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Cape Ann  
Transportation  
Authority

Transit Asset Management Plan for the period of 10/1/2022 to 9/30/2026  
Plan Prepared: 9/19/2022

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## **Cape Ann Transportation Authority**

The Cape Ann Transportation Authority (CATA) is a political subdivision of the Commonwealth, created in 1973 by Chapter 161B of the Massachusetts General Laws. The Authority is given general responsibility to develop, finance, and contract for the operation of mass transportation facilities and services within its territory. The five Municipalities comprising the Authority are Gloucester, Rockport, Ipswich, Essex, and Hamilton, located in the North Shore area of eastern Massachusetts. Each of these municipalities is represented by their chief executive officer, or designee, and serves as CATA's advisory board. The day-to-day affairs of the Authority are managed by an Administrator who is appointed by the Advisory Board.

CATA oversees operations of fixed route and demand response services in all five communities. Year-round fixed route service is provided in Gloucester and Rockport. Additional fixed route service is provided in the summer in Gloucester, Rockport, Ipswich, and Essex. All CATA vehicles are wheelchair accessible and comply with the Americans with Disabilities Act (ADA). CATA is an important feeder to several MBTA commuter rail stations.

Although responsible for establishing routes and setting fares, CATA is not involved in the direct operation of public mass transportation services. Rather, it relies on contracts negotiated with private sector transportation providers. The Authority owns the buses and vans and has one Administration/Operations/Maintenance facility located in Gloucester, MA.

The Authority is a designated recipient of Federal Transit Administration 5307 funds, receives State Operating Assistance, and each Member City/Town receiving service is assessed for its share of service. For the Fiscal Year 2023, 7/1/2022-6/30/2023, the Authority's budget is \$4,192,418

## **Executive Summary**

As a recipient of Federal Transit Administration funds, CATA is required to develop and maintain a Transit Asset Management Plan per FTA's Final Rule at 49 CFR Part 625. As defined by the Rule, Transit Asset Management (TAM) is the strategic and systematic practice of processing, operating, inspecting, maintaining, rehabilitating, and replacing transit capital assets to manage their performance, risks, and cost over their life cycles to provide safe, cost effective, and reliable public transportation.

The preparation of the TAM Plan is based on identifying the transit assets which CATA owns and has direct capital responsibility and the performance measures included in the Final Rule that relate to these identified assets. A complete TAM Plan is required by 9/30/2018 with an updated TAM Plan required by October 2022. CATA is considered a Tier II Transit Provider as defined in the Final Rule. This definition is as follows:

*Tier II Provider:* 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.

The consequences of an asset not being in a State of Good Repair (SGR) include: safety risks (increase in accidents per 100,000 revenue miles); decreased system reliability (poor on-time performance); higher maintenance costs per miles of service and/or lower system performance (missed trips due to increased frequency of breakdowns).

## **Section 1: Introduction & Applicability**

### **Time Frame of TAM Plan**

This document covers the period of 10/1/2022 to 9/30/2026. This TAM Plan shall be amended during the five year horizon period when there is a significant change to assets and/or operations occurring at the Authority.

### **The Accountable Executive**

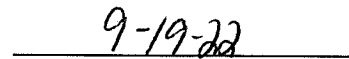
As required by the TAM Final Rule, each transit operator receiving FTA funding shall designate an “Accountable Executive” to implement the TAM Plan. The Authority’s Accountable Executive shall be the Administrator, acting as the Chief Executive Officer of the Authority. The Authority’s Accountable Executive 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 Accountable Executive shall be responsible to ensure the development and implementation of the TAM Plan, in accordance with 49 CFR Part 625 (625.25 Transit Asset Management plan requirements). Furthermore, the Accountable Executive shall approve the annual asset performance targets and TAM Plan document. These required approvals shall be self-certified by the Administrator via the annual FTA Certifications and Assurances forms in TrAMS.

The current Accountable Executive is Shona Norman.



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Shona Norman, Interim Administrator



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Date

### **TAM Plan Elements**

As a Tier II public transit provider, the TAM Plan prepared by the Authority must contain the following elements:

1. Inventory of Assets Portfolio An inventory of the number and type of capital assets to include Rolling Stock, Facilities, and Equipment

2. Condition Assessment of Inventoried Assets A condition assessment of those inventoried assets for which the Authority has direct ownership and capital responsibility
3. Description of Decision-Support Tool A description of the analytical process and decision-support tool the Authority uses to assist in capital asset prioritization
4. Prioritized List of Investments The prioritized list of projects the Authority will use to manage or improve the SGR of capital assets

The following Definitions, as included in the Final Rule, apply to this TAM Plan:

*Accountable Executive:* 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.

*Asset Category:* 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.

*Asset Class:* 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.

*Asset Inventory:* Means a register of capital assets, and information about those assets.

*Capital Asset:* Means a unit of rolling stock, a facility, a unit of equipment, or an element of infrastructure used for providing public transportation.

*Decision Support Tool:* Means 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:* 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.

*Exclusive-Use Maintenance Facility:* 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.

*Full Level of Performance:* Means the objective standard established by FTA for determining whether a capital asset is in a state of good repair.

*Horizon Period:* Means the fixed period of time within which a transit provider will evaluate the performance of its TAM plan. FTA standard horizon period is four years.

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

*Infrastructure:* Means the underlying framework or structures that support a public transportation system.

*Investment Prioritization:* 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.

*Key Asset Management Activities:* 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.

*Participant:* Means a tier II provider that participates in a group TAM plan.

*Performance Measure:* 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).

*Performance Target:* 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).

*Public Transportation System:* Means the entirety of a transit provider's operations, including the services provided through contractors.

*Public Transportation Agency Safety Plan:* Means a transit provider's documented comprehensive agency safety plan that is required by 49 U.S.C. 5329.

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

*Rolling Stock:* Means a revenue vehicle used in providing public transportation, including vehicles used for carrying passengers on fare-free services.

*Service Vehicle:* 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.

*State of Good Repair (SGR):* Means the condition in which a capital asset is able to operate at a full level of performance.

*Subrecipient:* Means an entity that receives Federal transit grant funds indirectly through a State or a direct recipient.

*TERM Scale:* 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

*Tier I Provider:* 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.

*Tier II Provider:* 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 subrecipient under the 5311 Rural Area Formula Program, (3) or any American Indian tribe.

*Transit Asset Management (TAM):* 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.

*Transit Asset Management (TAM) Plan:* 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.

*Transit Asset Management (TAM) Policy:* 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.

*Transit Asset Management (TAM) Strategy:* Means the approach a transit provider takes to carry out its policy for TAM, including its objectives and performance targets.



*Transit Asset Management (TAM) System:* Means 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):* Means 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:* Means either the expected life cycle of a capital asset or the acceptable period of use in service determined by FTA.

*Useful life benchmark (ULB):* 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.

### State of Good Repair (SGR) Standards Policy

CATA's SGR policy is as follows:

A capital asset is in a state of good repair (SGR) when each of the following objective standards is met:

1. If the asset is in a condition sufficient for the asset to operate at a full level of performance. An individual capital asset may operate at a full level of performance regardless of whether or not other capital assets within a public transportation system are in a SGR
2. The asset is able to perform its manufactured design function
3. The use of the asset in its current condition does not pose an identified unacceptable safety risk and/or deny accessibility
4. The asset's life-cycle investment needs have been met or recovered, including all schedule maintenance, rehabilitation, and replacement (ULB)

The TAM Plan allows CATA to predict the impact of its policies and investment justification decisions on the condition of its assets throughout the asset's life cycle, and enhances the abilities to maintain a SGR by proactively investing in an asset before the asset's condition deteriorates to an unacceptable level.

### Useful Life Benchmark

As previously mentioned, the Useful Life Benchmark (ULB) is defined as the expected life cycle or acceptable period of use in service for a capital asset as determined by a transit provider.

For the purposed of this TAM Plan, CATA utilized FTA standards for vehicle replacement found in FTA Circular 5010.E, as assets acquired by CATA are funded in part with Federal transit funds.

#### Minimum Service Life for Buses and Vans

Category	Length	Minimum Life whichever comes first	
		Years	Miles
Heavy-Duty Large Bus	35-45 ft	12	500,000
Heavy-Duty Small Bus	30 ft	10	350,000
Medium-Duty Transit Bus	30 ft.	7	200,000
Light-Duty Mid-Sized Bus	25-35 ft.	5	150,000
Light Duty Small Bus (cutaways, modified van)	16-28 ft.	4	100,000

#### Condition Assessment

As part of the TAM Plan, each vehicular and facility asset will have a physical condition assessment conducted on an annual basis. See Section 3 regarding condition assessment.

#### SGR Performance Measures and Targets

Under the Tam Final Rules, FTA established three performance measures for Tier II transit providers to approximate the State of Good Repair (SGR) for three categories of capital assets. Calculating performance measures will assist in quantifying the condition of assets, which will facilities setting targets that will support funding prioritization. These three performance measures are as follows:

- **Rolling Stock-Age:** The SGR performance measure for rolling stock is the percentage of revenue vehicles (fixed route and paratransit) within a particular asset class that have either met or exceeded their UBL
- **Equipment-Age:** The SGR performance measure for non-revenue, support service, and maintenance vehicles is the percentage of those vehicles that have either met or exceeded their ULB
- **Facilities-Condition:** The SGR performance measure for facilities in the percentage of facilities within an asset class rated below condition 3 on the FTA TERM rating scale

## **Section 2: Asset Inventory Portfolio**

The following capital asset items that are owned by CATA, and for which CATA has a direct Capital responsibility, are included in the TAM Plan asset inventory. Rolling Stock (buses/vans), Support Vehicles, and Facilities. CATA is not a grantee that operates passenger rail service, therefore CATA does not have any associated rail infrastructure in its asset portfolio.

### **Rolling Stock**

Rolling stock (buses and vans) owned by CATA are considered revenue service vehicles used in the provision of public transportation. Data for rolling stock is maintained in TransAm software. The following required data fields are maintained for each rolling stock asset:

External Vehicle ID  
Description  
Vehicle Type  
Mileage  
Manufacturer  
Plate  
Vehicle Weight  
Vehicle Features  
Capacity: Seating/Standing/Wheelchair  
Current State of Vehicle  
Storage location  
Disposition Date, Cost, and Buyer  
Grant Source Used for Purchase (State/Fed/%) ; Grant Number  
Purchase State (new/used)  
Asset Tag #  
Classification  
Vehicle Title  
VIN Number  
Anticipate Replacement/Rehab  
Year built/in Service Date/Age License  
Reported Condition Assessment Gross  
Purchase Cost, Date, Source (Dealer/Vendor)  
Fuel Type Make/Model  
Length of Vehicle

### **Non-Revenue Service Vehicles**

CATA owns and has direct capital responsibility for three non-revenue service vehicles. One is assigned to the Maintenance Department and two to the Operations and Administration.

Data for non-revenue service vehicles is maintained in TramsAM software. The following required data fields are maintained for each non-revenue service vehicle:

External Vehicle ID  
Description  
Vehicle Type  
Mileage  
Manufacturer  
Plate  
Vehicle Weight  
Vehicle Features  
Capacity: Seating  
Current State of Vehicle  
Storage location  
Classification  
Last Maintenance Performed  
Disposition Date, Cost, and Buyer  
Grant Source Used for Purchase (State/Fed/%); Grant Number  
Purchase State (new/used)  
Asset Tag #  
Classification  
Vehicle Title  
VIN Number  
Anticipate Replacement  
Year built/in Service Date/Age License  
Reported Condition Assessment Gross  
Purchase Cost, Date, Source (Dealer/Vendor)  
Fuel Type Make/Model

## **Facilities**

Facilities are any structure used in providing public transportation which CATA owns and has a direct capital responsibility. Facilities utilized and owned include one administration/operations/maintenance facilities.

Data for facility assets is maintained and updated in the TransAM software. The following required data fields are maintained for each facility asset.

Asset Ownership  
Asset Description/Name  
Physical Location/Address

Asset Tag #  
External ID  
Classification  
Asset Type  
Status  
Age/Year Built  
Reported Condition  
Last Maintenance  
Book Value  
Rehab Year  
Number of Parking Spaces (public, private, ADA)  
Vendor/Builder  
FTA facility classification  
Interior (sqft)  
Lot Size  
Grant Source Used (State/Fed/%)  
Build Cost  
Purchase Date  
In Service Date  
Purchase State (new/used)  
Expected useful life  
Land owner  
Building owner  
Facility Size  
Section of larger facility  
Percent Operational  
Number of structures, floors, elevators/escalators  
Replacement year  
Line number  
Features and amenities (ADA)  
Disposition Date/Cost/Buyer  
Grant Number  
SGR Status

Organization	Asset ID	Type	Model	Location	Status	Age	Condition	Replace	Mileage
CATA	101	Trolleybus	1C9S2HF	Administration Building: CATA	In Service	21	3	24-25	55403
CATA	301	Trolleybus	1C9S2HS	Administration Building: CATA	In Service	19	3	24-25	94439
CATA	1001	Bus	15GGE271	Administration Building: CATA	In Service	12	4	24-25	272194
CATA	1002	Bus	15GGE271	Administration Building: CATA	In Service	12	4	24-25	250650
CATA	1201	Bus	15GGE271	Administration Building: CATA	In Service	10	4	24-25	185311
CATA	1501	Bus	HC	Administration Building: CATA	In Service	7	3	24-25	127457
CATA	1502	Bus	HC	Administration Building: CATA	In Service	7	3	24-25	115959
CATA	1601	Bus	HC	Administration Building: CATA	In Service	6	3	26-27	140396
CATA	1602	Bus	HC	Administration Building: CATA	In Service	6	3	26-27	123632
CATA	1603	Bus	HC	Administration Building: CATA	In Service	6	3	26-27	146834
CATA	1604	Bus	HC	Administration Building: CATA	In Service	6	3	26-27	128008
CATA	1701	Bus	TRABUS	Administration Building: CATA	In Service	5	4	26-27	158452
CATA	1702	Bus	TRABUS	Administration Building: CATA	In Service	5	4	26-27	144002
CATA	1703	Bus	TRABUS	Administration Building: CATA	In Service	5	4	26-27	137395
CATA	1801	Bus	TRABUS	Administration Building: CATA	In Service	4	5	30-31	117102
CATA	1802	Bus	TRABUS	Administration Building: CATA	In Service	4	5	30-31	98888
CATA	250	Cutaway	ECII	Administration Building: CATA	In Service	9	3	24-25	105448
CATA	251	Cutaway	ECII	Administration Building: CATA	In Service	6	4	24-25	76060
CATA	252	Cutaway	ECII	Administration Building: CATA	In Service	6	4	24-25	104166
CATA	253	Cutaway	ECII	Administration Building: CATA	In Service	6	4	24-25	135400
CATA	254	Cutaway	ECII	Administration Building: CATA	In Service	6	4	24-25	125756
CATA	255	Cutaway	ECII	Administration Building: CATA	In Service	6	4	24-25	102593
CATA	256	Cutaway	ECII	Administration Building: CATA	In Service	6	4	24-25	125226
CATA	257	Cutaway	PHOENIX	Administration Building: CATA	In Service	5	4	24-25	2920
CATA	258	Cutaway	EC-II	Administration Building: CATA	In Service	5	4	24-25	98457
CATA	259	Cutaway	EC-II	Administration Building: CATA	In Service	5	4	24-25	94259
CATA	260	Cutaway	PHOENIX	Administration Building: CATA	In Service	4	4	24-25	79081
CATA	261	Cutaway	ECII	Administration Building: CATA	In Service	4	4	24-25	89806
CATA	262	Cutaway	ECII	Administration Building: CATA	In Service	4	4	24-25	83033
CATA	263	Cutaway	ECII	Administration Building: CATA	In Service	1	5	25-26	46195
CATA	264	Cutaway	ECII	Administration Building: CATA	In Service	1	5	25-26	52646
CATA	265	Cutaway	ProMaster	Administration Building: CATA	In Service	1	5	26-27	24391

Organization	Asset ID	Type	Model	Location	Status	Age	Condition	Mileage	Replace
CATA	EQUINOX 6	Trucks and other Rubber Tire Vehicles	CMD EQUINOX	Administration Building: CATA	In Service	6	5	40124	23-24
CATA	EQUINOX 7	Trucks and other Rubber Tire Vehicles	CMD EQUINOX	Administration Building: CATA	In Service	6	5	18265	23-24
CATA	ST-1	Trucks and other Rubber Tire Vehicles	CMD 2016	Administration Building: CATA	In Service	7	5	7234	23-24

Agency	Type	Asset Tag	Description	Location	Status	Age	Condition	FTA Facility
CATA	Administration Building	CATA	Administration and Operations Facility	Administration Building: CATA	I	18	4	Combined Administrative and

### Section 3: Asset Condition Assessment

CATA assess the condition of its assets by utilizing a condition rating assessment scale. This rating scale assigns a numerical value based on the physical condition of each asset. The rating scale is based on numbers 5.0 to 1.0, with 5.0 being new and 1.0 being poor. Assets with a rating of 3.0 or higher are considered to be in a SGR.

The inspection process and documentation forms utilized to assess facility and vehicle assets are detailed in the CATA Vehicle Maintenance and Facility Maintenance Plans.

#### Rolling Stock (Revenue Vehicles)

The TAM Plan condition assessment consists of assigning a condition rating to all rolling stock assets (revenue vehicles) for which CATA owns and has a direct capital responsibility.

The bus and van revenue vehicle condition assessment is as follows:

Condition	Ratings	Description
Excellent	5.0-4.8	New asset; no visible defects
Good	4.7-4.0	Asset showing minimal signs of wear; some slightly defective or deteriorated components
Adequate	3.9-3.0	Asset has reached its mid-life (condition 3.5); some moderately defective or deteriorate components
Marginal	2.9-2.0	Asset reaching or just past the end of its useful life;; increasing number of defective or deteriorated components and increasing maitnenacne needs
Poor	1.9-1.0	Asset is past its useful life and is in need of immediate repair or replacement; may have critically damaged componentents

Example evaluation methods are:

Engine	Evaluate available compression testes, oil usage, oil analysis, and noise
Drive-Train	Evaluate transmission and rear-end based on fluid analysis, shift quality, fluid leaks, and noises
Electrical	Evaluate lights, switches, gauges, and other electrical mechanisms relative to general working conditions; evaluate wiring condition especially front to back wiring
Suspension/Steering	Evaluate suspension and steering capability
A/C, Heating	Evaluate cooling and heating capability throughout the bus in order to maintain passenger and driver comfort
Structure	Evaluate extent of cracks and rust involvement in structure
Body Interior	Evaluate condition of floor, windows, seats, side and modesty panels and other interior items

### Non-Revenue Service Vehicles

The same evaluation of condition used for Revenue Vehicles is used for Non-Revenue Vehicles for which CATA owns and has direct capital responsibility. Non-Revenue Vehicles include supervisory and maintenance vehicles.

Condition	Ratings	Description
Excellent	5.0-4.8	New asset; no visible defects
Good	4.7-4.0	Asset showing minimal signs of wear; some slightly defective or deteriorated components
Adequate	3.9-3.0	Asset has reached its mid-life (condition 3.5); some moderately defective or deteriorate components
Marginal	2.9-2.0	Asset reaching or just past the end of its useful life;; increasing number of defective or deteriorated components and increasing maitnenacne needs
Poor	1.9-1.0	Asset is past its useful life and is in need of immediate repair or replacement; may have critically damaged componentents

### Facilities

CATA's one Administration/Operations/Maintenance Facilities is inspected as scheduled in the Facilities Maintenance Plan. Components inspected are listed below and the inspection forms are also included.



Component	Sub-components	Component	Sub-components
Substructure	Foundation	HVAC	Energy Supply
	Basement		Generation/Distribution
Shell	Superstructure		Controls
	Roof		Chimneys/Vents
Interiors	Exterior	Fire Protection	Sprinklers
	Partitions		Hydrants
	Stairs		Standpipes
Conveyance	Finishes	Electrical	Distribution
	Elevators		Wiring
	Escalators		Communications
Lifts	Other		
Plumbing	Fixtures	Site	Roadways/Driveways
	Water Distribution		Signage
	Sanitary Waste		Parking Lots
	Rain Water Drainage		Pedestrian Areas
			Fences/Walls
			Landscaping
			Site Utilities

Condition	Ratings	Description
Excellent	5.0-4.8	New asset; no visible defects
Good	4.7-4.0	Asset showing minimal signs of wear; some slightly defective or deteriorated components
Adequate	3.9-3.0	Asset has reached its mid-life (condition 3.5); some moderately defective or deteriorate components
Marginal	2.9-2.0	Asset reaching or just past the end of its useful life;; increasing number of defective or deteriorated components and increasing maitnenacne needs
Poor	1.9-1.0	Asset is past its useful life and is in need of immediate repair or replacement; may have critically damaged components

Monthly Maintenance						Year						
Maintenance Item	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Elevator (contractor)												
NOTES												
Quarterly Maintenance						Year						
Maintenance Item	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec

Building walk-through													
HVAC PM (contractor)													
Security													
Bus Area													
Maintenance Area													
Bus Wash													
Exterior walk-around													
NOTES													
Semi-Annual Maintenance							Year						
Maintenance Item	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
Backflow (City)													
Garage Walkthrough													
NOTES													
Annual Maintenance							Year						
Maintenance Item	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
Boiler/Compressor (state)													
Security-fire ext, alarms, sprinklers (contractors)													
Stormwater (contractor)													
Elevator (state)													
Oil/Water Separator (contractor)													
Fuel Tanks (contractor)													
NOTES													

## Section 4: Description of Decision Support Tools

CATA uses the following support tools to prepare its Transit Asset Management Plan:

- A. **TransAm** A software product purchased from Cambridge Systematics in conjunction with 14 other Regional Transit Authorities. This product allows for the creation of asset inventories as well as the setting of asset policy (ULB, replacement costs, etc).
- B. **Vehicle Maintenance Plan and Facility Maintenance Plan** These plans details all policies and procedures related to the Authority-owned vehicles and facilities. It includes maintenance department responsibilities, PM schedules, work order process, inspection needs, etc.
- C. **CATA Procurement Manual** The Procurement Manual lists all FTA purchasing policies, contract/bidding requirements and regulations, asset purchasing procedures, and asset disposal procedures.
- D. **TAM Plan** CATA's Transit Asset Management Plan contains the condition of assets used in the provision of public transportation services and to keep CATA in a State of Good Repair (SGR). The TAM Plan also contains information related to Asset Inventory, Asset Condition Assessment, Decision Support Tools, Investment Prioritization List (Program of Projects), and NTD annual reporting.
- E. **Public Transportation Agency Safety Plan (PTASP)** Final Rule 49 CFR Part 673 (effective date 7/19/2019, Final Plan due 7/20/2020).
- F. **Adopted Five Year Capital Plan/List of Prioritization of Projects/Programs** The Capital Plan includes projects needed to maintain SGR.
- G. **Boston Region Metropolitan Planning Organization** The Boston MPO TIP includes the transit projects adopted from the adopted CATA Capital Plan.

## Section 5: Prioritized List of Investments

CATA's adopted five year Capital Plan FFY23-FFY27 represents the prioritized list of capital projects over this time period, including any that will address State of Good Repair asset replacement. The plan includes Federal and State funding anticipated over the time period.

**STIP Investments Report**  
Program Activity: Transit, Cape Ann Transportation Authority

STIP: 2023 - 2027 (D)										
Year	MassDOT Project ID	Program	MassDOT Project Description	Funding Source	Total Project Cost	Total Programmed Funds	Federal Funds	State Funds	Other Funds	FTA Line Item
Federal Fiscal Year 2023						\$1,728,750	\$1,185,000	\$472,500	\$71,250	
Cape Ann Transportation Authority						\$1,728,750	\$1,185,000	\$472,500	\$71,250	
2023	RTD0010578	RTA Facility & Vehicle Maintenance	CATA --Preventive Maintenance	5307	\$356,250	\$285,000	\$285,000			11.7A.00
2023	RTD0010578	RTA Facility & Vehicle Maintenance	CATA --Preventive Maintenance	LF	\$356,250	\$71,250			\$71,250	11.7A.00
2023	RTD0010582	RTA Facility & Vehicle Maintenance	CATA --buy misc small capital	RTACAP	\$15,000	\$15,000		\$15,000		11.12.40
2023	RTD0010585	RTA Facility & Vehicle Maintenance	CATA --acquire shop equip/small capital	5307	\$37,500	\$30,000	\$30,000			11.42.06
2023	RTD0010585	RTA Facility & Vehicle Maintenance	CATA --acquire shop equip/small capital	RTACAP	\$37,500	\$7,500		\$7,500		11.42.06
2023	RTD0010589	RTA Vehicle Replacement	CATA --Revenue Vehicle Replacement	5307	\$1,415,000	\$965,000	\$965,000			11.12.03
2023	RTD0010589	RTA Vehicle Replacement	CATA --Revenue Vehicle Replacement	RTACAP	\$1,415,000	\$450,000		\$450,000		11.12.03
2024	RTD0010579	RTA Facility & Vehicle Maintenance	CATA --Preventive Maintenance	5307	\$356,250	\$285,000	\$285,000			11.7A.00
2024	RTD0010579	RTA Facility & Vehicle Maintenance	CATA --Preventive Maintenance	LF	\$356,250	\$71,250			\$71,250	11.7A.00
2024	RTD0010583	RTA Facility & Vehicle Maintenance	CATA --buy misc small capital	RTACAP	\$15,000	\$15,000		\$15,000		11.12.40
2024	RTD0010584	RTA Facility & Vehicle Maintenance	CATA --acquire shop equip/small capital	5307	\$37,500	\$30,000	\$30,000			11.42.06
2024	RTD0010584	RTA Facility & Vehicle Maintenance	CATA --acquire shop equip/small capital	RTACAP	\$37,500	\$7,500		\$7,500		11.42.06
2024	RTD0010587	RTA Facility & Vehicle Maintenance	CATA --repave admin/ops facility parking lot	5307	\$400,000	\$320,000	\$320,000			11.44.03
2024	RTD0010587	RTA Facility & Vehicle Maintenance	CATA --repave admin/ops facility parking lot	RTACAP	\$400,000	\$80,000		\$80,000		11.44.03
2025	RTD0010580	RTA Facility & Vehicle Maintenance	CATA --Preventive Maintenance	5307	\$356,250	\$285,000	\$285,000			11.7A.00
2025	RTD0010580	RTA Facility & Vehicle Maintenance	CATA --Preventive Maintenance	LF	\$356,250	\$71,250			\$71,250	11.7A.00
2025	RTD0010586	RTA Facility & Vehicle Maintenance	CATA --acquire shop equip/small capital	5307	\$37,500	\$30,000	\$30,000			11.42.06
2025	RTD0010586	RTA Facility & Vehicle Maintenance	CATA --acquire shop equip/small capital	RTACAP	\$37,500	\$7,500		\$7,500		11.42.06
2025	RTD0010588	RTA Vehicle Replacement	CATA --Revenue Vehicle Replacement	5307	\$680,000	\$455,000	\$455,000			11.12.03
2025	RTD0010588	RTA Vehicle Replacement	CATA --Revenue Vehicle Replacement	RTACAP	\$680,000	\$225,000		\$225,000		11.12.03
2025	RTD0010591	RTA Vehicle Replacement	CATA --Revenue Vehicle Replacement	RTACAP	\$600,000	\$600,000		\$600,000		11.12.03
2026	RTD0010581	RTA Facility & Vehicle Maintenance	CATA --Preventive Maintenance	5307	\$356,250	\$285,000	\$285,000			11.7A.00
2026	RTD0010581	RTA Facility & Vehicle Maintenance	CATA --Preventive Maintenance	LF	\$356,250	\$71,250			\$71,250	11.7A.00
2026	RTD0010592	RTA Vehicle Replacement	CATA --Revenue Vehicle Replacement	RTACAP	\$1,200,000	\$1,200,000		\$1,200,000		11.12.03
2027	RTD0011158	RTA Facility & Vehicle Maintenance	CATA --Preventive Maintenance	5307	\$356,250	\$285,000	\$285,000			11.7A.00
2027	RTD0011158	RTA Facility & Vehicle Maintenance	CATA --Preventive Maintenance	LF	\$356,250	\$71,250			\$71,250	11.7A.00
2027	RTD0011162	RTA Facility & Vehicle Maintenance	CATA --acquire shop equip/small capital	5307	\$37,500	\$30,000	\$30,000			11.42.06
2027	RTD0011162	RTA Facility & Vehicle Maintenance	CATA --acquire shop equip/small capital	RTACAP	\$37,500	\$7,500		\$7,500		11.42.06

## Section 6: Annual Performance Targets and Measures

As a recipient of Federal Transit Administration funds, CATA is required to develop and maintain a Transit Asset Management Plan per FTA's Final Rule 49 CFR Part 625. As defined by the Rule, Transit Asset Management (TAM) is the strategic and systematic practice of processing, operating, inspecting, maintaining, rehabilitating, and replacing transit capital assets to manage their performance, risks, and costs of the life cycle to provide safe, cost effective, and reliable public transportation.

The preparation of the TAM Plan is based on identifying the transit assets which CATA owns and has direct Capital responsibility and the performance measures included in the Final Rule that related to these identified assets. A completed TAM Plan is required by 9/30/2018 with an updated plan due October 2022.

<b>Equipment</b> Non-Revenue support-service and maintenance vehicles	<b>Performance Measure</b> Percentage of vehicles met or exceeded Useful Life Benchmark
<b>Rolling Stock</b> Revenue Vehicles by mode, bus/van	<b>Performance Measure</b> Percentage of vehicles met or exceeded Useful Life Benchmark
<b>Facilities</b> Maintenance and administrative facilities; and passenger stations (buildings) and parking facilities	<b>Performance Measure</b> Percentage of Assets with condition rating below 3.0 on FTA TERM Scale

Using the above Performance Measures leads to the setting of targets against the defined Useful Life Benchmark (ULB). FTA defines as “the expected lifecycle of a capital asset for a particular Transit Provider’s operating environment, or the acceptable period of use in service for a particular Transit Provider’s operating environment.”

CATA has defined the ULB as presented in FTA Circular C 5010.1E for buses and vans.

Category	Length	Minimum Life whichever comes first	
		Years	Miles
Heavy-Duty Large Bus	35-45 ft	12	500,000
Heavy-Duty Small Bus	30 ft	10	350,000
Medium-Duty Transit Bus	30 ft.	7	200,000
Light-Duty Mid-Sized Bus	25-35 ft.	5	150,000
Light Duty Small Bus (cutaways, modified van)	16-28 ft.	4	100,000

For this TAM Plan, CATA has prepared the following targets.

Asset Information		FFY23 (Target)		FFY24 (Target)		FFY25 (Target)		FFY26 (Target)	
Agency	Vehicle Type	Anticipate d Number of Assets	Target Percentag e of Baseline Assets ≥ ULB	Anticipate d Number of Assets	Target Percentag e of Baseline Assets ≥ ULB	Anticipate d Number of Assets	Target Percentag e of Baseline Assets ≥ ULB	Anticipate d Number of Assets	Target Percentag e of Baseline Assets ≥ ULB
CATA	Non-revenue vehicles	3	100%	3	100%	3	100%	3	100%
CATA	Bus & Trolley	12	30%	12	30%	12	30%	12	30%
CATA	Cutaway Vehicles <sup>a</sup>	20	5%	20	17%	20	17%	20	17%
CATA	Admin/Maint	1	0%	1	0%	1	0%	1	0%

*Facility-percent of facilities rated below 3 on the condition scale*

Administration/Operations/Maintenance Facility      0% 3 Pond Road

Updates to these targets will be done in conjunction with the preparation of the next TAM Plan and the FFY2024-2024 Capital Plan.

## Section 7: Recordkeeping and NTD Reporting

CATA shall report, on an annual basis, to the FTA’s National Transit Database (NTD)

- Asset Inventory data
- SGR performance targets for the next fiscal year
- Condition assessments and performance measures of capital assets
- Narrative that provides a description of any change in the condition of the Authority’s transit system or operations from the previous year and describes progress made during the reporting year to meet the performance targets set in the previous reporting year

## Section 8: Conclusion

This TAM Plan will be reviewed on an annual basis, updated, and incorporated into CATA’s capital and budget planning and reporting process.

This document shall cover a “horizon period” of time (starting 10/1/2022 to 9/30/2026). Projected Fleet Replacement will change annually as new data is entered into the TAM Plan planning and update process.