

TheBus - Hernando County, Florida Transit Asset Management Plan

Ronald F. Pianta, AICP, Accountable Executive

Last modified by Mary Elwin on 14 Aug 18 at 10:13

Introduction

TheBus is a TAM Tier II transit agency operated by the Hernando County Board of County Commissioners in Hernando County, Florida. The County is contained within the Hernando/Citrus Metropolitan Planning area which is located approximately 40 miles north of the Tampa-St. Petersburg area and 67 miles west of the Orlando metropolitan area. The Hernando County Board of County Commissioner's transit system consists of four (4) fixed-routes with ADA complementary service. One of the four routes connects into Pasco County to the south for a regional corridor connection to the Pasco-Hernando State College.

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				
	AO - Automobile	N/A				
	BR - Over-the-road Bus	N/A				
	BU - Bus	10%	10%	10%	10%	
	CU - Cutaway Bus	10%	20%	20%	10%	10%
	DB - Double Decked Bus	N/A				
	FB - Ferryboat	N/A				
	MB - Mini-bus	N/A				
	MV - Mini-van	N/A	100%			
	RT - Rubber-tire Vintage Trolley	N/A				
	SB - School Bus	N/A				
	SV - Sport Utility Vehicle	N/A				
	TB - Trolleybus	N/A				
	VN - Van	N/A				
	Custom 1	N/A				
Custom 2	N/A					
Custom 3	N/A					
EQUIPMENT						
Age - % of vehicles that have met or exceeded their Useful Life Benchmark (ULB)	Non Revenue/Service Automobile	N/A				
	Steel Wheel Vehicles	N/A				
	Trucks and other Rubber Tire Vehicles	N/A				
	Intelligent Transportation System	N/A				
	Electronic Farebox System	N/A				
	Custom 3	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				
	Maintenance	N/A				
	Parking Structures	N/A				
	Passenger Facilities	N/A				
	Equipment Storage Facility	N/A				
	Custom 2	N/A				
Custom 3	N/A					

Target Setting Methodology

Targets were established by utilizing the current bus, equipment and facilities replacement schedule which is based upon the number of buses or transit equipment needing to be replaced to provide the required level of service.

TAM Vision

The goal of the Transit Asset Management system is to identify and implement a capital replacement schedule for vehicles, facilities, and equipment and to support the County's Capital Improvement Plan for transit service.

TAM and SGR Policy

To provide for the safeguarding of fixed assets and to provide County personnel with accounting guidance applicable to the several categories of fixed assets.

TAM Goals and/or Objectives

Goals	Objectives
Establishing a process to identify and track asset life before it reaches its maximum usefulness.	Maintain a maintenance plan for assets by category class.
	Monitor asset condition for predictable replacement timing.
Establish a framework to support the capital budgeting program.	Program assets within an annual capital budget.
	Program long term asset replacement through a five-year capital improvement

About the TAM Plan

The TAM Plan will contain the County's transit vehicles, equipment, and facilities. The TAM Plan will establish performance measures for monitoring the condition of transit capital assets in programming timely replacement horizons. The TAM will be updated annually.

Roles and Responsibilities

Department/Individual	Role (Title and/or Description)	Subrecipient
Ronald F. Pianta	Director of Planning & Zoning Services	TheBus
Mary R. Elwin	Operations Support Supervisor	TheBus
Jannina Stampfli	Transit Coordinator	TheBus

Capital Asset Inventory

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

Asset Inventory Summary

Asset Category	Total Number	Avg Age	Avg Mileage	Avg Value
Revenue Vehicles	17	5.5	196,951	\$295,882.35
<i>AB - Articulated Bus</i>	0	-	-	-
<i>AO - Automobile</i>	0	-	-	-
<i>BR - Over-the-road Bus</i>	0	-	-	-
<i>BU - Bus</i>	10	7.4	285,136	\$450,000.00
<i>CU - Cutaway Bus</i>	6	3.0	75,571	\$80,000.00
<i>DB - Double Decked Bus</i>	0	-	-	-
<i>FB - Ferryboat</i>	0	-	-	-
<i>MB - Mini-bus</i>	0	-	-	-
<i>MV - Mini-van</i>	1	2.0	43,383	\$50,000.00
<i>RT - Rubber-tire Vintage Trolley</i>	0	-	-	-
<i>SB - School Bus</i>	0	-	-	-
<i>SV - Sport Utility Vehicle</i>	0	-	-	-
<i>TB - Trolleybus</i>	0	-	-	-
<i>VN - Van</i>	0	-	-	-
<i>Custom 1</i>	0	-	-	-
<i>Custom 2</i>	0	-	-	-
<i>Custom 3</i>	0	-	-	-
Equipment	2	1.0	0	\$160,000.00
<i>Non Revenue/Service Automobile</i>	0	-	-	-
<i>Steel Wheel Vehicles</i>	0	-	-	-
<i>Trucks and other Rubber Tire Vehicles</i>	0	-	-	-
<i>Intelligent Transportation System</i>	1	1.0	0	\$200,000.00
<i>Electronic Farebox System</i>	1	1.0	0	\$120,000.00
<i>Custom 3</i>	0	-	-	-
Facilities	1	1.0	N/A	\$50,000.00
<i>Administration</i>	0	-	N/A	-
<i>Maintenance</i>	0	-	N/A	-
<i>Parking Structures</i>	0	-	N/A	-
<i>Passenger Facilities</i>	0	-	N/A	-
<i>Equipment Storage Facility</i>	1	1.0	N/A	\$50,000.00
<i>Custom 2</i>	0	-	N/A	-
<i>Custom 3</i>	0	-	N/A	-

Condition Assessment

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

Asset Condition Summary

Asset Category	Total Number	Avg Age	Avg Mileage	Avg TERM Condition	Avg Value	% At or Past ULB
Revenue Vehicles	17	5.5	196,951	N/A	\$295,882.35	47%
<i>AB - Articulated Bus</i>	0	-	-	N/A	-	-
<i>AO - Automobile</i>	0	-	-	N/A	-	-
<i>BR - Over-the-road Bus</i>	0	-	-	N/A	-	-
<i>BU - Bus</i>	10	7.4	285,136	N/A	\$450,000.00	60%
<i>CU - Cutaway Bus</i>	6	3.0	75,571	N/A	\$80,000.00	33%
<i>DB - Double Decked Bus</i>	0	-	-	N/A	-	-
<i>FB - Ferryboat</i>	0	-	-	N/A	-	-
<i>MB - Mini-bus</i>	0	-	-	N/A	-	-
<i>MV - Mini-van</i>	1	2.0	43,383	N/A	\$50,000.00	0%
<i>RT - Rubber-tire Vintage Trolley</i>	0	-	-	N/A	-	-
<i>SB - School Bus</i>	0	-	-	N/A	-	-
<i>SV - Sport Utility Vehicle</i>	0	-	-	N/A	-	-
<i>TB - Trolleybus</i>	0	-	-	N/A	-	-
<i>VN - Van</i>	0	-	-	N/A	-	-
<i>Custom 1</i>	0	-	-	N/A	-	-
<i>Custom 2</i>	0	-	-	N/A	-	-
<i>Custom 3</i>	0	-	-	N/A	-	-
Equipment	2	1.0	0	N/A	\$160,000.00	0%
<i>Non Revenue/Service Automobile</i>	0	-	-	N/A	-	-
<i>Steel Wheel Vehicles</i>	0	-	-	N/A	-	-
<i>Trucks and other Rubber Tire Vehicles</i>	0	-	-	N/A	-	-
<i>Intelligent Transportation System</i>	1	1.0	0	N/A	\$200,000.00	0%
<i>Electronic Farebox System</i>	1	1.0	0	N/A	\$120,000.00	0%
<i>Custom 3</i>	0	-	-	N/A	-	-
Facilities	1	1.0	N/A	5.0	\$50,000.00	N/A
<i>Administration</i>	0	-	N/A	-	-	N/A
<i>Maintenance</i>	0	-	N/A	-	-	N/A
<i>Parking Structures</i>	0	-	N/A	-	-	N/A
<i>Passenger Facilities</i>	0	-	N/A	-	-	N/A
<i>Equipment Storage Facility</i>	1	1.0	N/A	5.0	\$50,000.00	N/A
<i>Custom 2</i>	0	-	N/A	-	-	N/A
<i>Custom 3</i>	0	-	N/A	-	-	N/A

Decision Support

Investment Prioritization

Annually during the budget preparation cycle, the management staff of both the transit and fleet departments review the priorities for the replacement of vehicles based upon condition and revenue streams.

Decision Support Tools

The following tools are used in making investment decisions:

Process/Tool	Brief Description
Repair/Maintenance History	Utilize AssetWorks software to assess and track vehicle conditions.
Annual Vehicle Inspections	Annual vehicle inspections are utilized as a method to determine safety and life cycle conditions.
Vehicle Replacement Schedule	Used to program future replacement of vehicles.

Risk Management

Risk	Mitigation Strategy
Availability of spare vehicles	Plan and program preventive maintenance activities.
Mechanical failures	Prioritize repairs and decision making
Vehicle accidents	Consistent scheduling of driver safety training.

Maintenance Strategy

Asset Category	Asset Class	Maintenance Activity	Frequency	Avg Duration (Hrs)	Cost
RevenueVehicles	BU - Bus	Preventive Maintenance Activities	Every 6,000 miles	4	\$350
RevenueVehicles	BU - Bus	Annual Maintenance & Safety Inspection	Annual	1	\$100
RevenueVehicles	CU - Cutaway Bus	Preventive Maintenance Activities	Every 6,000 miles	4	\$350
RevenueVehicles	CU - Cutaway Bus	Annual Maintenance & Safety Inspection	Annual	1	\$100
Equipment	Electronic Farebox System	Maintenance Agreement	Annual	1	\$11,000
Equipment	Intelligent Transportation System	Maintenance Agreement	Annual	1	\$10,000
Facilities	Equipment Storage Facility	Work Order System	As Needed	1	\$75

Unplanned Maintenance Approach

Effective decision making to address the needed repair, the value of the asset, and cost of the repair.

Overhaul Strategy

Asset Category	Asset Class	Overhaul Strategy
----------------	-------------	-------------------

RevenueVehicles	BU - Bus	Overhauls are not conducted based upon our Preventive Maintenance Program.
RevenueVehicles	CU - Cutaway Bus	Overhauls are not conducted based upon our Preventive Maintenance Program.

Disposal Strategy

Asset Category	Asset Class	Disposal Strategy
RevenueVehicles	BU - Bus	Refer to FTA circulars for current and relevant information on disposal requirements. Approval is sought from FTA for disposal of assets funded in part or whole. Once approval is obtained, the vehicles are placed in surplus vehicle status, secured on-site for disposal, sold at public auction, and scheduled for pick-up by the purchaser.
RevenueVehicles	CU - Cutaway Bus	Refer to FTA circulars for current and relevant information on disposal requirements. Approval is sought from FTA for disposal of assets funded in part or whole. Once approval is obtained, the vehicles are placed in surplus vehicle status, secured on-site for disposal, sold at public auction, and scheduled for pick-up by the purchaser.

Acquisition and Renewal Strategy

Asset Category	Asset Class	Acquisition and Renewal Strategy
RevenueVehicles	BU - Bus	Buses are scheduled based on their minimum useful life standard of 10 years or 350,000 miles or as applicable. Minimum useful life is tracked through the annual inspection of preventive maintenance programs.
RevenueVehicles	CU - Cutaway Bus	Cutaway buses are scheduled based on their minimum useful life of 7 years or 200,000 miles or as applicable. Minimum useful life is tracked through the annual inspection of preventive maintenance programs.
Equipment	Intelligent Transportation System	Upgrades are provided through the preventive maintenance contract as necessary. A new investment would be undertaken once the technology becomes outdated or upgrades are no longer available.
Equipment	Electronic Farebox System	Upgrades are provided through the preventive maintenance contract as necessary. A new investment would be undertaken once the technology becomes outdated or upgrades are no longer available.

Investment Prioritization

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

Capital Investment Activity Schedules

Document Name	File Extension
Preventive Mainenance Plan	PDF
Transit Capital Improvement Program	PDF

Appendices

[Appendix A](#)

Asset Register

[Appendix B1](#)

Revenue Vehicle (Rolling Stock) Condition Data

[Appendix B2](#)

Equipment Condition Data

[Appendix B3](#)

Facilities Condition Data

[Appendix C](#)

Proposed Investment Project List

[Appendix D](#)

Fleet Replacement Module Output

Appendix A: Asset Register

Asset Category	Asset Class	Asset Name	Make	Model	Count	ID/Serial No.	Asset Owner	Acquisition Year	Vehicle Mileage	Replacement Cost/Value
Equipment	Electronic Farebox System	Flamingo			1		HCBC/FTA	2017		\$120,000.00
Equipment	Intelligent Transportation System	Routematch			1		HCBC/FTA	2017		\$200,000.00
Facilities	Equipment Storage Facility	Equipment Storage Building			1		HCBC/FTA	2017		\$50,000.00
RevenueVehicles	BU - Bus	Arboc Bus	Arboc	Spirit of Mobility	1	18897	HCBC/FTA	2012	197,635	\$450,000.00
RevenueVehicles	BU - Bus	Arboc Bus	Arboc	Spirit of Mobility	1	18898	HCBC/FTA	2012	183,081	\$450,000.00
RevenueVehicles	BU - Bus	Arboc Bus	Arboc	Spirit of Mobility	1	18899	HCBC/FTA	2012	217,277	\$450,000.00
RevenueVehicles	BU - Bus	Gillig Bus	Gillig	Gillig 30 ft Low Floor	1	19411	HCBC/FTA	2002	595,953	\$450,000.00
RevenueVehicles	BU - Bus	Gillig Bus	Gillig	Gillig 30 ft Low Floor	1	19412	HCBC/FTA	2002	597,012	\$450,000.00
RevenueVehicles	BU - Bus	Gillig Bus	Gillig	Gillig 30 ft Low Floor	1	19413	HCBC/FTA	2002	629,984	\$450,000.00
RevenueVehicles	BU - Bus	Gillig Bus	Gillig	Gillig 29 ft Low Floor	1	19429	HCBC/FTA	2015	178,133	\$450,000.00
RevenueVehicles	BU - Bus	Gillig Bus	Gillig	Gillig 29 ft Low Floor	1	20041	HCBC/FTA	2016	96,046	\$450,000.00
RevenueVehicles	BU - Bus	Gillig Bus	Gillig	Gillig 29 ft Low Floor	1	20042	HCBC/FTA	2016	99,165	\$450,000.00
RevenueVehicles	BU - Bus	Gillig Bus	Gillig	Gillig 29 ft Low Floor	1	20079	HCBC/FTA	2017	57,071	\$450,000.00
RevenueVehicles	CU - Cutaway Bus	Glaval Van	Glaval	Universal	1	20038	HCBC/FTA	2016	51,755	\$80,000.00
RevenueVehicles	CU - Cutaway Bus	Glaval Van	Glaval	Universal	1	20054	HCBC/FTA	2016	43,172	\$80,000.00
RevenueVehicles	CU - Cutaway Bus	Glaval Van	Glaval	Universal	1	20055	HCBC/FTA	2016	45,768	\$80,000.00
RevenueVehicles	CU - Cutaway Bus	Glaval Van	Glaval	Universal	1	20056	HCBC/FTA	2016	48,543	\$80,000.00
RevenueVehicles	CU - Cutaway Bus	Goshen Bus	Goshen Coach	Express Commercial Cutaway GC-II	1	18890	HCBC/FTA	2013	126,753	\$80,000.00
RevenueVehicles	CU - Cutaway Bus	Goshen Bus	Goshen Coach	Express Commercial Cutaway GC-II	1	18891	HCBC/FTA	2013	137,437	\$80,000.00
RevenueVehicles	MV - Mini-van	Dodge	Dodge	Caravan	1	19441	HCBC/FTA	2016	43,383	\$50,000.00

Appendix B: Asset Condition Data

B1: Revenue Vehicle Assets

Asset Category	Asset Class	Asset Name	Count	ID/Serial No.	Age (Yrs)	Vehicle Mileage	Replacement Cost/Value	Useful Life Benchmark (Yrs)	Past Useful Life Benchmark
RevenueVehicles	BU - Bus	Arboc Bus	1	18897	6	197,635	\$450,000.00	5	Yes
RevenueVehicles	BU - Bus	Arboc Bus	1	18898	6	183,081	\$450,000.00	5	Yes
RevenueVehicles	BU - Bus	Arboc Bus	1	18899	6	217,277	\$450,000.00	5	Yes
RevenueVehicles	BU - Bus	Gillig Bus	1	19411	16	595,953	\$450,000.00	10	Yes
RevenueVehicles	BU - Bus	Gillig Bus	1	19412	16	597,012	\$450,000.00	10	Yes
RevenueVehicles	BU - Bus	Gillig Bus	1	19413	16	629,984	\$450,000.00	10	Yes
RevenueVehicles	BU - Bus	Gillig Bus	1	19429	3	178,133	\$450,000.00	10	No
RevenueVehicles	BU - Bus	Gillig Bus	1	20041	2	96,046	\$450,000.00	10	No
RevenueVehicles	BU - Bus	Gillig Bus	1	20042	2	99,165	\$450,000.00	10	No
RevenueVehicles	BU - Bus	Gillig Bus	1	20079	1	57,071	\$450,000.00	10	No
RevenueVehicles	CU - Cutaway Bus	Glaval Van	1	20038	2	51,755	\$80,000.00	5	No
RevenueVehicles	CU - Cutaway Bus	Glaval Van	1	20054	2	43,172	\$80,000.00	5	No
RevenueVehicles	CU - Cutaway Bus	Glaval Van	1	20055	2	45,768	\$80,000.00	5	No
RevenueVehicles	CU - Cutaway Bus	Glaval Van	1	20056	2	48,543	\$80,000.00	5	No
RevenueVehicles	CU - Cutaway Bus	Goshen Bus	1	18890	5	126,753	\$80,000.00	5	Yes
RevenueVehicles	CU - Cutaway Bus	Goshen Bus	1	18891	5	137,437	\$80,000.00	5	Yes
RevenueVehicles	MV - Mini-van	Dodge	1	19441	2	43,383	\$50,000.00	4	No

Appendix B: Asset Condition Data

B2: Equipment Assets

Asset Category	Asset Class	Asset Name	Count	ID/Serial No.	Age (Yrs)	Vehicle Mileage	Replacement Cost/Value	Useful Life Benchmark (Yrs)	Past Useful Life Benchmark
Equipment	Electronic Farebox System	Flamingo	1		1		\$120,000.00	10	No
Equipment	Intelligent Transportation System	Routematch	1		1		\$200,000.00	10	No

Appendix B: Asset Condition Data

B3: Facilities Assets

Asset Category	Asset Class	Asset Name	Count	ID/Serial No.	Age (Yrs)	TERM Scale Condition	Replacement Cost/Value
Facilities	Equipment Storage Facility	Equipment Storage Building	1		1	5	\$50,000.00

Appendix C: Proposed Investment Project List

Project Year	Project Name	Asset/Asset Class	Cost	Priority
2018	Small Heavy-Duty Diesel Bus Acquisition	RevenueVehicles	\$900,000.00	High
2018	Standard Cutaway Acquisition	RevenueVehicles	\$80,000.00	High
2019	Small Heavy-Duty Diesel Bus Acquisition	RevenueVehicles	\$450,000.00	High
2020	Standard Cutaway Acquisition	RevenueVehicles	\$160,000.00	High
2020	Small Heavy-Duty Diesel Bus Acquisition	RevenueVehicles	\$450,000.00	High
2021	Small Heavy-Duty Diesel Bus Acquisition	RevenueVehicles	\$450,000.00	High
2021	Standard Cutaway Acquisition	RevenueVehicles	\$160,000.00	High
2022	Small Heavy-Duty Diesel Bus Acquisition	RevenueVehicles	\$450,000.00	High
2022	Standard Cutaway Acquisition	RevenueVehicles	\$80,000.00	High
2023	Standard Cutaway Acquisition	RevenueVehicles	\$80,000.00	High

Appendix D: Fleet Replacement Module Output

Total in Current Year \$		\$2,330,000.00	\$0.00	\$50,000.00	\$320,000.00	\$0.00					
Total in Year of Expenditure \$		\$2,330,000.00	\$0.00	\$50,000.00	\$320,000.00	\$0.00					
		2019		2020		2021		2022		2023	
Fleet Type (Year/Make/Model)	Number	Cost in 2018 \$	Number	Cost in 2018 \$	Number	Cost in 2018 \$	Number	Cost in 2018 \$	Number	Cost in 2018 \$	
2012 Arboc Spirit of Mobility											
2002 Gillig Gillig 30 ft Low Floor	5	\$2,250,000.00									
2015 Gillig Gillig 29 ft Low Floor											
2016 Gillig Gillig 29 ft Low Floor											
2017 Gillig Gillig 29 ft Low Floor											
2013 Goshen Coach Express Commercial Cutaway GC-II											
2016 Glaval Universal	1	\$80,000.00					4	\$320,000.00			
2016 Dodge Caravan					1	\$50,000.00					