TRANSIT ASSET MANAGEMENT PLAN (TAM PLAN)

MISSION STATEMENT

Provide a reliable, safe and efficient public transit system to Martin County residents.

About MARTY

Martin County Board of County Commissioners began accepting Federal Transit Administration (FTA) Operating and Capital Assistance Funds in 1996. Martin County is a designated recipient of these funds pursuant to Section 49 U.S.C. Chapter 53.

Martin County is managed by a five member Board and oversees the public transit service known as the MARTY in Martin County.

MARTY provides service under the Purchased Transit model whereas a contractor(s) is hired to perform some of its operating tasks through a competitive bid process.

MARTY has three transit locations in which work is performed. Administration, planning, and field operations are conducted from 2401 SE Monterey Rd, Stuart, FL. Fueling, bus washing, overnight parking and pre-trip inspections operate from 2225 SE Avenger Circle, Stuart FL. The customer service/reservation center, vehicle maintenance and dispatching services are performed at 3091 SE Waaler Street, Stuart FL.

MARTY operates three fixed routes and Americans' with Disabilities Act (ADA) complementary services, within a defined service area of the County, as well as, a commuter bus service which provides connection to the urbanized area south of Martin County. MARTY's hours of operation are between 6:00am and 8:00pm, Monday thru Friday.

Acknowledgements

MARTY TAM Plan Administrative Staff

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Tables

EXECUTIVE SUMMARY

A Transit Asset Management (TAM) Plan is a business model that uses the condition of assets to guide the optimal prioritization of funding at transit agencies in order to keep transit systems in State of Good Repair (SGR). By implementing a TAM Plan, the benefits include:

- Improved transparency and accountability for safety, maintenance, asset use, and funding investments;
- Optimized capital investment and maintenance decisions;
- Data-driven maintenance decisions; and
- System safety & Performance outcomes.

The consequences of an asset not being in SGR include:

- Safety risks (accidents per 100,000 revenue miles);
- Decreased system reliability (on-time performance);
- Higher maintenance costs; and/or
- Lower system performance (missed runs due to breakdown).

Transit Asset Management Plan (TAM) Plan Policy:

MARTY has developed this TAM Plan to aide in: (1) Assessment of the current condition of capital assets; (2) determine what condition and performance of its assets should be (if they are not currently in a State of Good Repair); (3) identify the unacceptable risks, including safety risks, in continuing to use an asset that is not in a State of Good Repair; and (4) deciding how to best balance and prioritize reasonably anticipated funds (revenues from all sources) towards improving asset condition and achieving a sufficient level of performance within those means.

Agency Overview:

Martin County's public transit service, MARTY, provides approximately 72,000 unlinked passenger trips annually on its fixed route with ADA complementary service and commuter bus program. The following is the inventory of vehicles used to provide the MARTY program:

- 9 fixed route heavy duty vehicles – County owned
- 2 fixed route light duty vehicles – County owned
- 2 commuter bus medium/heavy duty vehicles – County leased
- 3 compact car - driver transport vehicles – County owned
- 1 utility pick-up truck – County owned
- 6 paratransit vehicles – Contractor provided

Local operating conditions of the transit system consist of Monday thru Friday service from 6:00am to 8:00pm. The operating climate conditions in the service area consist of subtropical weather year round. The warmer weather conditions put a strain on the A/C and climate controls of the vehicles.

MARTY has introduced new replacement vehicles over the last few years as funding has become available. The TAM Plan is further aiding MARTY to assess the condition of its existing assets and determine its needs over time for keeping the now expanding system in a state of good repair.

SECTION 1: INTRODUCTION & APPLICABILITY

MARTY is committed to operating a public transit system that offers reliable, accessible and convenient service with safe vehicles.

Transit Asset Management (TAM) is an administrative management process that combines the components of investment (available funding), rehabilitation and replacement actions, and performance measures with the outcome of operating assets in the parameters of State of Good Repair (SGR).

The County is currently operating as a FTA-defined Tier II transit operator in compliance with (49 CFR S.S. 625.45 (b)(1). Tier II transit providers are those transit agencies that do not operate rail fixed guideway public transportation systems and have 100 or fewer vehicles in fixed-route revenue service during peak regular service, or have 100 or fewer vehicles in general demand response service during peak regular service hours.

This TAM Plan provides and outlay of how MARTY will assess, monitor, and report the physical condition of assets utilized in the operation of the public transportation system. The County's approach to accomplish a SGR includes the strategic and systematic process of operating, maintaining, and improving physical assets, with a focus on both engineering and economic analysis based upon quality of information, to identify a structured sequence of maintenance, preservation, repair, rehabilitation, and replacement actions that will achieve and sustain a desired state of good repair over the lifecycle of the assets at a minimum practicable cost. This document shall cover a "horizon period" of time (10/1/2018 to 9/30/21). This TAM Plan shall be amended during the four-year horizon period when there is a significant change to staff, assets, and/or operations occurring at the County.

The Accountable Executive:

Per FTA TAM requirements, each transit operator receiving FTA funding shall designate an "Accountable Executive" to implement the TAM Plan. The County's Accountable Executive shall be the Deputy County Administrator. The County'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 public transportation agency safety plan.

The Accountable Executive shall be responsible to ensure the development and implementation of the TAM Plan, in accordance with S.S. 625.25 (Transit Asset Management Plan requirements). Additionally, the Compliance & TAM Program Coordinator shall be responsible to ensure reporting requirements in

accordance with both S.S. 625.53 (Recordkeeping for Transit Asset Management) and S.S. 625.55 (Annual Reporting for Transit Assessment Management) are completed. Furthermore, the Accountable Executive shall approve the annual asset performance targets, TAM Plan document and SGR Policy. These required approvals shall be self-certified by the Deputy County Administrator via the annual FTA Certifications and Assurances forms in TrAMS.

TAM Plan Elements:

As a Tier II transportation provider, MARTY has developed and implemented a TAM Plan containing the following elements:

(1) Asset Inventory Portfolio: An inventory of the number and type of capital assets to include Rolling Stock.

(2) Asset Condition Assessment: A condition assessment of those inventoried assets for which the County has direct ownership and capital responsibility.

(3) Decision Support Tools & Management Approach: A description of the analytical processes and decision-support tools that the County uses to estimate capital investment needs over time, and develop its investment prioritization.

(4) Investment Prioritization: MARTY's project based prioritization of investments, developed in accordance with S.S. 625.33.

Definitions:

Accountable Executive: Means a single, identifiable person who has ultimate responsibility for carrying out the safety management system of the public transit agency; responsibility for carrying out transit asset management practices; and control or direction over human and capital resources needed to develop and maintain both the agency's public transit 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 transit.

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 providers 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.

Infrastructure: Means a transit providers 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.

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 the cost of managing an asset over its whole life.

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 providers 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 sub recipient.

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.

Sub recipient: 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 sub recipient 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) 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 cycle of those assets.

Transit Provider (provider): Means a recipient or sub recipient of Federal financial assistance under 49 U.S.C. Chapter 53 that owns, operates, or manages capital assets used in providing public transportation.

Useful life: Means either the expected life cycle of a capital asset or the acceptable period of use in a 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

MARTY'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 transit 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; and
(4) The assets life-cycle investment needs have been met or recovered, including all scheduled maintenance, rehabilitation and replacements (ULB).

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

MARTY shall establish annual TAM goals, which are separate from annual SGR performance goals, based upon tangible criteria related to asset performance. For FY18 -19, MARTY shall use this time period to gather data in order to establish baseline measures. TAM goals include monitoring the following criteria (Table 1.1):

- Safety risks (Measures of accidents per 100,000 revenue miles by mode, no more than 1);
- System reliability (on-time performance by mode, 92% goal);

- Maintenance Resources (Number of vehicles out of service for 30 or more days, by mode); and
- System performance (missed runs due to major breakdown as a percentage of total runs by mode, no more than 1 in a 30 day period).

Table 1.1

MARTY Annual TAM Goals

Criteria	Measure	FY 2018	
		Goal	Actual
Safety Risks	Number of accidents per 100,000 revenue miles by mode (MB)	1	TBD
Safety Risks	Number of accidents per 100,000 revenue miles by mode (DR)	1	TBD
Safety Risks	Number of accidents per 100,000 revenue miles by mode (CB)	1	TBD
Safety Risks	Number of facility-accident related accidents to employees or customers	0	TBD
System Reliability	On-time performance (MB)	92%	TBD
System Reliability	On-time performance (DR)	92%	TBD
System Reliability	On-time performance (CB)	92%	TBD
Maintenance Resources	Number of Vehicles out of service for 30 or more days by mode (MB)	1	TBD
Maintenance Resources	Number of Vehicles out of service for 30 or more days by mode (DR)	1	TBD
Maintenance Resources	Number of Vehicles out of service for 30 or more days by mode (CB)	1	TBD
System Performance	Missed runs due to major breakdown, as a percentage of total runs by mode (MB)	<6	TBD
System Performance	Missed runs due to major breakdown, as a percentage of total runs by mode (DR)	<6	TBD
System Performance	Missed runs due to major breakdown, as a percentage of total runs by mode (CB)	<6	TBD

It is the belief of Martin County that TAM Plan implementation and monitoring provides a framework for maintaining a SGR by considering the condition of its assets in relation to the local operating environment. MARTY has developed its SGR policies to account for the prevention, preservation, maintenance, inspection, rehabilitation, disposal, and replacement of capital assets. The goal of these policies is to allow MARTY to determine and predict the cost to improve asset conditions(s) at various stages of the asset life cycle, while balancing prioritization of capital, operating and expansion needs. The two foundational criteria of SGR performance measures are *Useful Life Benchmark* (ULB) and *Condition*.

Useful Life Benchmark:

The Useful Life Benchmark (ULB) is defined 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. ULB criteria are user defined, whereas ULB takes into account, a provider's unique operating environment (service frequency, weather, geography). When developing Useful Life Benchmark's (ULB), the County recognized and took into account the local operating environment of its assets within the service area, historical maintenance records, manufacturer guidelines, and the default asset ULB derived from the FTA. In most cases, if an asset exceeds its ULB, then it is a strong indicator that it may not be in a state of good repair.

For the purposes of this TAM Plan, MARTY utilized FTA ULB measure for transit assets and rolling stock (Table 1.2 through Table 1.4).

Assets cited in this document are financed with federal funding. The FTA vehicle replacement and facilities lifecycles specifically those standards found in FTA Circular 5010.1E, IV-24:

Recipients of federal assistance must specify the expected minimum useful life in invitations for bids when acquiring new or replacement vehicles. FTA guidelines for Minimum Useful Life are as follows:

Table 1.2

Minimum Service-life categories for Buses and Vans

Category	Typical Characteristics				Minimum Life (Whichever comes first)	
	Length	Approx. GVW	Seats	Average Cost	Years	Miles
Heavy-Duty Large Bus	35 to 48 ft and 60 ft artic.	33,000 to 40,000	27 to 40	$325,000 to over $600,000	12	500,000
Heavy-Duty Small Bus	30 ft	26,000 to 33,000	26 to 35	$200,000 to $325,000	10	350,000
Medium-Duty and Purpose-Built Bus	30 ft	16,000 to 26,000	22 to 30	$75,000 to $175,000	7	200,000
Light-Duty Mid-Sized Bus	25 to 35 ft	10,000 to 16,000	16 to 25	$50,000 to $65,000	5	150,000
Light-Duty Small Bus, Cutaways, and Modified Van	16 to 28 ft	6,000 to 14,000	10 to 22	$30,000 to $40,000	4	100,000

NTD Maximum useful life is determined by years of service or accumulation of miles whichever comes first, by asset type as follows (Table 1.3):

Table 1.3

Vehicle Type		Default ULB (in years)
AB	Articulated bus	14
AG	Automated guideway vehicle	31
AO	Automobile	8
BR	Over-the-road bus	14
BU	Bus	14
CC	Cable car	112
CU	Cutaway bus	10
DB	Double decked bus	14
FB	Ferryboat	42
HR	Heavy rail passenger car	31
IP	Inclined plane vehicle	56
LR	Light rail vehicle	31
MB	Minibus	10
MO	Monorail vehicle	31
MV	Minivan	8
	Other rubber tire vehicles	14
RL	Commuter rail locomotive	39
RP	Commuter rail passenger coach	39
RS	Commuter rail self-propelled passenger car	39
RT	Rubber-tired vintage trolley	14
SB	School bus	14
	Steel wheel vehicles	25
SR	Streetcar	31
SV	Sport utility vehicle	8
TB	Trolleybus	13
TR	Aerial tramway	12
VN	Van	8
VT	Vintage trolley	58

MARTY Asset Useful Life Benchmarks

Table 1.4

Asset Classification	Asset Item	NTD Max ULB* Years	FTA Min ULB* Years
Rolling Stock: Revenue Vehicles, Paratransit (DR)	Ford	8	7
Rolling Stock: Revenue Vehicles, Paratransit (DR) - Van	MV1	8	4
Rolling Stock: Revenue Vehicles, Fixed-Route (MB) 30ft	Gillig, Low Floor Diesel	14	12
Rolling Stock: Revenue Vehicles, Fixed-Route (MB) 26ft	ARBOC	14	7
Rolling Stock: Revenue Vehicles, Fixed-Route (CB) 34ft	Freightliner	14	12
Facility: Maintenance	Waaler St	40	40
Equipment: Non-Revenue Service Vehicle	Chevy Cruze	8	4
Equipment: Non-Revenue Service Vehicle	Chevy 1500	8	4

Condition Assessment:

The physical condition of an asset is rated as an SGR performance measure because it is a direct reflection of its ability to perform its intended function. As part of the TAM Plan SGR Standards, the County requires each vehicular asset and facility meeting FTA TAM Plan criteria to have a physical condition assessment conducted on an annual basis, where applicable. The condition assessments use a rating scale to rate the current physical appearance, maintenance requirements, safety and accessibility of an asset, "as it currently sits". See Section 3 for more on condition assessments.

SGR Performance Measures & Targets:

SGR performance measures combine the measure of ULB and physical condition to create a performance measure from which asset performance targets can be derived on an annual basis. These performance measures are directly related to asset lifecycle (ULB & condition) and maintenance needs. By the time an asset meets or exceeds its assigned ULB, it should have reached its prescribed mileage, maintenance, and condition requirements. Further information related to SGR targets can be found in Section 6. FTA-defined SGR performance measures include:

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

SECTION 2: ASSET INVENTORY PORTFOLIO

The following capital asset items that MARTY owns, operates and has direct capital responsibility, as well as contractor owned and operated are also included in the TAM Plan asset inventory, are comprised of: Rolling Stock, Equipment, and Facilities (Table 2.1). Currently, MARTY is not a grantee that operates passenger rail service. Therefore, MARTY does not have any associated rail infrastructure in its asset portfolio.

MARTY utilizes IPS fleet management software, to maintain inventory, schedule maintenance, and track the condition of assets. Assets are also inventoried and tracked in the County's Purchase Order System, Banner.

Table 2.1
Asset Inventory Summary

Asset Category	Total Number	Avg Age	Avg Mileage	Avg Value
RevenueVehicles	**19**	**3.1**	**80,858**	**$214,929.37**
AB - Articulated Bus	0	-	-	-
AO - Automobile	0	-	-	-
BR - Over-the-road Bus	0	-	-	-
BU - Bus	11	1.3	44,813	$327,967.45
CU - Cutaway Bus	2	4.0	130,281	$126,828.02
DB - Double Decked Bus	0	-	-	-
FB - Ferryboat	0	-	-	-
MB - Mini-bus	0	-	-	-
MV - Mini-van	0	-	-	-
RT - Rubber-tire Vintage Trolley	0	-	-	-
SB - School Bus	0	-	-	-
SV - Sport Utility Vehicle	0	-	-	-
TB - Trolleybus	0	-	-	-
VN - Van	6	6.0	130,465	$37,060.00
Custom 1	0	-	-	-
Custom 2	0	-	-	-
Custom 3	0	-	-	-
Equipment	**4**	**0.8**	**2,827**	**$17,665.75**
Non Revenue/Service Automobile	3	0.7	2,520	$16,548.00
Steel Wheel Vehicles	0	-	-	-
Trucks and other Rubber Tire Vehicles	1	1.0	3,750	$21,019.00
Custom 1	0	-	-	-
Custom 2	0	-	-	-
Custom 3	0	-	-	-
Facilities	**1**	**1.0**	**N/A**	**$0.00**
Administration	0	-	N/A	-
Maintenance	1	1.0	N/A	$0.00
Parking Structures	0	-	N/A	-
Passenger Facilities	0	-	N/A	-
Custom 1	0	-	N/A	-
Custom 2	0	-	N/A	-
Custom 3	0	-	N/A	-

Rolling Stock

Rolling stock is either a MARTY-owned or a contractor owned and operated revenue service vehicle used in the provision of providing public transportation, and includes vehicles used to primarily transport passengers. The following required data fields are maintained for each rolling stock asset (public transit vehicle):

External Vehicle	Asset Tag #
Asset Description	Classification
Vehicle Type	Last Maintenance Performed
Vehicle Title Ownership	Expected Useful Life
Mileage	Expected Useful Miles
VIN Number	Useful Life Benchmark (UBL)
Manufacturer	Anticipated Replacement or
Rehab Year	Year Built/In Service Date/Age
License Plate	
Reported Condition Assessment	Gross Vehicle Weight
Purchase Cost	Vehicle Features
Purchase Date	Capacity
	Seating/Standing/Wheelchair
Purchase Status (New/Used)	Length of Vehicle
Purchase Source (Dealer/Vendor)	Current Status of Vehicle
Fuel Type	Storage Location
Make/Model	Disposition Date, Cost & Buyer
Grant Source Used to Purchase	Grant Number
SGR Status	

MARTY operates three modes of public transportation service, fixed route, commuter bus, and ADA paratransit. The fixed route bus service fleet inventory consists of 30’ Gillig diesel buses and 26’ Arboc Low floor gas buses. The Commuter bus fleet inventory consists of 34’ Arboc Spirit of Liberty vehicles and the paratransit services uses MV1’s (cars) and 22’ Ford Starcraft E350’s (Table 2.2).

Table 2.2

Fixed Route

Asset Category	Asset Class	Asset Name	Make	Model	Count	ID/Serial No.	Asset Owner	Acquisition Year	Vehicle Mileage	Replacement Cost/Value
RevenueVehicles	BU - Bus	30' Bus (50)	Gillig	Low Floor	1	59165	MCBOCC	2015	115,576	$380,740.00
RevenueVehicles	BU - Bus	30' Bus (51)	Gillig	Low Floor	1	60039	MCBOCC	2016	76,061	$392,643.00
RevenueVehicles	BU - Bus	30' Bus (52)	Gillig	Low Floor	1	60271	MCBOCC	2016	68,659	$392,964.00
RevenueVehicles	BU - Bus	30' Bus (53)	Gillig	Low Floor	1	61412	MCBOCC	2016	47443	$ 399,826.00
RevenueVehicles	BU - Bus	30' Bus (54)	Gillig	Low Floor	1	61604	MCBOCC	2017	29407	$ 407,425.00
RevenueVehicles	BU - Bus	30' Bus (55)	Gillig	Low Floor	1	61605	MCBOCC	2017	19314	$ 407,425.00
RevenueVehicles	BU - Bus	30' Bus (56)	Gillig	Low Floor	1	61603	MCBOCC	2017	15414	$ 407,425.00
RevenueVehicles	BU - Bus	30' Bus (57)	Gillig	Low Floor	1	61718	MCBOCC	2018	9207	$ 409,597.00
RevenueVehicles	BU - Bus	30' Bus (58)	Gillig	Low Floor	1	61835	MCBOCC	2018	10559	$ 409,597.00
RevenueVehicles	BU - Bus	Freightliner	ARBOC	Spirit of Li	1	2020	Key Financ	2017	53558	$ -
RevenueVehicles	BU - Bus	Freightliner	ARBOC	Spirit of Li	1	2021	Key Financ	2017	47750	$ -
RevenueVehicles	CU - Cutaway	26' Bus (18)	ARBOC	Spirit of M	1	57714	MCBOCC	2013	127688	$ 125,021.00
RevenueVehicles	CU - Cutaway	26' Bus (21)	ARBOC	Spirit of M	1	58940	MCBOCC	2015	132873	$ 128,635.04

Paratransit

Asset Category	Asset Class	Asset Name	Make	Model	Count	ID/Serial No.	Asset Owner	Acquisition Year	Vehicle Mileage	Replacement Cost/Value
RevenueVehicles	VN - Van	Paratransit	MV1		1	1	MV	2012	144259	$ 42,420.00
RevenueVehicles	VN - Van	Paratransit	MV1		1	2	MV	2012	115143	$ 42,420.00
RevenueVehicles	VN - Van	Paratransit	MV1		1	3	MV	2012	124271	$ 42,420.00
RevenueVehicles	VN - Van	Paratransit	FORD	E350	1	4	MV	2012	146506	$ 31,700.00
RevenueVehicles	VN - Van	Paratransit	FORD	E350	1	5	MV	2012	132323	$ 31,700.00
RevenueVehicles	VN - Van	Paratransit	FORD	E350	1	6	MV	2012	120286	$ 31,700.00

Equipment:

Equipment evaluated per FTA requirements in the TAM Plan, is all non-revenue vehicles regardless of value, and any County-owned equipment with a cost of $50,000 or less in acquisition value. Equipment includes non-revenue service vehicles that are primarily used to support maintenance and repair work for a public transportation system, supervisory work, or for the delivery of materials, equipment, or tools. MARTY does not utilize or operate any third-party non-revenue service vehicle equipment assets.

Equipment: Non-Revenue Service Vehicles

MARTY operates four non-revenue service vehicles in its daily operations (Table 2.3). Three vehicles, Chevy Cruze, are primarily used for road supervising and driver exchanges. One pick-up truck is used for maintenance – related road calls.

The following required data fields are maintained for each non-revenue service vehicle equipment asset:

External Vehicle	Asset Tag #
Asset Description	Classification
Vehicle Type	Last Maintenance Performed
Vehicle Title Ownership	Expected Useful Life
Mileage	Expected Useful Miles
VIN Number	Useful Life Benchmark (UBL)

Manufacturer	Anticipated Replacement or
Rehab Year	Year Built/In Service Date/Age
License Plate	
Reported Condition Assessment	Gross Vehicle Weight
Purchase Cost	Vehicle Features
Purchase Date	Capacity
	Seating/Standing/Wheelchair
Purchase Status (New/Used)	Length of Vehicle
Purchase Source (Dealer/Vendor)	Current Status of Vehicle
Fuel Type	Storage Location
Make/Model	Disposition Date, Cost & Buyer
Grant Source Used to Purchase	Grant Number
SGR Status	Book Value

Equipment: At or over $50,000 in Acquisition Value

Currently, MARTY has no equipment in this category

Table 2.3

Asset Category	Asset Class	Asset Name	Make	Count	ID/Serial No.	Asset Owner	Acquisition Year	Vehicle Mileage	Replacement Cost/Value
Equipment	Trucks and other Rubl	Pick up truck	Chevrolet	1	61436	MCBOCC	2017	3750	$ 21,019.00
Equipment	Non Revenue/Service	Safety vehicle	Chevrolet	1	60370	MCBOCC	2017	3780	$ 16,936.00
Equipment	Non Revenue/Service	Automobile	Chevrolet	1	61928	MCBOCC	2018	7	$15,772.00
Equipment	Non Revenue/Service	Safety vehicle	Chevrolet	1	60371	MCBOCC	2017	3772	$ 16,936.00

Facilities:

MARTY currently utilizes one third-party leased facility for exclusive use for maintenance of the MARTY vehicles and well as other support functions. The following required data fields are maintained for each facility asset:

Asset Ownership	Build Cost
Asset Description/Name	Purchase Date
Physical Location/Address	In-Service Date
Asset Tag #	Purchase Status (New/Used)
External ID	Expected Useful Life
Classification	Land Owner
Asset Type	Building Owner
Status	Facility Size
Age/Year Built	Section of Larger Facility

Reported Condition	Percent Operational
Last Maintenance	Number of Structures
Book Value	Number of Floors
Rehabilitation Year	Number of Elevators or Escalator
Replacement Year	Number of Parking Spaces (Public, Private, ADA)
Vendor/Builder	Line Number
FTA Facility Classification	Features & Amenities (ADA)
Interior (Sq. Ft)	Disposition Date, Cost & Buyer
Lot Size	Grant Number
Grant Source Used for Purchase	SGR Status

Table 2.4

Asset Category	Asset Class	Asset Name	Count	ID/Serial No.	Asset Owner	Acquisition	Replacement Cost/Value
Facilities	Maintenance	Waaler St Maint Cntr	1	1	Private	leased by 3rd party	0

SECTION 3: ASSET CONDITION ASSESSTMENT

MARTY will assess the condition of its assets on an annual basis by utilizing both a visual and physical condition rating assessment scale (Table 3.1). This rating scale assigns a numerical value or rank based on the visual and/or physical condition(s) presented by each individual asset throughout its life cycle. The rating scale is based on numbers 1 to 5, with 5 being new and one being poor. Assets with a rating of 2.5 or higher are considered to be in SGR. All completed asset inspection forms are documented in the data set of the IPS electronic software program.

Rolling Stock

The TAM Plan Rolling Stock condition assessment consists of assigning a condition rating to all rolling stock assets for which County owns and has a direct capital responsibility. The condition assessments ranking is not conducted in the TAM Plan for rolling stock assets for which the County does not own, the rolling stock asset is owned by a 3rd party, and/or where the County does not have a direct capital responsibility for the rolling stock asset.
However, for the purposes of NTD reporting (Inventory & Condition Submittal), all County owned and 3rd party owned rolling stock assets (regardless of direct capital responsibility) are assigned an asset condition rating. Currently the County owns 11 vehicles, has a true lease for two vehicles and uses six 3rd party vehicles for its paratransit service.

The fixed route and commuter bus rolling stock condition assessment can be found on (Table 3.2). The Paratransit vehicles rolling stock condition assessment can be found on (Table 3.2).

Table 3.1

Score	Rating	Description
5	Excellent	New construction, no visible defects
4	Good	Minor improvements to superficial repairs needed to be addressed through routine maintenance. No significant visible damage such as cracksing, spalling, sagging, rust or shifting.
3	Adequate	Needs some repair. There may be surface cracking, rust, shifting and spalling on components. Insulation or drainage may need maintenance. Substructure is cosmetically "fair" and functioning as designed within useful life.
2	Marginal	Components need extensive repair at a minimum. They show signs of significant cracking, sagging, rust, shifting, and spalling/ decay. Significant insulation or drainage issues may be present. There are no apparent saftey issues. Components are functional but have exceeded their useful life.
0	Poor	Components show critical defects affecting function, health or safety. They are visibly in poor condition. They cannot be repaired. Must be replaced. They have exceeded their useful life and warrant structural review.

Table 3.2

Table 3.2

Asset Category	Asset Class	Asset Name	Count	ID/Serial No.	Age (Yrs)	Vehicle Mileage	Replacement Cost/Value	Useful Life Benchmark (Yrs)	Past Useful Life Benchmark	Visual Condition Assessment Score	Physical Condition Assessment Score
RevenueVehicles	BU - Bus	30' Bus (51)	1	60039	2	76061	$ 392,643.00	14	No		
RevenueVehicles	BU - Bus	30' Bus (50)	1	59165	3	115576	$ 380,740.00	14	No		
RevenueVehicles	BU - Bus	30' Bus (52)	1	60271	2	68659	$ 392,964.00	14	No		
RevenueVehicles	BU - Bus	30' Bus (53)	1	61412	2	47443	$ 399,826.00	14	No		
RevenueVehicles	BU - Bus	30' Bus (54)	1	61604	1	29407	$ 407,425.00	14	No		
RevenueVehicles	BU - Bus	30' Bus (55)	1	61605	1	19314	$ 407,425.00	14	No		
RevenueVehicles	BU - Bus	30' Bus (56)	1	61603	1	15414	$ 407,425.00	14	No		
RevenueVehicles	BU - Bus	30' Bus (57)	1	61718		9207	$ 409,597.00	14	No		
RevenueVehicles	BU - Bus	30' Bus (58)	1	61835		10559	$ 409,597.00	14	No		
RevenueVehicles	BU - Bus	Freightliner	1	2020	1	53558	-	14	No		
RevenueVehicles	BU - Bus	Freightliner	1	2021	1	47750	-	14	No		
RevenueVehicles	CU - Cutaway Bus	26' Bus (18)	1	57714	5	127688	$ 125,021.00	10	No		
RevenueVehicles	CU - Cutaway Bus	26' Bus (21)	1	58940	3	132873	$ 128,635.04	10	No		
RevenueVehicles	VN - Van	Paratransit	1	1	6	144259	$ 42,420.00	7	No		
RevenueVehicles	VN - Van	Paratransit	1	2	6	115143	$ 42,420.00	7	No		
RevenueVehicles	VN - Van	Paratransit	1	3	6	124271	$ 42,420.00	7	No		
RevenueVehicles	VN - Van	Paratransit	1	4	6	146506	$ 31,700.00	7	No		
RevenueVehicles	VN - Van	Paratransit	1	5	6	132323	$ 31,700.00	7	No		
RevenueVehicles	VN - Van	Paratransit	1	6	6	120286	$ 31,700.00	7	No		

Equipment: Non-Revenue Service Vehicles

The TAM Plan Equipment condition assessment consists of assigning a physical condition rating to both all equipment that is either a non-revenue service vehicle or a non-vehicle equipment asset with an acquisition value of $50,000 or more (individual line item or group). Furthermore, the equipment condition assessment contains only assets for which the County owns and has a direct capital responsibility.

A condition assessment ranking is not conducted in the TAM Plan for equipment assets which the County does not own, is owned by a 3rd party, the equipment has an acquisition cost below $50,000 (individual line item or group), or where the County does not have direct capital responsibility.

However, for the purposes of NTD reporting (Inventory & Condition Submittal), all County owned equipment (with direct capital responsibility) that is a non-revenue service vehicle is only reported (Table 3.3). Currently, the County does not own any non-revenue service vehicles or non-vehicle equipment assets with an acquisition cost at or above $50,000.

Table 3.3

Asset Category	Asset Class	Asset Name	Count	ID/Serial No.	Age (Yrs)	Vehicle Mileage	Replacement Cost/Value	Useful Life Benchmark (Yrs)	Past Useful Life Benchmark
Equipment	Non Revenue/Service Automobile	Safety vehicle	1	60370	1	3,780	$16,936.00	7	No
Equipment	Non Revenue/Service Automobile	Safety vehicle	1	60371	1	3,772	$16,936.00	7	No
Equipment	Non Revenue/Service Automobile	Safety vehicle	1	61928		7	$15,772.00	7	No
Equipment	Trucks and other Rubber Tire Vehicles	Pick up truck	1	61436	1	3,750	$21,019.00	7	No

Facilities

The TAM Plan Facilities condition assessment consists of assigning a physical condition rating, based on the FTA TERM Scale, to all facility assets for which MARTY owns and has a direct capital responsibility. A condition assessment ranking is not conducted in the TAM Plan for facility assets for which MARTY does not own the asset, the facility asset is owned by a 3rd party, and/or where MARTY does not have direct capital responsibility for the facility.

However, for the purposes of NTD reporting (Inventory & Condition), all MARTY owned and 3rd party owned facility assets (regardless of direct capital responsibility) are included in the Facility Asset Inventory (Table 3.4). Only County owned facility assets with a direct capital responsibility are assigned a facility asset condition rating. Currently, MARTY does not have direct responsibility for exclusive use facilities.

Table 3.4

Asset Category	Asset Class	Asset Name	Count	ID/Serial No	Age (Yrs)	TERM Scale Condition	Replacement Cost/Value
Facilities	Maintenance	Waaler St Maint Cntr	1	1	1	5	

SECTION 4: DECISION SUPPORT TOOLS & MANAGEMENT APPROACH

Sections 4 & 5 of this document are interrelated and detail the process and tools used to manage the lifecycle planning of capital public transit assets. MARTY staff within the planning and operations departments utilizes the following management practices, policies and technology throughout the lifecycle of an asset.

Decision Support Tools:

The following analytical process is in place to support investment decision-making, including project selection and prioritization (Table 4.1). MARTY has electronic software, IPS that shows the utilization for asset lifecycle management and investment planning; written policy manuals and bus replacement schedules spreadsheets are also used. An explanation of the decision tools can be found in (Table 4.2).

Table 4.1

1 Semi-annual management meeting to asset performance and set goals. (Maintenance, Operations, IT, Finance/Grants, Procurement, Executive)
2 Review needs based on safety deficiemcies, asset ULB, agency capacity, customer demand, maintenance needs, IT security needs, and other data.
3 Prioritize projects based on funding availability
4 Development of Assett Investment priority list to report for Program of Projects.
5 Contract advertising RFP and award process
6 Board approval for approved RFP awards
7 Placement on TIP/STIP
8 Project/ Program Implementation and Monitoring

Project Year	Project Name	Asset Class	Cost	Priority
2019	Diesel Bus Acquisition	Revenue Vehicles	$400,000.00	High
2020	Diesel Bus Acquisition	Revenue Vehicles	$400,000.00	Low
2021	Diesel Bus Acquisition	Revenue Vehicles	$400,000.00	Low
2022	Diesel Bus Acquisition	Revenue Vehicles	$400,000.00	Low

Table 4.2

Documents	Description
Facility and Maintenance Plan	MARTY's Facility and Maintenance Plan details all policies and procedures related to the Authority-owned facilties and equipment. It includes: facility maintenance standards, facilit inspection process, PM schedules, work order process, facility components, vendor contracts and inspection needs.
Fleet Management and Maintenance Manual	MARTY's Facility and Maintenance Plan details all policies and procedures related to the Authority-owned vehicles. It includes: maintenance department responsibilies, PM schedules, work order process, vendor contracts and inspection needs.
Procurement Manual	The Procurement Procedure Manual lists all FTA purchasing policies, contract/bidding requirements and regulations, asset purchasing procudures, and asset disposal procedures.
TAM Plan	MARTY's Transit Asset Plan is a document containing a business model that uses the condition of assets (facility, rolling stock and equipment) used in the provision of providing public transportation to help guide the optimal prioritization of funding in order to keep the agencies trans system in a State of Good Repair (SGR). The TAM Plan also contains information related to data collection and reporting requirements for th following: Asset Inventory portfolio, Asset Condition assessment (PTMS) Decsion Support Tools and Management approach, Investment priorization list for Program of Projects reporting, and NTD annual reporting.
Capital Plan/List of Priorization of Projects/Programs	The Capital plan lists projects in rank of order on the priority list of projects needed in order to maintain SGR of an asset.
Metropolitan Planning Organization (MPO) Transportation Improvement Program (TIP)	The Metropolitan Planning Organization Improvement Program is a list of upcoming transportation projects covering a period of at least four years. The TIP is developed SCATS SARTA's MPO. The TIP includes capital and non-capital surface transportation projects.

Management Approach to Asset Management:

The primary management approach utilized to maintain SGR is risk mitigation. This management philosophy applies risk mitigation strategies (policies and procedures) throughout the assets life cycle, both from a maintenance perspective (breakdowns) and a safety & accessibility perspective (accidents/ADA requirements).

Throughout each asset's life cycle, MARTY shall monitor all assets for unsafe and inaccessible conditions. However, identifying an opportunity to improve the safety of an asset does not necessarily indicate an unsafe condition. When MARTY encounters and identifies an unacceptable safety risk associated with an asset, the asset shall be ranked with higher investment prioritization, to the extent practicable. MARTY's risk management philosophy is the proactive approach of identifying future projects and ranking preventative projects with better return on investment higher in the investment prioritization risk. Policies and procedures to mitigate risk are included in the documents presented in (Table 4.3 to 4.7).

Performing an analysis of the asset life cycle at the individual level is just one management approach MARTY uses to maintain a SGR. This analysis follows the asset from the time it is purchased, placed in operation, maintained, and ultimately disposed of. The analysis is a snap shot of each asset's current status. The asset lifecycle stages consist of the following strategies:

- TAM Plan – Acquisition & Renewal Strategy (Design/Procurement)
- TAM Plan – Maintenance Strategy (Operate/Maintain/Monitor)
- TAM Plan – Overhaul Strategy (Rebuild)
- TAM Plan – Replacement Strategy (Disposal)
- TAM Plan – Risk Management Strategy (Mitigation)

Table 4.3

Acquisition and Renewal Strategy: Determine when in initiate acquisition activities for assets. Describe MARTY's lon term replacement strategy, abd how long-term renewal and improvement activities are assessed based on the asse lifestyle. As applicable, describe any planned changes or improvements to these processes, describing the strategie

Asset Category	Asset Class	Aquistion and Renewal Strategy
Rolling Stock	BU - Bus	Transition to a 100% low to no emission vehicles. Projection for replacement start the day new vehicles are added as an asset.
Rolling Stock	CU - Paratransit Cutaway Van VN - Van	Paratransit Vans are 4-5 years/ 100,000/150,000. Projection for replacement start the day new vehicles are added as an asset.
Equipment - Non revenue vehicles	SUP - Support Vehicles	Replacement of support vehicles is based on ULB and funding availability.
Facility	Administration, Maintence, Transit Stations, Fuel Stations	Facilities are maintained on an annual bases to extend ULB.

Table 4.4

Maintenance Strategy

Asset Category	Asset Class	Maintenance Activity	Frequency
Rolling Stock	BU - Bus	Clean, Wash & Vaccum	Weekly
		Pre-trip inspection	Daily
		PM Service	Mileage
		SGR Inspection	Annually
		Transmission Inspection	Mileage
		Rear End Inspection	Mileage
		Air Dryer Inspection	Mileage
		Engine Breather Inspection	Mileage
		A/C Inspection	Mileage
		Camera System Inspection	Bi-Monthly
		Farebox inspection	Monthly
		Tire Inspection	Daily
		ADA Systems Inspection	Daily/ Monthly
Rolling Stock	CU - Paratransit Cutaway VN - Van	Clean, Wash & Vaccum	Weekly
		Pre-trip inspection	Daily
		PM Service	Mileage
		SGR Inspection	Annually
		Transmission Inspection	Mileage
		Rear End Inspection	Mileage
		A/C Inspection	Monthly/Quarterly /Annually
		Camera System Inspection	Bi-Monthly
		Farebox inspection	Monthly
		Tire Inspection	Daily
		ADA Systems Inspection	Daily/ Monthly
Equipment	SUP - Support Vehicles	Clean, Wash & Vaccum	Weekly
		Pre-trip inspection	Daily
		Post-trip inspection	Daily
		PM Service	Mileage
		SGR Inspection	Annually
Facilities	Administrative, Maintenance, Transit Stations	Facility and Equipment Inspection: Mission Critical	Daily/ Monthly
		Facility and Equipment Inspection: Mission Critical	Monthly
		Facility and Equipment Inspection: Mission Critical	Annually
		SGR Facility and Equipment Inspection	Annual

Table 4.5

Overhaul Strategy: Determine how and when assets get overhauled or replaced. Describe what activities take place during an overhaul. As applicable, describe any planned changes or improvements to these processes.

Asset Category	Asset Class	Acquisition and Renewal Strategy
Rolling Stock	BUS - Bus	It is MARTY's policy to repair damaged or non-functioning assets and componennts on an "as needed" basis. MARTY does not overhaul or rehabilitate its assets. Assets are replaced once the following conditions are met: (1) the asset's ULB has been met, or (2) the asset is considered a total loss by covering insurance.
Rolling Stock	CU - Paratransit Cutaway Van VN - Van	
Equipment - Non revenue vehicles	SUP - Support Vehicles	
Facilities	Administration, Maintence, Transit Stations, Fuel Stations	

Table 4.6

Disposal Strategy: Describe stategy for disposing of assets to be replaced. Describe the approval process and detail, including procedures for physically removing the asset from the property. As applicable, describe any planned changes or improvements to these processes.

Asset Catego	Asset Class	Acquisition and Renewal Strategy
Rolling Stock	BUS - Bus	Buses, once ULB is met or exceeded, are disposed of using the following method: 1) Asset documents are reviewed for remaining book value. If Vehicle has 5,000 or more remaining value, FTA must be reimbursed; 2) Approval received from both FTA and MARTY Board to initiate disposal procedures; 3) Vehicles are placed out to bid, sold directly or scrapped. Advertisements are placed on the Authority website and in both local newspapers; 4) Auctioned Vehicles are sold to the highest bidder; 5) The Authority Maintenance Director creates the asset disposal form for documentation purposes and sent to Finance; 6) The asset is written off the books by the Authority finance department and removed from TAMP tracking; and 6) The buyer/scrap dealer receives title, and removes the vehicle from the property. 7) If disposal is tied to an EPA grant, EPA disposal instructions are followed and submitted as grant requires.
Rolling Stock	CU - Paratransit Cutaway Van VN - Van	Paratransit vans and cutaway vans, once ULB is met or exceeded, are disposed of using the following method: 1) Asset documents are reviewed for remaining book value. If Vehicle has 5,000 or more remaining value, FTA must be reimbursed; 2) Approval received from both FTA and MARTY Board to initiate disposal procedures; 3) Vehicles are placed out to bid, sold directly or scrapped. Advertisements are placed on the Authority website and in both local newspapers; 4) Auctioned Vehicles are sold to the highest bidder; 5) The Authority Maintenance Director creates the asset disposal form for documentation purposes and sent to Finance; 6) The asset is written off the books by the Authority finance department and removed from TAMP tracking; and 6) The buyer/scrap dealer receives title, and removes the vehicle from the property. 7) If disposal is tied to an EPA grant, EPA disposal instructions are followed and submitted as grant requires.
Equipment	Non- Revenue SUP - Support Vehicles Cars/Trucks/Vans	Non-revenue service vehicles, once ULB is met or exceeded, are disposed of using the following method: 1) Asset documents are reviewed for remaining book value. If Vehicle has 5,000 or more remaining value, FTA must be reimbursed; 2) Approval received from both FTA and MARTY Board to initiate disposal procedures; 3Vehicles are placed out to bid, sold directly or scrapped. Advertisements are placed on the Authority website and in both local newspapers; 4) Auctioned Vehicles are sold to the highest bidder; 5) The Authority Maintenance Director creates the asset disposal form for documentation purposes and sent to Finance; 6) The asset is written off the books by the Authority finance department and removed from TAMP tracking.
Facilities	Administration, Maintence, Transit Stations, Fuel Stations	Facilities and real-estate, once ULB is met or exceeded or conditions exist to permit a move, facility assets are disposed of using the following method: 1) Approval received from the Authority Board and the FTA to initiate disposal procedures; 2) The facility is inspected and appraised by the 3rd party; 3) Utilizing a real-estate company, the facility is placed up for sale and bid; 4) The facility is sold to the highest bidder, sale is approved by the Authority Board and FTA; 5) The Authority removes all property and vacates the location; 6)The asset is written off the books by the Authority finance department and removed from TAMP tracking; and 7) The highest bidder receives title, and takes ownership of the property.

Table 4.7

Risk Management: ID any risks faced to your assets or organization as a whole, and describe the mitigation strategies for each one.

Risk	Mitigation Strategy
Loss of significant amounts of federal/ state/ local funding.	Decrease dependence on federal funding for capital improvements. Utilize reserve fund. Cut back on maintenance and service activities that are in balance with budget. Extend asset ULB, if possible. Decrease dependence on local/state funding for capital improvements. Local Sales Tax revenue makes up 80% of MARTY's operating funds. Loss of sales tax funding could result in the lose of public transportation services for Martin County, FL. Utilize reserve fund. Cut back on maintenance and service activities that are in balance with budget.
Fuel supply chain disruption.	Fuel offsite in partnership with another transit agency, state DOT, municipality, and/or private sector organization.
Parts supply chain disruption.	Partner with regional transit agencies and OEMs to retain parts supply chain.
Catastrophic loss of asset(s) due to natural or man-made disasters and hazards.	Enact MARTY and Catastrophic Loss Plans. Use backup facilities, and reserve vehicles from partner transit agencies.

SECTION 5: PRORITIZATION LIST OF INVESTMENTS

MARTY shall perform an investment prioritization analysis on a semi-annual basis, in order to:

1.) Determine what capital investments are needed, how much (and when), in order to maintain SGR (Table 5.1); and
2.) Rate and rank SGR programs and projects in order of implementation priority (Table 4.1).

Table 5.1					
Asset Category	**Asset Class**	**Condition**	**Performa**	**SGR Target FY 18**	**FTA Performance Metric**
Revenue Vehicles					
	Asset Class	**Fleet Size**	**Average Age**	**FTA ULB (Years)**	**Performance Measures**
BU - Bus	30' Bus	11	1.3	12	5
CU - Cutaway Bus	26' Bus	2	4	10	3
VN- Van	Paratransit	6	6	7	3
Facilities					
	Asset Class	**Fleet Size**	**Age**	**FTA ULB (Years)**	**Performance Measures**
Facility:	Maintenance	1	100%	No more than 0% of MARTY facilities rated less than 3.0 on the FTA scale.	The % of facilities that are rated less than 3.0 on the FTA Scale.
Equipment					
	Asset Class	**Class Size**	**Age**	**FTA ULB (Years)**	**Performance Measures**
Equipment	Non Revenue/Service Automobile	3	0.7	7	5
Equipment	Trucks and other Rubber Tire Vehicles	1	1	7	5

The investment prioritization analysis aids MARTY in making more informed investment decisions to improve SGR of our capital assets, and define when an asset needs overhaul or replacement. The investment prioritization list is a list containing the work plan(s) and schedule(s) of the proposed projects and programs that MARTY estimates would achieve its SGR goals, and a ranking of projects and programs based on implementation priority over the TAM Plan horizon period of four (4) years.

MARTY will rank selected projects and programs to improve or manage the SGR of capital assets for which MARTY has direct capital responsibility. The ranking criteria of projects and programs shall be consistent throughout the TAM Plan. Priority consideration will be given to local projects and programs that: (1) both improve SGR and correct an identified unacceptable safety risk; and (2) take into consideration ADA requirements (49 CFR Part 37) concerning maintenance of accessible features and alteration of transit facilities. Furthermore, when developing an investment prioritization list, MARTY shall take into consideration its estimation of funding levels from all sources that it reasonably expects will be available in each fiscal year during the TAM Plan horizon period.

The ranking of investment prioritization programs and projects will be expressed as: *High Priority*, *Medium Priority*, or *Low Priority*. Each investment prioritization program or project ranked shall contain a year and/or date in which the MARTY intends to carry out the program or project. This output process is a list of ranked projects and programs at the asset class level that identify assets from the asset inventory. MARTY's list of prioritized investments can be found on (Table 4.1).

Table 4.1

1	Semi-annual management meeting to asset performance and set goals. (Maintenance, Operations, IT, Finance/Grants, Procurement, Executive)
2	Review needs based on safety deficiemcies, asset ULB, agency capacity, customer demand, maintenance needs, IT security needs, and other data.
3	Prioritize projects based on funding availability
4	Development of Assett Investment priority list to report for Program of Projects.
5	Contract advertising RFP and award process
6	Board approval for approved RFP awards
7	Placement on TIP/STIP
8	Project/ Program Implementation and Monitoring

Project Year	Project Name	Asset Class	Cost	Priority
2019	Diesel Bus Acquisition	Revenue Vehicles	$400,000.00	High
2020	Diesel Bus Acquisition	Revenue Vehicles	$400,000.00	Low
2021	Diesel Bus Acquisition	Revenue Vehicles	$400,000.00	Low
2022	Diesel Bus Acquisition	Revenue Vehicles	$400,000.00	Low

SECTION 6: ANNUAL PERFORMANCE TARGETS & MEASURES

This section lists the process, data sources, and methodology used in the development of the FTA requirement for MARTY to set annual SGR performance targets. As introduced in Section 1, a State of Good Repair (SGR) is a threshold that identifies the desired performance condition. Specifically, an asset is in an SGR when: The condition of a capital asset is able to operate at a full level of performance. This means the asset:

1. Is able to perform its designed function;
2. Does not pose a known and/or unacceptable safety risk (Condition); and
3. Its lifecycle investments have been met or recovered FTA (ULB)

The FTA has enlisted the use of the following asset performance measure criteria for use in the development of MARTY's SGR performance targets (Table 6.1).

MARTY will establish one or more performance target(s) for each applicable asset class performance measure on an annual basis for the next fiscal year. The timeline for establishing SGR performance targets & measures are as follows:

> *Within three months before the effective date of October 1, 2018, MARTY shall set performance targets for the next fiscal year for each asset class included in this TAM Plan. These performance targets shall be established on or by no later than the date of the last Martin County Board of County Commissioners meeting of FY18. TAM Plan updates and adjusted targets shall be established with annual NTD reporting and approved by the Accountable Executive.*

SGR performance targets are based on realistic expectations derived from both the most recent available data (ULB/condition), FTA performance measure criteria, and the financial resources from all sources MARTY reasonably expects will be available during the TAM Plan horizon period for capital

planning purposes. SGR performance targets for the current fiscal year shall be monitored on a semi-annual basis. The Accountable Executive is required to approve each annual performance target submission to FTA/NTD.

Table 6.1
Performance Targets & Measures

Asset Category - Performance Measure	Asset Class	2019 Target	2020 Target	2021 Target	2022 Target	2023 Target
REVENUE VEHICLES						
Age - % of revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB)	AB - Articulated Bus	N/A	N/A	N/A	N/A	N/A
	AO - Automobile	N/A	N/A	N/A	N/A	N/A
	BR - Over-the-road Bus	N/A	N/A	N/A	N/A	N/A
	BU - Bus	0%	0%	0%	0%	0%
	CU - Cutaway Bus	50%	50%	0%	0%	0%
	DB - Double Decked Bus	N/A	N/A	N/A	N/A	N/A
	FB - Ferryboat	N/A	N/A	N/A	N/A	N/A
	MB - Mini-bus	N/A	N/A	N/A	N/A	N/A
	MV - Mini-van	N/A	N/A	N/A	N/A	N/A
	RT - Rubber-tire Vintage Trolley	N/A	N/A	N/A	N/A	N/A
	SB - School Bus	N/A	N/A	N/A	N/A	N/A
	SV - Sport Utility Vehicle	N/A	N/A	N/A	N/A	N/A
	TB - Trolleybus	N/A	N/A	N/A	N/A	N/A
	VN - Van	100%	100%	100%	100%	100%
	Custom 1	N/A	N/A	N/A	N/A	N/A
	Custom 2	N/A	N/A	N/A	N/A	N/A
	Custom 3	N/A	N/A	N/A	N/A	N/A
EQUIPMENT						
Age - % of vehicles that have met or exceeded their Useful Life Benchmark (ULB)	Non Revenue/Service Automobile	0%	0%	0%	0%	0%
	Steel Wheel Vehicles	N/A	N/A	N/A	N/A	N/A
	Trucks and other Rubber Tire	N/A	N/A	N/A	N/A	N/A
	Custom 1	N/A	N/A	N/A	N/A	N/A
	Custom 2	N/A	N/A	N/A	N/A	N/A
	Custom 3	N/A	N/A	N/A	N/A	N/A
FACILITIES						
Condition - % of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) Scale	Administration	N/A	N/A	N/A	N/A	N/A
	Maintenance	N/A	N/A	N/A	N/A	N/A
	Parking Structures	N/A	N/A	N/A	N/A	N/A
	Passenger Facilities	N/A	N/A	N/A	N/A	N/A
	Custom 1	N/A	N/A	N/A	N/A	N/A
	Custom 2	N/A	N/A	N/A	N/A	N/A
	Custom 3	N/A	N/A	N/A	N/A	N/A

SECTION 7: RECORDKEEPING & NTD REPORTING

MARTY shall maintain all supporting TAM Plan records and documents. MARTY shall make TAM Plan records available to FEDERAL (FTA), STATE (FDOT, and MPO's entities that provide(s) funding to the MARTY, and to aid in the planning process. MARTY shall report, on an annual basis, to the FTA's National Transit Database (NTD):

- Inventory of assets;
- SGR performance targets for the next fiscal year;
- Condition inspection assessments and performance measures of capital assets; and
- An annual narrative shall also be included and reported to NTD that provides a description of any change in the condition of the MARTY transit system or operations from the previous year,

and describe the progress made during the reporting year to meet the performance targets set in the previous reporting year.

Per NTD requirements, because MARTY's fiscal year ends on September 30th, annual TAM data reporting to NTD shall be completed by MARTY staff by the last day of January of each calendar year.

SECTION 8: UPDATES & CONTINUOUS IMPROVEMENT

The TAM Plan can be considered a "living document" that shall be reviewed on at least a semi-annual basis, updated, and incorporated in to MARTY's capital and budget planning, and reporting processes. Beginning in 2018, TAM Plan data shall serve as a "baseline" measure of asset performance management. As more data is collected, additional monitoring categories and goals will be included to support condition and reliability-based decision-making.

This document shall cover a "horizon period" of time (starting 10/1/2018) to 9/30/3023) beginning with the completion of the initial TAM Plan in 2018, continuing with full implementation in FY2018, and ending four years later in FY2023. Projected Fleet Replacement will change annually as new data is entered into the TAM Plan Template. This TAM Plan shall be updated annually shall be updated annually in conjunction with annual NTD reporting.

SECTION 9: CONCLUSION

The MARTY division/team firmly believe that by implementing this Transit Asset Management Plan, that it will allow the transit system to meet its mission and offer safe, efficient, reliable, and accessible public transit to the general public of the MARTY service area. In addition, MARTY believes that by implementing this TAM Plan, the following *State of Good Repair* (SGR) indicators will be either maintained or improved upon:

- Limit safety risks;
- Justify investments;
- Increase system reliability & accessibility;
- Lower maintenance costs; and/or
- Increase system performance