2003	51,313	\$75,000.00

## Appendix B: Asset Condition Data

## B1: Revenue Vehicle Assets

Asset Category	Asset Class	Asset Name	Count	ID/Serial No.	Age (Yrs)	Vehicle Mileage	Replacement Cost/Value	Useful Life Benchmark (Yrs)	Past Useful Life Benchmark
RevenueVehicles	BR - Over-the-road Bus	18/2002 mci coach	1	1M8PDMRA02P054758	21	627,099	\$650,000.00	12	yes
RevenueVehicles	BR - Over-the-road Bus	7752/Over-the-road bus (BR) (45ft)	1	4RKG33491M9737752	3	59,745	\$650,000.00	12	No
RevenueVehicles	BR - Over-the-road Bus	7753/Over-the-road bus (BR) (45ft)	1	4RKG33493M9737753	3	55,076	\$650,000.00	12	No
RevenueVehicles	BU - Bus	0554/ 2021 Proterra Electric	1	7JZTG13JXMS000554	2	15,000	\$1,100,000.00	12	No
RevenueVehicles	BU - Bus	0555/ 2021 Proterra Electric	1	7JZTG13J1MS000555	2	7,000	\$1,100,000.00	12	No
RevenueVehicles	BU - Bus	16/Standard Size Heavy Duty Low-Floor (35-40 feet)	1	1N9HEACL8AC084326	13	294,952	\$450,000.00	12	Yes
RevenueVehicles	BU - Bus	17/Standard Size Heavy Duty Low-Floor (35-40 feet)	1	1N9HEACL6ACO84325	13	350,770	\$450,000.00	12	Yes
RevenueVehicles	BU - Bus	2159/Standard size medium duty Trolley	1	4UZABOFCOLCMD2159	2	13,415	\$275,000.00	12	No
RevenueVehicles	BU - Bus	2161/Standard size medium duty Trolley	1	4UZABOFC9LCMD2161	2	9,689	\$275,000.00	12	No
RevenueVehicles	BU - Bus	2162/Standard size medium duty Trolley	1	4UZAB0FC9LCMD2162	2	11,572	\$275,000.00	12	No
RevenueVehicles	BU - Bus	2163/Standard size medium duty Trolley	1	4UZABOFC0MCMD2163	2	15,339	\$275,000.00	12	No
RevenueVehicles	BU - Bus	2164/Standard size medium duty Trolley	1	4UZAB0FC2MCMD2164	2	7,541	\$275,000.00	12	No
RevenueVehicles	BU - Bus	2165/Standard size medium duty Trolley	1	4UZAB0FC4MCMD2165	2	19,088	\$275,000.00	12	No
RevenueVehicles	BU - Bus	2166/Standard size medium duty Trolley	1	4UZAB0FC6MCMD2166	2	6,395	\$275,000.00	12	No
RevenueVehicles	BU - Bus	24/Standard Size Heavy Duty Low-Floor (35-40 feet)	1	5FYD2GL043U024931	19	448,049	\$450,000.00	12	Yes
RevenueVehicles	BU - Bus	26/Standard Size Heavy Duty Low-Floor (35-40 feet)	1	1N9HEACLXAC084327	13	403,212	\$450,000.00	12	Yes
RevenueVehicles	BU - Bus	2671/Standard size medium duty Trolley	1	4UZAB0FC3LCMJ2671	2	6,767	\$275,000.00	12	No

Asset Category	Asset Class	Asset Name	Count	ID/Serial No.	Age (Yrs)	Vehicle Mileage	Replacement Cost/Value	Useful Life Benchmark (Yrs)	Past Useful Life Benchmark
		28/Standard Size Heavy							
		Duty Low-Floor (35-40			19	692,373		12	Yes
RevenueVehicles	BU - Bus	feet)	1	5FYD2GL0X3U024920			\$450,000.00		
		29/Standard Size Heavy							
		Duty Low-Floor (35-40			13	534,005		12	Yes
RevenueVehicles	BU - Bus	feet)	1	1N9HEACL1AC084328			\$450,000.00		
		34/Medium Size Heavy			47	206 402		42	Net
RevenueVehicles	BU - Bus	Duty (30 feet)	1	1BAGJBPA76W100344	1/	306,493	\$450,000.00	12	Yes
		35/Standard Size Heavy							
		Duty Low-Floor (35-40			19	109,752		12	Yes
RevenueVehicles	BU - Bus	feet)	1	5FYD2GL033U024922			\$450,000.00		
RevenueVehicles	BU - Bus	861/2008 Gillig BRT	1	15GGB271981079721	15	145,494	\$450,000.00	12	Yes

### Appendix B: Asset Condition Data

#### **B2: Equipment Assets**

Asset Category	Asset Class	Asset Name	Count	ID/Serial No.	Age (Yrs)	Vehicle Mileage	Replacement Cost/Value	Useful Life Benchmark (Yrs)	Past Useful Life Benchmark
		Bus Pressure						<b>、 、 、 、 、 、 、 、 、 、 、 、 、 、 、 、 、 </b>	
Equipment	Bus Washing Equipment	Washer	1	11097010-00008	10	N/A	\$10,000.00	8	Yes
		Power brush bus			-	[			Ne
Equipment	Bus Washing Equipment	washer	1	11822-900/3	5	N/A	\$21,000.00	10	NO
		23/Van, 7		2C4RDGBG3ER4519	0				Vec
Equipment	Trucks and other Rubber Tire Vehicles	passenger, 2014	1	36	0	72,420	\$35,000.00	7	fes
		30/Van, 13		1FTSS34L19DA7037	11				Voc
Equipment	Trucks and other Rubber Tire Vehicles	passenger, 2009	1	7	11	94,857	\$40,000.00	7	Tes
		32/Van, 7		2D8HN44E39R6156	11				Vec
Equipment	Trucks and other Rubber Tire Vehicles	passenger, 2009	1	95		152,557	\$35,000.00	7	103
		50/Pickup truck		1GC2KUEG0JZ2030	5				No
Equipment	Trucks and other Rubber Tire Vehicles	with plow, 2018	1	63	5	30,784	\$50,000.00	10	
		54/Road service		1GDJG31U5412054	20				Yes
Equipment	Trucks and other Rubber Tire Vehicles	truck, 2003	1	11	20	49,620	\$50,000.00	10	
		Underground tank							
		and fuel island			25		4000.000.00		No
Equipment	Vehicle Fueling System	equipment	1	N/A		N/A	\$200,000.00	30	
		Assorted tools and			30				Yes
Equipmont	Vahiela Maintonanco Equinmont	than vohicle lifts	1	N/A		N/A	\$E0.000.00	20	
Equipment			1	N/A		IN/A	\$30,000.00	50	
		Wireless mobile			10				No
Fauinment	Vehicle Maintenance Equinment	column lifts set #1	4	HBD11K0017-20	12	N/A	\$45,000,00	15	NO
							\$43,000.00	15	
		Wireless mobile			10				No
Equipment	Vehicle Maintenance Equipment	column lifts. set #2	4	HBD13I0013-16	10	N/A	\$45.000.00	15	
						,	,,		
		Wireless mobile			6				No
Equipment	Vehicle Maintenance Equipment	column lifts, set #3	4	HBD17J001-4	-	N/A	\$45,000.00	15	

# Appendix B: Asset Condition Data

## **B3: Facilities Assets**

Asset Category	Asset Class	Asset Name	Count	ID/Serial No.	Age (Yrs)	TERM Scale Condition	Replacement Cost/Value
Facilities	Admin/Maintenance	Admin and Maintenance Bldg.	1	N/A	39	3	\$1,000,000.00

# Appendix C: Proposed Investment Project List

Project	Project Name	Asset/Asset Class	Cost	Priority
Year		···· <b>,</b> ·····		
2021	trolley replacement	RevenueVehicles	\$1,000,000.00	High
2020	Fare Box technology	RevenueVehicles	\$120,000.00	High
2021	telemetrics	RevenueVehicles	\$120,000.00	High
2021	trolley replacement	RevenueVehicles	\$1,000,000.00	High
2022	electric buses	RevenueVehicles	\$2,500,000.00	Medium
2024	electric buses	RevenueVehicles	\$2,500,000.00	medium

# Appendix D: Fleet Replacement Module Output

Total in Current Year \$	\$3,550,000.00		\$1,2	750,000.00		\$0.00		\$0.00		\$0.00
Total in Year of Expenditure \$	\$3,550,000.00		\$1,3	750,000.00		\$0.00		\$0.00		\$0.00
		2024	2025			2026		2027		2028
Fleet Type (Year/Make/Model)	Number	Cost in 2023 \$	Number	Cost in 2023 \$	Number	Cost in 2023 \$	Number Cost in 2023 \$		Number	Cost in 2023 \$
2010 Eldorado XHF	1	\$500,000.00								
2006 BlueBird L4RE	1	\$500,000.00								
2004 New Flyer SR877	1	\$500,000.00								
2008 Gillig BRT	1	\$500,000.00								
2002 MCI D4500	1	\$500,000.00	1	\$650,000.00						
2021 HomeTown/Freightliner Main										
Street	1	\$500,000.00								
2020 Prevost X3-45	1	\$500,000.00								
2021 Proterra electric ZX5+	1	\$500,000.00	1	\$1,100,000.00						



# **Tier II Transit Asset Management Plan**

Version 2.0 January 2023

Greater Portland Transit District

Accountable Executive: Greg Jordan, Executive Director

Created: May 2019 Revised: January 2023

## INTRODUCTION

Version 2.0 of GPTD's Transit Asset Management Plan represents the first update to the plan since it was originally created in 2019. Since 2019, the agency's fleet has changed and it is achieving its key benchmarks for asset management and replacement. The agency is working to manage its equipment, non-revenue vehicles and facilities in such a way as to optimize useful, asset reliability, and functionality as it relates to providing public transportation.

In 2016, the Federal Transit Administration (FTA) published a rule, 49 CFR Part 625, to require public transit providers that receive Federal transit assistance to undertake certain transit asset management activities. Transit asset management is 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. Asset management is a cornerstone of effective performance management. By leveraging data to improve investment decision-making, asset management improves reliability, safety, cost management, and customer service.

## BACKGROUND

Maintaining transit assets, such as rolling stock, infrastructure, equipment, and facilities, in a state of good repair is essential to maintaining safety, ensuring system reliability, and reducing long-term maintenance costs. In its 2010 National State of Good Repair Assessment, FTA found that more than 25% of rail transit assets and 40% of bus assets were in marginal or poor condition. There is an estimated backlog of \$50–\$80 billion in deferred maintenance and replacement needs—a backlog that continues to grow. Transit agency customers, policymakers, and public agencies hold agency management accountable for performance and increasingly expect more business-like management practices. The magnitude of these capital needs, performance expectations, and increased accountability requires agency managers and accountable executives to become better asset managers.

In 2012, Congress passed the Moving Ahead for Progress in the 21st Century Act (MAP-21) that required the establishment of a National Transit Asset Management (TAM) System that would include a definition of "state of good repair;" requirements that recipients and subrecipients of Federal transit funding develop transit asset management plans; state of good repair performance measure and reporting requirements; and annual reporting requirements.

To ensure compliance with the requirements of MAP-21, FTA published a final rule on TAM planning requirements on July 26, 2016. The final rule included a transit-specific asset management framework for managing assets individually and as a portfolio of assets that comprise an integrated system. Within that framework, FTA has identified three potential roles in transit asset management planning:

*Tier I Provider* is 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 I providers must develop their own, individual TAM plan.

*Tier II Provider* is 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. Tier II providers can develop their own individual TAM plan or can be included in a group plan developed by a sponsor agency.

# GPTD operates less than 100 vehicles in maximum service and, as a result, falls into the Tier II category. Secondly, because GPTD is a direct recipient it is creating its own TAM plan.

Asset management processes are ongoing and involve evaluating and managing the relationships between costs, risks, and performance over the asset's lifecycle. The transit asset management framework has three categories of business processes:

- Asset Management Vision and Direction agency-wide processes that establish the organizationwide asset management policy and strategy and drive resource allocation.
- Lifecycle Management the processes involved in the lifecycle management of individual asset classes; these include managing the data (inventory), monitoring the assets' condition and performance, and developing lifecycle management plans.
- Cross-Asset Planning and Management agency-wide processes that consider information from all asset classes to support the capital programming and operations and maintenance budgeting process.

## TRANSIT ASSET MANAGEMENT PLAN REQUIREMENTS

GPTD has developed this Tier II Transit Asset Management Plan in accordance with the guidelines established by the FTA. Specifically, §625.25 requires that all TAM plans must include:

- An inventory of the number and type of capital assets. The inventory must include all capital assets that the provider owns, except equipment with an acquisition value under \$50,000 that is not a service vehicle. The inventory also must include third-party owned or jointly procured exclusive-use maintenance facilities, passenger station facilities, administrative facilities, rolling stock, and guideway infrastructure used by a provider in the provision of public transportation. The asset inventory must be organized at a level of detail commensurate with the level of detail in the provider's program of capital projects.
- A condition assessment of those inventoried assets for which a provider has direct capital responsibility. A condition assessment must generate information in a level of detail sufficient to monitor and predict the performance of the assets and to inform the investment prioritization.
- A description of analytical processes or decision-support tools used to estimate capital investment needs over time.
- A project-based prioritization of investments.

## DEFINITIONS

Accountable Executive - 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 - A grouping of asset classes, including a grouping of equipment, rolling stock, infrastructure, and facilities.

Asset class - 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 - A register of capital assets and information about those assets.

*Capital asset* - A unit of rolling stock, a facility, a unit of equipment, or an element of infrastructure used for providing public transportation.

Decision support tool - 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* - An entity that receives Federal financial assistance directly from the Federal Transit Administration (FTA).

*Equipment* - An article of nonexpendable, tangible property having a useful life of at least one year.

*Exclusive-use maintenance facility* - A maintenance facility that is not commercial and either owned by a transit provider or used for servicing their vehicles.

*Facility* - A building or structure that is used in providing public transportation.

FTA - The Federal Transit Administration.

*Full level of performance* - The objective standard established by FTA for determining whether a capital asset is in a state of good repair.

*Group TAM plan* - A single Transit Asset Management (TAM) plan that is developed by a sponsor on behalf of at least one Tier II provider.

*Horizon period* - The fixed period of time within which a transit provider will evaluate the performance of its TAM plan.

*Implementation strategy* - A transit provider's approach to carrying out TAM practices, including establishing a schedule, accountabilities, tasks, dependencies, and roles and responsibilities.

*Infrastructure* - The underlying framework or structures that support a public transportation system.

*Investment prioritization* - 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* - A list of activities that a transit provider determines are critical to achieving its TAM goals.

*Life-cycle cost* - The cost of managing an asset over its whole life.

*MaineDOT* – The Maine Department of Transportation.

Participant – A Tier II provider that participates in a group TAM plan.

*Performance Measure* - 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* - A quantifiable level of performance or condition, expressed as a value for the measure, to be achieved within a time period required by FTA.

*Public transportation system* - The entirety of a transit provider's operations, including the services provided through contractors.

*Public transportation agency safety plan* - A transit provider's documented comprehensive agency safety plan that is required by 49 U.S.C. 5329.

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

*Rolling stock* - A revenue vehicle used in providing public transportation, including vehicles used for carrying passengers on fare-free services.

*Service vehicle* - A unit of equipment used primarily to support maintenance and repair work for a public transportation system or to deliver materials, equipment, or tools.

Sponsor - A state, a designated recipient, or a direct recipient that develops a group TAM for at

least one Tier II provider.

*State of good repair (SGR)* - The condition in which a capital asset is able to operate at a full level of performance.

*Subrecipient* - An entity that receives Federal transit grant funds indirectly through a state or direct recipient.

*TERM scale* - The five-category rating system used in FTA'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* - A recipient that owns, operates, or manages either (1) one hundred and one 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* - A recipient that owns, operates, or manages (1) one hundred 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)* - 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* - 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* - A transit provider's documented commitment to achieving and maintaining a state of good repair for all 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* - The approach a transit provider takes to carry out its policy for TAM, including its objectives and performance targets. *Transit asset management system* - 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)* - 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* - Either the expected life cycle of a capital asset or the acceptable period of use in service determined by FTA.

*Useful life benchmark (ULB)* - 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.

## TAM POLICY

GPTD's TAM policy is as follows:

- 1. Commitment to Maintaining Assets in a State of Good Repair GPTD is committed to maintaining assets in a State of Good Repair through sound financial management and reinvestment, transparency, and coordination with the MPO and regional transportation partners; promoting a culture that supports lifecycle based asset management across the organization; and by focusing on high quality data-driven asset condition and performance information to provide with safe, reliable, sustainable service for the communities served by GPTD.
- 2. Lifecycle Management A data-driven set of activities will be used to evaluate the cost, condition, and performance of each class of assets over their entire lifecycle.
- 3. Optimizing Use of GPTD Funds across Asset Lifecycle The Capital Improvement Plan (CIP) will be aligned with TAM investment priorities in order to optimize both capital and operating costs and to achieve the following: Public and employee safety; optimized useful life and maintain existing assets; replace assets in accordance to TAM targets; leverage available funds and optimize GPTD costs; improve system-wide reliability; environmental sustainability goals.

## ASSET INVENTORY

Transit assets included within this plan may be considered in three overall classifications:

- 1. Rolling Stock this category includes GPTD's 40 heavy duty buses (BU) and 4 medium duty cutaway buses (CU) used in revenue service.
- 2. Equipment this category includes major equipment with an acquisition value over \$50,000 and non-revenue vehicles.
- 3. Facilities this category includes GPTD's operations and maintenance facility and a passenger waiting facility.

GPTD has established the following performance measures:

Asset Category	Performance	Definition	GPTD Performance
	Measure		Target
<b>Rolling Stock</b> Heavy duty buses (BU)	Age	% of revenue vehicles within a particular asset class that have met or exceed their Useful Life Benchmark (ULB) of 14 years.	No more than 10% of revenue vehicles in all asset classes that meet or exceed ULB.
<b>Rolling Stock</b> Medium duty cutaway buses (CU)	Mileage/Age	% of revenue vehicles within a particular asset class that have met or exceed their Useful Life Benchmark (ULB) of 200,000 miles or 7 years whichever comes first.	No more than 10% of CU revenue vehicles meet or exceed ULB.
Rolling Stock Heavy duty buses (BU) & Medium duty cutaway buses (CU)	Fleet Average Age	Average age of total combined fleets in years.	Maintain average fleet age between 6-7 years.
<b>Equipment</b> Maintenance equipment or non- revenue vehicles	Age	% of equipment and vehicles that have met or exceed their ULB.	No more than 20% of non-revenue vehicles in all asset classes that meet or exceed ULB. No more than 20% of equipment in all asset classes that meet or exceed ULB.
FacilitiesAll buildings or structures, notConditionincluding bus shelters	Condition	% of facilities with a condition rating below 3.0 on FTA's Transit Economic Requirements Model (TERM Scale.	Maintain all facilities at condition rating of 3.0.

## **Rolling Stock**

GPTD's approach to replacement of BU buses is to establish the ULB at 14 years. GPTD works to secure the appropriate federal, state and local funding to replace buses within that timeframe. Although Cutaway buses (CU) have are rated as 7-year buses, GPTD utilizes the vehicle miles benchmark of 200,000 because these vehicles are used on long distance express routes. The condition assessment reflects results of the most recent inventory of physical assets which was completed in connection with the agency's year-end financial audit, as well as ongoing maintenance cost per bus.

# Refer to Attachment A for the Rolling Stock Inventory.

Attachment B provides GPTD's bus replacement plan through 2027 and is the primary decision support tool for determining asset replacement timing and funding decisions. A key benchmark at the core of this plan is to maintain the overall average fleet age between 6-7 years. Achieving this benchmark year over year helps ensure stable and sustainable maintenance costs. This TAM plan serves as a primary input to GPTD's annual Five-Year Capital Improvement Program (CIP) budgeting process, as well as the MPO's annual update to the region's Five Year Operating and Capital Program

(FYCOP). The TAM plan, along with the CIP and FYCOP, are principal methods by which GPTD prioritizes investments.

GPTD aims to implement a lifecycle maintenance approach in which major components are replaced proactively and on a pre-determined schedule based on either ULB benchmarks or predictive analysis. For rolling stock assets with a 14-year ULB, GPTD programs and seeks funding for mid-life vehicle refurbishments which include replacement of major components (e.g., engines, transmissions) between 6-7 years.

## Equipment

Table 1 outlines GPTD's equipment with values over \$50,000. The ULB for each piece of equipment was generated based on consultations with OEMs. This TAM plan will serve as a primary input to GPTD's annual Capital Improvement Program budgeting process.

GPTD's equipment maintenance approach has been reactive in that the agency fixes equipment and replaces components upon failure. The agency is working to move toward a lifecycle maintenance approach in which major components are replaced proactively and on a pre-determined schedule based on either ULB benchmarks or predictive analysis.

## Table 1: Equipment Inventory

ASSET CATEGORY	DESCRIPTION	QTY	TITLEHOLDER	DATE ACQ	ULB (Yrs)	AGE	Met/Exceed ULB	CONDITION	ACQ COST	CURR BOOK VAL
Equipment	Pro Vision Bus Surveilance Equip.	1	GPTD	1/26/2011	7	9	Yes	Fair	\$ 75,533	\$ 899
Equipment	Backup Generator	1	GPTD	1/1/2009	7	11	Yes	Good	\$ 114,086	\$ -
Equipment	Bus Wash	1	GPTD	4/26/2007	10	12	Yes	Fair	\$ 118,587	\$ -
Equipment	Diesel Fueling System	1	GPTD	1/1/1998	27	20	No	Fair	\$ 132,911	\$ 14,465
Equipment	GFI 24 CAP-UPC3 and Top Plates	1	GPTD	11/11/2011	7	9	Yes	Fair	\$ 135,900	\$ -
Equipment	Bus Lifts	1	GPTD	11/1/2013	20	7	No	Good	\$ 806,277	\$ 463,801
Equipment	HVAC for CNG Fuel Ventilation	1	GPTD	5/1/2006	10	13	Yes	Good	\$ 920,409	\$-
Equipment	CNG Fueling Station	1	GPTD	5/1/2006	10	13	Yes	Fair	\$ 1,306,745	\$ 10,007
					% Met or E	xceeded ULB	75%			

Table 2 outlines GPTD's equipment replacement plan through 2027 and is the primary decision support tool for determining asset replacement timing and funding decisions. This TAM plan will serve as a primary input to GPTD's annual Capital Improvement Program budgeting process which is the principle method by which GPTD prioritizes investments. Based on condition assessments and replace/rehab schedules, GPTD expects to achieve its performance target of ensuring no more than 20% of equipment in all asset classes meets or exceeds ULB.

## Table 2: Equipment Replacement/Rehabilitation Plan

ASSET CATEGORY	DESCRIPTION	QTY	DATE ACQ	ULB (Yrs)	AGE	Rehab/Replace	2023		2024	2025	 2026	2027
Equipment	Pro Vision Bus Surveilance Equip.	1	1/26/2011	7	9	Replace	\$ -	\$	50,000	\$ -	\$ -	\$ -
Equipment	Backup Generator	1	1/1/2009	7	11	Replace	\$ 125,000	\$	-	\$ -	\$ -	\$ -
Equipment	Bus Wash	1	4/26/2007	10	12	Rehab	\$ 120,000	\$	-	\$ -	\$ -	\$ -
Equipment	Diesel Fueling System	1	1/1/1998	27	20	N/A	\$ -	\$	-	\$ -	\$ -	\$ -
Equipment	GFI 24 CAP-UPC3 and Top Plates	1	11/11/2011	7	9	N/A	\$ -	\$	-	\$ -	\$ -	\$ -
Equipment	Bus Lifts	1	11/1/2013	20	7	N/A	\$ -	\$	-	\$ -	\$ -	\$ -
Equipment	HVAC for CNG Fuel Ventilation	1	5/1/2006	10	13	Rehab	\$ -	\$	100,000	\$ -	\$ -	\$ -
Equipment	CNG Fueling Station	1	5/1/2006	10	13	Rehab	\$ -	\$	200,000	\$ -	\$ 	\$ -

## **Equipment - Support Vehicles**

Table 3 outlines GPTD's Non-Revenue Vehicle inventory. The ULB for each vehicle was generated based on consultations with OEMs. This TAM plan will serve as a primary input to GPTD's annual Capital Improvement Program budgeting process.

GPTD's equipment maintenance approach has been reactive in that the agency fixes equipment and replaces components upon failure. The agency is working to move toward a lifecycle maintenance approach in which major components are replaced proactively and on a pre-determined schedule based on either ULB benchmarks or predictive analysis.

## Table 3: Equipment – Support Vehicles Inventory

ASSET CATEGORY	DESCRIPTION	LIC-REG #	QTY	TITLEHOLDER	DATE ACQ	ULB (Yrs)	AGE	M/E ULB	CONDITION	AC	Q COST	CURR	BOOK VAL
Equipment-Support Vehicles	2013 GMC Yukon 4WD (S3)	423-659	1	GPTD	07/02/12	7	11	Yes	Good	\$	34,243	\$	-
Equipment-Support Vehicles	2013 GMC Sierra 3500 Pickup w/plow (S2)	423-369	1	GPTD	08/09/12	7	10	Yes	Fair	\$	43,660	\$	-
Equipment-Support Vehicles	2022 Chevrolet Silverado 3500	429-938	1	GPTD	02/14/22	7	1	No	Excellent	\$	60,408	\$	60,408
Equipment-Support Vehicles	2019 Honda Clarity Plug-In	427-501	1	GPTD	03/25/19	8	4	No	Excellent	\$	35,576	\$	22,976
Equipment-Support Vehicles	2020 Ford F-350	428-324	1	GPTD	05/12/20	7	3	No	Excellent	\$	83,811	\$	63,856
					% Met or I	Exceeded ULB	-40%						

Table 4 outlines GPTD's equipment replacement plan through 2027 and is the primary decision support tool for determining asset replacement timing and funding decisions. This TAM plan will serve as a primary input to GPTD's annual Capital Improvement Program budgeting process which is the principle method by which GPTD prioritizes investments.

Table 4: Equipment – Non-Revenue Vehicles Replacement Plan

ASSET CATEGORY	DESCRIPTION	QTY	DATE ACQ	ULB (Yrs)	AGE	Rehab/Replace	2023	2024		2024		2025		2026		2027	
Equipment-Support Vehicles	2013 GMC Yukon 4WD (S3)	1	07/02/12	7	11	Replace	\$ 50,000	\$	-	\$	-	\$	-	\$	-		
Equipment-Support Vehicles	2013 GMC Sierra 3500 Pickup w/plow (S2)	1	08/09/12	7	10	Replace	\$ -	\$	65,000	\$	-	\$	-	\$	-		
Equipment-Support Vehicles	2022 Chevrolet Silverado 3500	1	02/14/22	7	1	N/A	\$ -	\$	-	\$	-	\$	-	\$	-		
Equipment-Support Vehicles	2019 Honda Clarity Plug-In	1	03/25/19	8	4	N/A	\$ -	\$	-	\$	-	\$	-	\$	-		
Equipment-Support Vehicles	2020 Ford F-350	1	05/12/20	7	3	N/A	\$ -	\$	-	\$	-	\$	-	\$	-		

## Facilities

Table 5: Facilities Inventory and Replacement Plan

ASSET CATEGORY	DESCRIPTION	QTY	ACQ YR	ULB (Yrs)	AGE	CONDITION	REHAB/REP.	2023		2024 2025		 2026	:	2027	
Facilities	GPTD Ops-Maint. Facility	1	1983	40	40	2.7	Replace	\$ -	\$	-	\$	-	\$ -	\$ 25	,000,000
Facilities	Passenger Facility	1	2007	12	15	2.5	In Review	\$ -	\$	-	\$	-	\$ -	\$	-

Table 5 outlines GPTD's facilities inventory and financial plan through 2027 and is the primary decision support tool for determining asset replacement timing and funding decisions. Condition assessment was developed using FTA's Transit Economic Requirements Model (TERM) Scale. At present, both GPTD facilities fall below the target of 3.0.

GPTD is planning for the replacement of the Operations-Maintenance facility at 114 Valley Street in Portland. The continued need for the passenger facility on Elm Street in Portland is under review in relation the regional need for new passenger transit elsewhere on the Portland peninsula. This TAM plan will serve as a primary input to GPTD's annual Capital Improvement Program budgeting process which is the principle method by which GPTD prioritizes investments.
#### ATTACHMENT A

#### Greater Portland Transit District – Rolling Stock Inventory Updated: 12/31/2022

																		Remaining	g
								Remaining		Minimum	Remaining					Total	Remaining	Fed Share	6
			Date in	TAM Plan	Fed Useful	Actual	Remaining	% based on	Actual	Useful Life	% based on	Condition	Ac	cquistion	F	ederal	Fed. Share	based on	Ι,
Veh #	Vehicle Year	r Make/Model	Service	Update Date	Life (yr)	Service	Years	yrs	Mileage	Mileage	miles	Assessment		Cost		Share	based on yrs	miles	
1101	2011	Gillig Phantom	3/2/2011	12/31/2022	14.0	11.8	2.2	15%	462,076	500,000	8%	Fair	\$	370,287	\$	296,230	\$ 45,681	\$ 22,46	<b>58</b>
1102	2011	Gillig Phantom	3/2/2011	12/31/2022	14.0	11.8	2.2	15%	467,031	500,000	7%	Fair	\$	370,287	\$	296,230	\$ 45,681	\$ 19,53	33
1103	2011	Gillig Phantom	3/2/2011	12/31/2022	14.0	11.8	2.2	15%	405,723	500,000	19%	Fair	\$	370,287	\$	296,230	\$ 45,681	\$ 55,85	<b>5</b> 5
1104	2011	Gillig Phantom	3/2/2011	12/31/2022	14.0	11.8	2.2	15%	482,661	500,000	3%	Fair	\$	370,287	\$	296,230	\$ 45,681	\$ 10,27	/3
1105	2011	Gillig Phantom	3/2/2011	12/31/2022	14.0	11.8	2.2	15%	462,873	500,000	7%	Fair	\$	370,287	\$	296,230	\$ 45,681	\$ 21,99	)6
1106	2011	Gillig Phantom	3/2/2011	12/31/2022	14.0	11.8	2.2	15%	436,274	500,000	13%	Fair	\$	370,287	\$	296,230	\$ 45,681	\$ 37,75	5
1107	2011	Gillig Phantom	3/2/2011	12/31/2022	14.0	11.8	2.2	15%	455,583	500,000	9%	Fair	\$	370,287	\$	296,230	\$ 45,681	\$ 26,31	.5
1401	2014	Gillig Phantom	1/14/2014	12/31/2022	14.0	9.0	5.0	36%	318,189	500,000	36%	Good	\$	453,847	\$	363,078	\$ 130,523	\$ 132,02	!3
1402	2014	Gillig Phantom	1/14/2014	12/31/2022	14.0	9.0	5.0	36%	336,329	500,000	33%	Good	\$	453,847	\$	363,078	\$ 130,523	\$ 118,85	1
1403	2014	Gillig Phantom	1/14/2014	12/31/2022	14.0	9.0	5.0	36%	342,931	500,000	31%	Good	\$	453,847	\$	363,078	\$ 130,523	\$ 114,05	57
1404	2014	Gillig Phantom	1/14/2014	12/31/2022	14.0	9.0	5.0	36%	322,185	500,000	36%	Good	\$	453,847	\$	363,078	\$ 130,523	\$ 129,12	1
1405	2014	Gillig Phantom	1/14/2014	12/31/2022	14.0	9.0	5.0	36%	326,886	500,000	35%	Good	\$	453,847	\$	363,078	\$ 130,523	\$ 125,70	18
1606	2015	Arboc: Spirit of Mobility	6/16/2016	12/31/2022	7.0	6.5	0.5	6%	264,115	200,000	-32%	Poor	Ş	159,589	Ş	127,671	\$ 8,295	Ş -	
1607	2015	Arboc: Spirit of Mobility	6/16/2016	12/31/2022	7.0	6.5	0.5	6%	265,778	200,000	-33%	Poor	\$	159,589	\$	127,671	\$ 8,295	<u>Ş</u> -	
1/09	2016	Arboc: Spirit of Mobility	11///201/	12/31/2022	7.0	5.2	1.8	26%	239,918	200,000	-20%	Poor	\$	160,117	\$	128,094	\$ 33,841	\$ -	
1810	2018	New Flyer Exelsion	7/1/2018	12/31/2022	14.0	4.5	9.5	68%	165,914	500,000	6/%	Good	\$	507,087	\$	405,670	\$ 2/5,15/	\$ 2/1,05	*/
1811	2018	New Flyer Exelsion	7/1/2018	12/31/2022	14.0	4.5	9.5	68%	179,933	500,000	64%	Good	\$	507,087	\$	405,670	\$ 275,157	\$ 259,68	13
1812	2018	New Fiver Exclosion	7/1/2018	12/31/2022	14.0	4.5	9.5	68%	170,433	500,000	00% CE9/	Good	\$ ¢	507,087	ş	405,670	\$ 275,157	\$ 207,39	11
1015	2018	New Fiyer Exclosor	7/1/2018	12/31/2022	14.0	4.5	9.5	60%	167.244	500,000	67%	Good	> ¢	507,087	ç	405,670	\$ 275,157	\$ 262,60	10
1014	2018	New Fiyer Exclosion	9/1/2018	12/31/2022	14.0	4.5	9.5	60%	107,244	500,000	67% E0%	Good	ç	470 242	ې د	405,070	\$ 273,137	\$ 209,97	0 12
1916	2018	New Fiyer Exclusion	8/1/2018	12/31/2022	14.0	4.4	9.0	69%	205,650	500,000	59% 60%	Good	ې د	479,545	ې د	202,474	\$ 202,420	\$ 227,14	: <u>~</u>
1810	2018	New Flyer Exelsion	8/1/2018	12/31/2022	14.0	4.4	9.0	68%	201,125	500,000	50%	Good	ç	479,343	ş ¢	383 474	\$ 262,428	\$ 225,22	22
1817	2018	New Flyer Exelsion	8/1/2018	12/31/2022	14.0	4.4	9.6	68%	204,300	500,000	60%	Good	ç	479,343	s s	383,474	\$ 262,428	\$ 220,78	14
1819	2010	New Flyer Exelsion	8/1/2018	12/31/2022	14.0	4.4	9.6	68%	202,040	500,000	58%	Good	Ś	479 343	Ś	383 474	\$ 262,428	\$ 222,51	
1820	2018	New Flyer Exelsion	8/1/2018	12/31/2022	14.0	4.4	9.6	68%	201,105	500,000	60%	Good	Ś	479.343	Ś	383,474	\$ 262,428	\$ 229,23	37
1921	2019	New Flyer Exelsion	9/4/2019	12/31/2022	14.0	3.3	10.7	76%	140.952	500.000	72%	Good	Ś	490,107	ŝ	416,591	\$ 317.620	\$ 299.15	52
1922	2019	New Flyer Exelsion	9/4/2019	12/31/2022	14.0	3.3	10.7	76%	157.418	500.000	69%	Good	Ś	490.107	Ś	416.591	\$ 317.620	\$ 285.43	33
1923	2019	New Flyer Exelsior	9/6/2019	12/31/2022	14.0	3.3	10.7	76%	158,417	500,000	68%	Good	Ś	489,771	Ś	416,305	\$ 317,565	\$ 284,40	)5
1924	2019	New Flyer Exelsior	9/11/2019	12/31/2022	14.0	3.3	10.7	76%	150,100	500,000	70%	Good	\$	489,771	\$	416,305	\$ 317,972	\$ 291,33	30
1925	2019	New Flyer Exelsior	9/25/2019	12/31/2022	14.0	3.3	10.7	77%	150,448	500,000	70%	Good	\$	489,771	\$	416,305	\$ 319,113	\$ 291,04	10
1926	2019	New Flyer Exelsior	9/13/2019	12/31/2022	14.0	3.3	10.7	76%	154,981	500,000	69%	Good	\$	489,771	\$	416,305	\$ 318,135	\$ 287,26	<u>56</u>
2027	2020	New Flyer Exelsior	8/28/2020	12/31/2022	14.0	2.3	11.7	83%	110,758	500,000	78%	Good	\$	516,659	\$	439,160	\$ 365,680	\$ 341,87	/9
2028	2020	New Flyer Exelsior	8/28/2020	12/31/2022	14.0	2.3	11.7	83%	111,856	500,000	78%	Good	\$	516,659	\$	439,160	\$ 365,680	\$ 340,91	15
2029	2020	New Flyer Exelsior	9/11/2020	12/31/2022	14.0	2.3	11.7	84%	112,548	500,000	77%	Good	\$	516,659	\$	439,160	\$ 366,883	\$ 340,30	)7
2030	2020	New Flyer Exelsior	9/18/2020	12/31/2022	14.0	2.3	11.7	84%	97,997	500,000	80%	Good	\$	516,659	\$	439,160	\$ 367,485	\$ 353,08	37
2031	2020	New Flyer Exelsior	9/15/2020	12/31/2022	14.0	2.3	11.7	84%	111,463	500,000	78%	Good	\$	516,659	\$	439,160	\$ 367,227	\$ 341,26	0ز
2032	2020	New Flyer Exelsior	9/18/2020	12/31/2022	14.0	2.3	11.7	84%	111,642	500,000	78%	Good	\$	516,659	\$	439,160	\$ 367,485	\$ 341,10	)3
2033	2020	New Flyer Exelsior	9/29/2020	12/31/2022	14.0	2.3	11.7	84%	112,442	500,000	78%	Good	\$	516,659	\$	438,204	\$ 367,628	\$ 339,65	;9
2134	2021	New Flyer Exelsior	3/20/2021	12/31/2022	14.0	1.8	12.2	87%	73,301	500,000	85%	Good	\$	519,208	\$	410,174	\$ 357,919	\$ 350,04	12
2135	2021	New Flyer Exelsior	3/20/2021	12/31/2022	14.0	1.8	12.2	87%	80,398	500,000	84%	Good	\$	519,208	\$	410,174	\$ 357,919	\$ 344,22	20
2236	2022	Proterra	5/19/2022	12/31/2022	14.0	0.6	13.4	96%	12,824	500,001	97%	Good	\$	939,457	\$	147,345	\$ 140,828	\$ 143,56	<b>6</b>
2237	2022	Proterra	6/30/2022	12/31/2022	14.0	0.5	13.5	96%	13,592	500,002	97%	Good	\$	939,457	\$	147,345	\$ 142,039	\$ 143,34	łO

# ATTACHMENT B

Greater Portland Transit District Rolling Stock Inventory | Performance Measures Updated: 12/31/2022

				Date in	Fed Useful	2019	2020	2021	2022	2023	2024	2025	2026	2027
Veh # 405*	Vehicle Year 2004	Make/Model Gillig Phantom	Fuel	Service 6/1/2004	Life (yr) 14	12/31/2019 15.6	12/31/2020 16.6	12/31/2021	12/31/2022	12/31/2023	12/31/2024	12/31/2025	12/31/2026	12/31/2027
407*	2004	Gillig Phantom	Diesel	6/1/2004	14	15.6	16.6							
412*	2004	Gillig Phantom	Diesel	6/1/2004	14	15.6	16.6	17.6						
416*	2004	Gillig Phantom Orion Bus Industries Ltd	Diesel	6/1/2004	14	15.6 14.5	16.6	17.6						
531	2005	Orion Bus Industries Ltd.	CNG	7/6/2005	14	14.5								
532	2005	Orion Bus Industries Ltd.	CNG	7/6/2005	14	14.5								
536	2005	Orion Bus Industries Ltd.	CNG	7/6/2005	14	14.5								
539	2005	Orion Bus Industries Ltd.	CNG	7/6/2005	14	14.5								
541	2005	Orion Bus Industries Ltd.	CNG	7/6/2005	14	14.5								
1101	2011	Gillig Phantom	Diesel	3/1/2011	13	8.8	9.8	10.8	11.8	12.8	13.8			
1102	2011	Gillig Phantom Gillig Phantom	Diesel	3/2/2011	14	8.8	9.8 9.8	10.8	11.8	12.8	13.8			
1104	2011	Gillig Phantom	Diesel	3/2/2011	14	8.8	9.8	10.8	11.8	12.8	13.8	14.8		
1105	2011	Gillig Phantom	Diesel	3/2/2011	14	8.8	9.8	10.8	11.8	12.8	13.8	14.8		
1106	2011	Gillig Phantom Gillig Phantom	Diesel	3/2/2011	14	8.8	9.8	10.8	11.8	12.8	13.8	14.8		
1401	2011	Gillig Phantom	CNG	1/14/2014	14	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	
1402	2014	Gillig Phantom	CNG	1/14/2014	14	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	
1403	2014	Gillig Phantom	CNG	1/14/2014	14	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	
1404	2014	Gillig Phantom	CNG	1/14/2014	14	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	
1606	2015	Arboc: Spirit of Mobility	Diesel	6/16/2016	7.0	3.5	4.5	5.5	6.5					
1607	2015	Arboc: Spirit of Mobility	Diesel	6/16/2016	7.0	3.5	4.5	5.5	6.5					
1608	2015	Arboc: Spirit of Mobility Arboc: Spirit of Mobility	Diesel	6/16/2016	7.0	3.5	4.5	5.5	6.5 5.4					
1810	2010	New Flyer Exelsior	CNG	7/1/2018	14	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5
1811	2018	New Flyer Exelsior	CNG	7/1/2018	14	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5
1812	2018	New Flyer Exelsion	CNG	7/1/2018	14	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5
1813	2018	New Flyer Exelsion	CNG	7/1/2018	14	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5 8.5	9.5 9.5
1815	2018	New Flyer Exelsion	Diesel	8/1/2018	14	1.4	2.4	3.4	4.4	5.4	6.4	7.4	8.4	9.4
1816	2018	New Flyer Exelsior	Diesel	8/1/2018	14	1.4	2.4	3.4	4.4	5.4	6.4	7.4	8.4	9.4
1817	2018	New Flyer Exelsion	Diesel	8/1/2018	14	1.4	2.4	3.4	4.4	5.4	6.4	7.4	8.4	9.4
1819	2018	New Flyer Exelsion	Diesel	8/1/2018	14	1.4	2.4	3.4	4.4	5.4	6.4	7.4	8.4	9.4
1820	2018	New Flyer Exelsior	Diesel	8/1/2018	14	1.4	2.4	3.4	4.4	5.4	6.4	7.4	8.4	9.4
1921	2019	New Flyer Exelsion	Diesel	9/4/2019	14	0.3	1.3	2.3	3.3	4.3	5.3	6.3	7.3	8.3
1922	2019	New Flyer Exelsion	Diesel	9/4/2019	14 14	0.3	1.3	2.3	3.3	4.3	5.3	6.3	7.3	8.3
1924	2019	New Flyer Exelsior	Diesel	9/11/2019	14	0.3	1.3	2.3	3.3	4.3	5.3	6.3	7.3	8.3
1925	2019	New Flyer Exelsior	Diesel	9/25/2019	14	0.3	1.3	2.3	3.3	4.3	5.3	6.3	7.3	8.3
1926	2019	New Flyer Exelsion	Diesel	9/13/2019	14	0.3	1.3	2.3	3.3	4.3	5.3	6.3 5 3	7.3	8.3
2027	2020	New Flyer Exelsion	Diesel	8/28/2020	14		0.3	1.3	2.3	3.3	4.3	5.3	6.3	7.3
2029	2020	New Flyer Exelsior	Diesel	9/11/2020	14		0.3	1.3	2.3	3.3	4.3	5.3	6.3	7.3
2030	2020	New Flyer Exelsion	Diesel	9/18/2020	14		0.3	1.3	2.3	3.3	4.3	5.3	6.3	7.3
2031	2020	New Flyer Exelsion	Diesel	9/15/2020	14		0.3	1.3	2.3	3.3	4.3	5.3	6.3	7.3
2033	2020	New Flyer Exelsior	Diesel	9/29/2020	14		0.3	1.3	2.3	3.3	4.3	5.3	6.3	7.3
2134	2021	New Flyer Exelsior	Diesel	3/20/2021	14			0.8	1.8	2.8	3.8	4.8	5.8	6.8
2135	2021	New Flyer Exelsion Proterra Battery Electric	Diesel	3/20/2021	14			0.8	1.8	2.8	3.8	4.8	5.8	6.8 5.6
2237	2022	Proterra Battery Electric	Electric	6/30/2022	14				0.5	1.5	2.5	3.5	4.5	5.5
TBD	2023	Arboc Replacements (TBD)	Diesel	4/1/2023	14					0.8	1.8	2.8	3.8	4.8
TBD	2023	Arboc Replacements (TBD)	Diesel	4/1/2023	14					0.8	1.8	2.8	3.8	4.8
TBD	2023	Arboc Replacements (TBD)	Diesel	4/1/2023	14					0.8	1.8	2.8	3.8	4.8
TBD	2025	Gillig (2011) Replacements	Diesel	6/1/2025	14							0.6	1.6	2.6
TBD	2025	Gillig (2011) Replacements	Diesel	6/1/2025	14							0.6	1.6	2.6
TBD	2025	Gillig (2011) Replacements	Diesel	6/1/2025	14							U.b	0.6	2.6
TBD	2026	Gillig (2011) Replacements	Diesel	6/1/2026	14								0.6	1.6
TBD	2026	Gillig (2011) Replacements	Diesel	6/1/2026	14								0.6	1.6
TBD	2026	Gillig (2011) Replacements	Diesel	6/1/2026	14								0.6	1.6
TBD	2027	Gillig (2014) Replacements	Electric	6/1/2027	14									0.6
TBD	2027	Gillig (2014) Replacements	Electric	6/1/2027	14									0.6
TBD	2027	Gillig (2014) Replacements	Electric	6/1/2027	14									0.6
Total Vehicles	2027	Gillig (2014) Replacements	Electric	6/1/2027	14	44	44	44	44	44	44	44	44	44
Average Age MB % Meeting o CU % Meeting or	or Exceeding ULE r Exceeding ULB	3 (Years) : (Years)				6.5 25% 0%	5.1 9% 0%	5.3 5% 0%	5.5 0% 0%	5.9 0% n/a	6.9 0% n/a	6.9 9% n/a	6.6 0% n/a	6.0 0% n/a
		5. U.S. 6. 1								A	ć	A	A	A
		Est. Unit Cost to Replace Est. Unit Cost to Replace Est. Unit Cost to Replace		CNG Diesel Electric						\$ 575,000 \$ 555,000 \$ 900,000	\$ 592,250 \$ 571,650 \$ 909,000	\$ 610,018 \$ 588,800 \$ 918,090	\$ 628,318 \$ 606,463 \$ 927,271	\$ 647,168 \$ 624,657 \$ 936,544
		Anticipated Replacements Anticipated Replacements		CNG Diesel						0.0 4.0	0.0 0.0	0.0 3.0	0.0 4.0	0.0
		Anticipated Replacements Estimated Capital Cost		Electric						0.0	0.0 \$ -	0.0 \$ -	0.0	5.0 \$ -
		Estimated Capital Cost		Diesel						\$ 2,220,000	\$ -	\$ 1,766,399	\$ 2,425,854	\$ -
		Estimated Capital Cost		Electric						\$ -	\$ - :	\$ -	\$ 2.425.954	\$ 4,682,718
		Total Investment								\$ 2,220,000	÷ -	ş 1,766,399	<del>3</del> 2,425,854	<del>3</del> 4, <del>6</del> 82,718
* 71 2004 400														



Bruce A. Van Note COMMISSIONER

#### MaineDOT Narrative Report - October 2022

Under the FAST Act and MAP-21, "transit providers are required to submit an annual narrative report to the NTD that provides a description of any change in the condition of its transit system from the previous year and describes the progress made during the year to meet the targets previously set for that year."

# **Agency Information**

Maine Department of Transportation, NTD ID: 1R03 16 State House Station Augusta, ME 04333-0016 (207) 624-3026 office / (207) 441-4187 cell Point of Contact: Barbie-Jo Lord

Prepared by Kelly Arata on October 1, 2022 for reporting year 2022

## Useful Life Benchmark – Revenue Vehicles

MaineDOT's subrecipients have a fleet of 326 vehicles to provide demand response and flex route services. The inventory consists of 108 vans and minivans, 129 cutaways and 89 buses. In addition, one subrecipient has 2 ferry boats that provides public transportation.

MaineDOT's Maine State Ferry Service has 7 ferry boats that provide public transportation.

#### What targets did your agency set?

In calculating percent of revenue vehicles that have met or exceeded their useful life benchmark, MaineDOT set its targets based on vehicle type and useful life in years in each of the categories, as follows:

Classification	ication Vehicle or Equipment Type				
		(years)			
Class 1	Minivan, van, sedan	4			
Class 2	Light-duty small bus, minibus, small body-on-	5			
	chassis, cutaways				
Class 3	Medium-duty transit bus < 30', trolley-like bus	7			
Class 4	Medium Size Heavy duty	10			
	transit bus 30'				
Class 5	Heavy duty transit bus 35'; Commuter Coach	12			
Class 6	Ferry Boats	30-50			

The useful life benchmarks were adjusted from the default due to the rural nature of our roads and potential corrosion from the salt used during our winter season that contributes to a shorter life than the default ULB for these buses and vans.

#### How did your agency calculate these targets?

The acquisition dates for rolling stock is stored in MaineDOT's asset inventory and anticipated service lives are used to determine ages and whether assets are over or under the Useful Life Benchmarks (ULB) that MaineDOT set for each type of bus, cutaway and van. Anticipated service lives are documented in the State Management Plan and are primarily determined from the minimums set forth in FTA Circular 5010.1E.

MaineDOT determines the number of vehicles in each of the above categories using our vehicle type classifications, as follows:

Asset Category*	Performance	Asset Class	2022	2023	2022	2022
	Measure		Actuals	Target	Actual -	Actual
			Beyond	Beyond	<2.0	>2.0 SGR
			Useful	Useful	non-	Average
			Life	Life	SGR	
					Average	
Rolling Stock	Age - % of revenue	Class 1	49%	50%	26%	74%
	vehicles within a	Class 2	42%	42%	7%	93%
	particular asset class	Class 3	33%	29%	24%	76%
	that have met or	Class 4	97%	100%	7%	93%
	exceeded their Useful	Class 5	0%	0%	0%	100%
	Life Benchmark (ULB)	Class 6	40%	56%	14%	86%

<u>Note</u>: Class 1 has two categories (minivans and vans) with targets of 100% and 31% respectively. Note: Class 3, 4 and 5 were combined and reported with target of 49%.

#### How has your agency made progress toward its targets?

For land-based services, MaineDOT issued delivery orders for 40 cutaways/buses and 31 accessible vans since the last report in October 2021. However, these numbers were adjusted downward based on the cancellation of one delivery order for 13 cutaways and one delivery order for 13 accessible vans that were issued in the Spring of 2021. As a result of these cancellations, the total number of vehicles contained in delivery orders issued is adjusted downward to 27 cutaways/buses and 18 accessible vans for a total of 45 vehicles.

As of September 2022, MaineDOT accepted delivery of 8 cutaway/buses. An additional 13 accessible vans are anticipated to be delivered before the end of the year. In addition, the 19 cutaways ordered in the latter part of 2021 and the 5 remaining accessible vans are delayed until sometime in 2023 with no known delivery date. Delivery delays and cancellations are due to the coronavirus impacts and the nonavailability of chassis and/or components. Therefore, these events have impacted our progress on improving our state of good repair.

In addition, our subrecipients have disposed of approximately 43 buses and vans since the last report in October 2021.

MaineDOT is in the process of going out to bid for approximately 13 cutaways and 26 accessible vans by the end of this year with an anticipated delivery date of Fall 2023-Winter 2024. In addition, MaineDOT is in the process of going out to bid for approximately 6 trolley/buses by the end of this year with an anticipated delivery date of Spring/Summer 2023. All these procurements will help us replace some of our oldest buses/trolleys and vans over the next year if there are no unforeseen circumstances and will assist us in moving towards meeting our targets.

MaineDOT works with its subrecipients using a three-factor analysis to determine its State of Good Repair based on years, miles and condition assessment using its annual PTMS report for year ending in June of each year. MaineDOT's priority is to replace rolling stock that are below 2.0 average on the rating scale or its rolling stock that has high repair costs that are beyond their useful life in years or miles.

For water-based services, ferry boats have a long useful life. MaineDOT purchased one ferry boat since the last report in October 2021 and is in the process of disposing of one of its oldest ferries. MaineDOT anticipates purchasing three additional ferry boats – one by 2023, 2024 and 2025 – if there are no unforeseen circumstances.

#### What challenges face your agency in making progress toward the targets?

MaineDOT's land-based subrecipients provide demand response or flex route service over rural roads in their vast service territories. Funding remains a challenge. Our subrecipients continually search for new ways to acquire the local match needed for these capital purchases as well as for all their administrative and operating needs. The availability of the CARES Act and CRRSAA Act funds for operating and administrative needs may allow some of the transit providers to have more local match available from their current local match sources that could be used in future rolling stock purchases. However, current sources for local match may also be hampered with required adjustments as a result of the coronavirus. In addition, MaineDOT has experienced delays in delivery because of the impacts of coronavirus on chassis availability, microchip shortages and component shortages. Furthermore, manufacturers/vendors have been unable to hold the prices in their contracts and have either cancelled a few of our delivery orders or could not move forward with their bids on some of the cutaways or accessible vans.

MaineDOT uses its formula funds under 5310 and 5339 to replace rolling stock and other capital expenditures such as preventive maintenance as well as for facility rehabilitation or expansion if the need arises and is within our current priority and funding levels. In addition, MaineDOT may use a small portion of its 5307 and 5311 funds to replace rolling stock. The number of vehicles needing replacement exceeds available funding.

MaineDOT's priority is to replace land-based rolling stock that are below 2.0 average rating scale or its rolling stock that has high repair costs that are beyond their useful life in years or miles. If rolling stock is not replaced on a timely basis after the vehicle has reached its useful life, there may be a high cost of maintenance and repairs on the older vehicles to keep them on the road until the funds are available for replacement.

MaineDOT's water-based services also face a funding challenge.

# Useful Life Benchmark – Non-Revenue Vehicles

#### What targets did your agency set?

For land-based services, the administrative and service vehicles for our subrecipients are beyond their useful life. These types of vehicles are not a top priority for the state to replace. Therefore, the target remains the same.

For water-based services, the rescue boats for the Maine State Ferry Service are not beyond their useful life. Therefore, the target remains the same.

Asset Category*	Performance	Asset Class	2022	2023	2022	2022
	Measure		Actuals	`Target	Actual -	Actual
			Beyond	Beyond	<2.0	>2.0
			Useful	Useful	Average	Average
			Life	Life		
Equipment	Age - % of non-revenue	Automobiles	100%	100%	100%	0%
(land-based)	vehicles that have met	Truck and	100%	100%	33%	67%
	or exceeded their	other rubber				
	Useful Life Benchmark	tire vehicles				
	(ULB)					
Equipment	Age - % of non-revenue	Rescue Boats	0%	0%	0%	100%
(water-based)	vehicles that have met					
	or exceeded their					
	Useful Life Benchmark					
	(ULB)					

#### How did your agency calculate these targets?

Regarding land-based services, we prioritize the rehabilitation and replacement of our vehicles that provide the transit service, so generally any non-revenue vehicles forego replacement when we have significant revenue vehicle capital costs. Many of our revenue vehicles have reached or are approaching the end of their useful life, so we expect to be spending our capital funding on those instead of non-revenue vehicles. As these vehicles are beyond their useful life, these targets remained the same as the year before at 100% beyond their useful life.

Regarding water-based services, the Maine State Ferry Service rescue boats are not beyond their useful life. As these rescue boats are not beyond their useful life, these targets remained the same as the year before at 0% beyond their useful life.

#### How has your agency made progress toward its targets?

We do not currently have a procurement in place to replace those vehicles which have exceeded their useful life, so we will not make further significant progress toward this benchmark over the next reporting year. However, over the next reporting year there will be no additional vehicles exceeding their useful life so there will also be no negative progress. If these vehicles need replacement, the transit agency will purchase on their own using local funds until there is federal and/or state funding available to do so.

### What challenges face your agency in making progress toward the targets?

Funding remains a major challenge. Presently capital funding is completely dedicated to replacing revenue vehicles.

# **Facilities - Condition**

(insert brief, non-exhaustive statement on the agency's assets within this category)

There are two administrative and maintenance facilities built or purchased with federal funds for land-based services that are used for public transportation purposes. There are two administrative and/or maintenance facilities that were built or purchased with local funds used for public transportation purposes with one facility currently being renovated and rehabilitated using federal funds. There is one administrative and maintenance facility that was constructed using a combination of federal funds, USDA funds and local funds for public transportation purposes.

One of our water-based transit providers purchased their building and piers with local funds to provide ferry service.

Regarding water-based facilities, the Maine State Ferry Service has terminals, piers and transfer bridges that it owns to provide general public transportation. In addition, the State of Maine owns and maintains the piers that Casco Bay Island Transit District, a direct recipient of FTA funds, uses to provide general public transportation.

#### What targets did your agency set?

The facilities, terminals, piers and transfer bridges have a condition assessment Term rating between 3.0 to 5.0 except one land-based facility that is borderline but is currently under renovation and rehabilitation.

Asset Category*	Performance Measure	Asset Class	2022 Actuals	2023 Target
Facilities (land-based)	Condition - % of facilities with a condition rating below 3.0 on the FTA Term Scale	Support (Main. & Admin.) Passenger	0%	0%
Facilities (water-based)	Condition - % of facilities with a condition rating below 3.0 on the FTA Term Scale	Terminal	0%	0%

Facilities (water-based)	Condition - % of facilities with a condition rating below 3.0 on the FTA Term Scale	Piers	0%	0%
Facilities (water-based)	Condition - % of facilities with a condition rating below 3.0 on the FTA Term Scale	Transfer Bridge	0%	0%

#### How did your agency calculate these targets?

After assessing our land-based and water-based facilities within each category, we found that approximately 100% of them are at a 3.0 or higher on the TERM scale or will be after the renovation and rehabilitation is completed in 2022. The priority is to maintain those facilities with on-going maintenance projects and avoid having them fall below a 3 rating. With this information, our target remains the same at 0%.

#### How has your agency made progress toward its targets?

We have not had any facilities fall below a 3.0 condition assessment on the TERM scale. One of MaineDOT's subrecipients is rehabilitating their facility that they had originally purchased with local funds. In addition, MaineDOT has taken steps to rehabilitate some of the ferry boat docking pens and is in the process of rehabilitating others soon. We remain within the targets for this measure.

#### What challenges face your agency in making progress toward the targets?

Funding remains a challenge but there is a priority to maintain the facilities at a high level.

# York County Community Action Corp.

Age:	Mileage:	Life Span Used:	Vehicle Type:	e VIN:	Original Price:	Replacement Cost:	Purchase Date:			
3	3795	3%	2	1FDFE4FS5KDC66276	\$79,315.00	\$60,000.00	12/4/2020	12	Startrans Se	2019
3	5783	4%	2	1FDAF5GY5KEF41896	\$112,419.00	\$60,000.00	1/6/2020	24	Defender	2019
3	24428	16%	2	1FDFE4FS8KDC66272	\$79,315.00	\$60,000.00	6/8/2021	12	Startrans Se	2019
3	27500	18%	2	1FDFE4FS7KDC66277	\$79,315.00	\$60,000.00	5/12/2021	12	Startrans Se	2019
3	31511	21%	2	1FDFE4FS0KDC66279	\$79,315.00	\$60,000.00	3/25/2021	12	Startrans Se	2019
3	31763	21%	2	1FDFE4FS7KDC66280	\$79,315.00	\$60,000.00	6/8/2021	12	Startrans Se	2019
3	34017	23%	2	1FDFE4FS1KDC66274	\$79,315.00	\$60,000.00	11/24/2020	12	Startrans Se	2019
8	23147	23%	1	2C7WDGBG7ER467742	\$37,579.00	\$38,000.00	10/16/2014	6	Braun Enter	2014
3	34769	23%	2	1FDFE4FSXKDC66273	\$79,315.00	\$60,000.00	12/4/2020	12	Startrans Se	2019
3	39897	27%	2	1FDFE4FS3KDC66275	\$79,315.00	\$60,000.00	3/25/2021	12	Startrans Se	2019
3	41556	28%	2	1FDFE4FS9KDC66278	\$79,315.00	\$60,000.00	12/4/2020	12	Startrans Se	2019
7	32111	32%	1	2C7WDGBG4FR634401	\$37,579.00	\$38,000.00	8/13/2015	6	Braun Enter	2015
8	40091	40%	1	2C7WDGBG6ER405085	\$37,579.00	\$38,000.00	10/16/2014	6	Braun Enter	2014
3	80722	54%	2	1FDAF5GY3KEF41895	\$112,419.00	\$60,000.00	1/6/2020	24	Defender	2019
5	85726	57%	2	1HA6GUBG9HN000743	\$134,062.00	\$60,000.00	4/9/2018	16	Glaval Titan	2017
13	129179	65%	3	1F6NF53Y990A00601	\$130,264.00	\$100,000.00	2/22/2010	28	TROLLEY	2009
13	131332	66%	3	1F6NF53Y290A00603	\$130,264.00	\$100,000.00	2/22/2010	28	TROLLEY	2009
13	136876	68%	3	1F6NF53Y090A00602	\$130,264.00	\$100,000.00	2/22/2010	28	TROLLEY	2009
13	139432	70%	3	1F6NF53Y790A00600	\$130,264.00	\$100,000.00	2/22/2010	28	TROLLEY	2009
13	140380	70%	3	1F6NF53Y490A00604	\$130,264.00	\$100,000.00	2/22/2010	28	TROLLEY	2009
13	140729	70%	3	1F6NF53Y590A01292	\$130,264.00	\$100,000.00	3/24/2010	28	TROLLEY	2009
10	165257	83%	3	1GB6G5BG2C1134721	\$134,336.00	\$100,000.00	5/30/2012	16	4500	2012
5	138105	92%	2	1HA6GUBG9HN000905	\$134,062.00	\$60,000.00	4/27/2018	16	Glaval Titan	2017
12	205240	103%	3	1GB9G5AG7A1139733	\$165,358.00	\$100,000.00	9/1/2010	16	4500	2010
12	226093	113%	3	1GB9G5AG0A1139542	\$125,846.00	\$100,000.00	9/1/2010	16	4500	2010
12	232067	116%	3	1GB9G5AG9A1139376	\$125,846.00	\$100,000.00	9/1/2010	16	3600	2010
12	239277	120%	3	1GB9G5AG9A1139992	\$125,846.00	\$100,000.00	9/1/2010	16	4500	2010
5	188997	126%	2	1HA6GUBG4HN000813	\$134,062.00	\$60,000.00	4/27/2018	16	Glaval Titan	2017
11	269245	135%	3	1GB6G5BG0B1151595	\$129,008.00	\$100,000.00	11/4/2011	16	4500	2011
11	280182	140%	3	1GB6G5BG0B1150687	\$129,008.00	\$100,000.00	11/4/2011	16	4500	2011
				30 Items			\$2,254,000.00	)		

# Vehicle Rank Report Summary Legend:

 Green
 New: <= 25%</th>

 Blue
 Ideal: 25% And <= 50%</td>

 Gold
 Scheduled: 50% And <= 75%</td>

 Red
 Critical: > 75% And <= 100%</td>

Gray Scrap: > 100%