

***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

[Introduction 4](#_Toc527365839)

[Background 4](#_Toc527365840)

[Transit Asset Management Plan Requirements 5](#_Toc527365841)

[Definitions 6](#_Toc527365842)

[Rolling Stock and Equipment Classifications 11](#_Toc527365843)

[Condition Assessments 16](#_Toc527365844)

[Rolling Stock and Equipment 16](#_Toc527365845)

[Facilities 17](#_Toc527365846)

[Decision Support Tools by Asset Class 23](#_Toc527365847)

[Investment Prioritization 27](#_Toc527365848)

**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 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 (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.

**Table 1 Rolling Stock Classifications**

Table 1 Rolling Stock Classifications





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**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **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 |
| KVCAP | 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 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 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.

**Table 3 Facility Maintenance Procedures by Asset Type and Responsible Party**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Facility Type** | **Owner** | **Operator** | **Maintenance Responsibility** | | **Process Notes** |
| **Lead** | **Assist** |
| Building (e.g. passenger terminal, garage, administrative office) | MaineDOT | Maine State Ferry Service (MaineDOT) | M&O Multimodal Transportation Operations Managers | MSFS Staff | MaineDOT performs biennial facility inspections |
| MSFS contracts for winter maintenance |
| 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 |
| Parking Lot | MaineDOT | Maine State Ferry Service (MaineDOT) | Region office | MSFS Staff watch on daily basis | MaineDOT performs biennial inspections |
| 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. |
| 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 5-year 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, semi-annual, 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)**

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

**Table 5 MaineDOT Facility Information Request Form**

Table 5 MaineDOT Facility Information Request Form

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

Table 6 MaineDOT Ferry Vessel Information Request Form

## 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) |
| 3- Fair - 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.

Table 8 MaineDOT Facility Condition Assessment Tool

**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.

**Table 9 MaineDOT Condition Assessment Tool – Ferry Infrastructure**

Table 9 MaineDOT Condition Assessment Tool for Ferry Infrastructure

**Table 10 MaineDOT Condition Assessment Tool – Ferry Transfer Bridges**

Table 10 Ferry Terminal Transfer Bridge Inspection Sheet

**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.

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

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

Table 11A - partner form to Table 11The 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.

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ASSET RATING SCORE** | **Asset Age** | **Asset Condition** | **Asset Performance** | **Level of Maintenance** |
| (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-Operable or Unsafe | | | |

## 

## 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 Based Facility Useful Life Rating Scale

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.

**Table 20 MaineDOT SGR Targets**

Table 20 MaineDOT State of Good Repair Targets

Table 20 Part 2 - SGR Targets

Table 20 Part 3 Facilities

# 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 non-revenue 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 decision-support 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.

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Vessel Being Replaced** | **Year to be Delivered** | **Estimated Cost** | **Funding Source** |
| 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 |

**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 Terminal

Little Diamond Island Rockland

Great Diamond Island Pier Vinalhaven

Chebeague Island Pier North Haven

Long Island Pier Lincolnville

Peaks island Pier Isleboro

Rockland Bass Harbor

Swans Island Swans Island

Isle au Haut – Stonington Facility

Transfer Bridge Surface Parking Lot

Vinalhaven Rockland

Isleboro

Lincolnville

Matinicus

Bass Harbor

Swans Island

Frenchboro

Rockland Transfer Bridge 1

Rockland Transfer Bridge 2

North Haven Transfer Bridge

\*See Separate Document

# Appendix 3 accountable executive

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Provider | Abbre- viated | Accountable Executive | Email | Tele. No. |
| Aroostook Regional Transportation System | ARTS | David Dionne, Executive Director | [executivedirector@artsme.org](mailto:executivedirector@artsme.org) | 764-1290 |
| City of Bath | Bath | Michael Peabody, Facilities Dir. | [mpeabody@CityofBath.com](mailto:mpeabody@CityofBath.com) | 443-8365 |
| Downeast Community Partners | DCP | Cheryl Robbins, Transportation Director | [cheryl.robbins@DowneastCommunityPartners.org](mailto:cheryl.robbins@DowneastCommunityPartners.org) | 610-5932 |
| Downeast Transportation | DTI | Phyllicia Jordan, Operations & Facilities Mgr | [pjordan@exploreacadia.com](mailto:pjordan@exploreacadia.com) | 667-5796 |
| Kennebec Valley Community Action Program | KVCAP | Suzanne Walsh, CEO | [suzannew@kvcap.org](mailto:suzannew@kvcap.org) | 859-1579 |
| Penquis Community Action Program | Penquis | Steven Richard, Transportation Director | srichard@penquis.org | 973-3512 |
| Regional Transportation Program | RTP | Jack DeBeradinis, Executive Director | [jackd@rtprides.org](mailto:jackd@rtprides.org) | 615-0093 |
| Waldo Community Action Partners | WCAP | Michael Hallundbaek, Director | [MHallundbaek@MidCoastConnector.org](mailto:MHallundbaek@MidCoastConnector.org) | 930-7901 |
| West's Transportation | West's | Emory West, Manager | [westbus@ymail.com](mailto:westbus@ymail.com) | 546-2823 |
| Western Maine Transportation Services | WMTS | Sandy Buchanan, General Manager | [SBuchanan@westernmainetrans.org](mailto:SBuchanan@westernmainetrans.org) | 333-6972 x207 |
| York County Community Action Corporation | YCCAC | Tom Reinauer, Transportation Director | Thomas.Reinauer@yccac.org | 459-2930 |
| Isle Au Haut | Isle Au Haut | George Cole, President | [gw.cole@verizon.net](mailto:gw.cole@verizon.net) | (516) 658-2838 |
| MaineDOT, Ferry Service | MSFS | Mark Higgins, Ferry Service Manager | Mark.A.Higgins@maine.gov | 596-5422 |
| Maine Department of Transportation | MaineDOT | Rick Dubois, Multimodal Operations Director | [rick.dubois@maine.gov](mailto:rick.dubois@maine.gov) | 624-3312 |