TPCG Transit Division Transit Asset Management Plan

Last modified by Wendell Voisin, Public Transit Administrator on 08 Dec 16 at 11:54

Introduction

TPCG Public Transit Division or, "Good Earth Transit", as it is known, provides fixed route and paratransit services within the Houma Urbanized Area. Its bus fleet consists of 12 heavy-duty Gillg buses and 5 cutaway buses. TPCG provides fixed route service in the City of Thibodaux using 3 of the 5 cutaway buses, and complimentary paratransit service with the other two cutaway buses. The Gillig buses are used to provide fixed route service on the five Houma routes. TPCG currently operates 7 buses on fixed routes in Houma and 1 bus on the fixed route in Thibodaux. The three dedicated Thibodaux fixed route buses are used to provide complimentary paratransit in Thibodaux on an as-needed basis. Bus service in Thibodaux operates 5 days per week from 6 am to 6 pm, and service in Houma operates 7 days per week from 5 am to 7 pm weekdays and from 8 am to 5 pm on weekends and holidays.

Performance Targets & Measures

Asset Class	Performance Measure	Target
Rolling Stock *All revenue vehicles*	**Age** - % of revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB)	**HD Bus - 0%** **Cutaway Bus - 0%**
Equipment *Non-revenue vehicles*	**Age** - % of vehicles that have met or exceeded their Useful Life Benchmark (ULB)	**Service Vehicles - 10%**
Facilities *All buildings or structures*	**Condition** - % of facilities with a condition rating below 3.0 on a the FTA Transit Economic Requirements Model (TERM) Scale	**Facilities - 0%**

Target Setting Methodology

Rolling Stock (Revenue Vehicles): Heavy-duty Buses. Target ULB - 15 yrs or 750,000 mi; Cutaway buses. Target ULB - 5 yrs or 150,000 mi; Equipment (Non-Revenue Vehicles): Service Vehicles. Target ULB - 4 yrs or 100,000 mi. Facilities (Buildings): Administrative/Maintenance Facility. Target ULB - 50 yrs or TERM Rating >= 3; Downtown Passenger Station. Target ULB - 50 yrs or TERM Rating >= 3.

TAM Vision

TPCG Public Transit Division desires to achieve 100% reliability of the equipment and facilities used by Good Earth Transit to provide transportation services to the residents of Houma and Thibodaux. In this manner the public transit system's users will not have to suffer delays as buses or other critical equipment is taken out of service due to mechanical or safety failures.

TAM and SGR Policy

TPCG SGR policy is to maintain sufficient equipment and rolling stock such that 90% of the fleet and 100% of the facilities are available at any time. This includes replacement of rolling stock in a timely fashion, updating and repairing facilities and equipment so as not to interfere with its function within the system. To that end, rolling stock and equipment are to be replaced as they reach their useful life benchmarks, facilities are to be updated or repaired in any TERM category that ranks less than a 3 within one year of budgeting repairs.

TAM Goals and/or Objectives

Goals	Objectives
Achieve 100% reliability of equipment and facilities	1) Develop methodology to calculate availablity percentage for equipment and facilities. 2) Use those methods to establish current availability baselines. 3) Review baseline percentages semi-annually to make system adjustments as needed.
Develop Program Plan for establishing and maintaining a Useful Life Benchmark for all Rolling Stock and Equipment.	1) Link biennial inventory database with Preventative Maintenance database. 2) Develop appropriate forms to collect information consistent with TERM for facilities and Inspection reports for Rolling Stock and Equipment to assess ULB for assets on an annual basis. 3) Develop semi-annual reports from linked databases that will calculate the uptime percentage for every unit of rolling stock and equipment, and facilities. 4) Use database information to plan timely rolling stock and equipment replacements to increase availablity of equipment and other assets

About the TAM Plan

The TAM Plan consists of an information database on assets, their condition, and our ability to plan approiate expenditures to replace equipment timely. The document is a live document that will be updated annually when the annual inventory is conducted. Information from the inventory database will flow into the TAM plan updating condtional assessments as needed.

Roles and Responsibilities

Department/Individual	Role (Title and/or Description)	Subrecipient
Wendell Voisin	Public Transit Administrator	Develop TAM Plan and Corresponding Financial
Gayle Vaughn	Transit Office Manager	Implement and Ensure TAM Plan Provisions and
Gene Bergeron	Trasit Fleet Maintance Supervisor	Assess Asset Conditions and Carry Out Corrective
Anitra McPhereson	Transit Operations Supervisor	Assess Asset Conditions and Carry Out Corrective

Asset Portfolio

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

Asset Inventory Summary

Asset Category	Total Number	Avg Age	Avg Value
Equipment	6	6.16667	$21,646.33
Facilities	4	8.5	$746,716.50
Rolling Stock	17	6.64706	$244,698.47

Condition Assessment

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

Asset Condition Summary

Asset Category	Count	Avg Age	Avg TERM Condition	Avg Value	% At or Past ULB
Equipment	6	6.16667	N/A	$21,646.33	0.00%
Facilities	4	8.5	4.5	$746,716.50	0.00%
Rolling Stock	17	6.64706	N/A	$244,698.47	17.65%

Management Approach

Investment Prioritization

SHORT TERM PLANNING: During the annual budget planning cycle, projected asset needs for the coming year are estimated and compared to current assets. Repairs or overhauls for assets that are approaching marginal condition, are planned for in the budget at that time, using the maintenance fund departments 693 and 694 for vehicles and fixed facilities respecively.
MIDRANGE PLANNING: When the annual inventory is prepared the age and overall condition of the transit assets and equipment are evaluated. For heavy-duty bus replacements, a minimum of two years is requied to replace vehicles, so if no current rolling stock contracts are avaiable, The Public Transit Administrator will prepare a technical specification to send to the purchasing department for bid letting. Service vehicle replacements are planned in the annual budet process, because those items are commercially availible and do not require bid specification. Acquisition of these items takes place under the capital outlay budet deparment 690-89xx. LONG RANGE
PLANNING: A generalized long range financial plan is updated every five years, that includes any forseeable changes that the transit system will likely make. Under this plan local matching funds are estimated for future needs and incorporated into the budet process as an annual increment to the division's fund balance. A budgetary line item is set under deparment 670 to accrue the local matching funds.

Decision Support Tools

The following tools are used in making investment decisions:

Process/Tool	Brief Description
Maintenance Scheduler.mdb (database)	A software system that provides uptime information on vehicle assets
Property Management Database.mdb	A software system that provides current information on asset age and condition, that is updated annually.

Risk Management

Risk	Mitigation Strategy
Loss of support of local funds	Increase advertising sales effort, use some fund balance funding to support operations.
Loss of equipment due to Hurricane or other Natural Disaster	Inplement equipment evacuation plan. Utilize Public Works maintenance garage in which is unlikely to be lost due to flooding due to its location.
Excessive loss of qualified bus operators	Create part-time positions, Utilize social media to advertise job openings, implement in-house CDL training program. Request CDL drivers from other divisions.

Loss of qualified mechanics	Send work to TPCG Fleet Maintenance. Shop out work.
Loss of ridership due to missed routes or disabled equipment	Use TAM plan procedures to identify "at risk" rolling stock and plan repair or replacement to maintain a state of good repair.

Maintenance Strategy

Asset Category/Class	Maintenance Activity	Frequency	Avg Duration (Hrs)	Cost
HD Bus	Service and Inspection	6000	6	$205
HD Bus	Service and Inspection	12000	4	$119
HD Bus	Service and Inspection	18000	2	$77
HD Bus	Service and Inspection	24000	3	$149
HD Bus	Service and Inspection	30000	6	$136
HD Bus	Service and Inspection	42000	2	$42
HD Bus	Service and Inspection	48000	2	$62
HD Bus	Service and Inspection	60000	2	$42
HD Bus	Service and Inspection	75000	3	$485
HD Bus	Service and Inspection	100000	3	$546
HD Bus	Service and Inspection	120000	1	$23
HD Bus	Service and Inspection	150000	2	$714
HD Bus	Service and Inspection	200000	4	$2,597
HD Bus	Service and Inspection	300000	2	$385
HD Bus	Service and Inspection	1 year	2	$44
HD Bus	Service and Inspection	3 year	1	$29
HD Bus	Service and Inspection	6 year	3	$106
HD Bus	Service and Inspection	Monthly	3	$56
HD Bus	Service and Inspection	Weekly	1	$19

Unplanned Maintenance Approach

Operators who complete vehicle defect reports or deficiencies at facilities are refered to Gene Bergeron who will create work orders in our Maintenance Scheduler.mdb database. Depending on the nature on the maintenance needed the work will be assigned to a mechanic on staff, sent out for repair, referred to the TPCG building maintenance division, or have a contractor brought in for the repair that needs to be done.

Overhaul Strategy

Asset Category/Class	Overhaul Strategy
HD Bus	Overhaul of engines and transmissions are solely done on an as needed basis. We do not set specific time or mileage for overhaul of these components.
Cutaway Bus	No overhaul strategy, we do not typically overhaul this type of equipment. We replace these units before overhauls are needed.
Service Vehicle	No overhaul strategy, we do not typically overhaul this type of equipment. We replace these units before overhauls are needed.

Disposal Strategy

Asset Category/Class	Disposal Strategy
All Equipment	All equipment including revenue and service vehicles are liquidated by surplus auction sale.

Acquisition and Renewal Strategy

Asset Category/Class	Acquisition and Renewal Strategy
Cutaway Bus	Cutaway buses will be replaced by units acquired from the Statewide contract for FTA buses when possible. Good Earth Transit will no longer use Diesel buses due to emission control problems. We will procure either gasoline or propane vehicles in the near future, until other fuel options become available. We will also focus on procuring low floor designs due to minimize lift issues and to have alternative means to operate ramp or lift in case of failure.
Heavy Duty Bus	The replacement strategy for 35' Heavy Duty buses is to replace two buses per year over a four year period. The replacement strategy for 30' Heavy Duty buses is to replace two per year over a two year period. The replacements will start when the vehicles reach the end of their useful life at 12 and 10 years respectively. The vehicles selected for replacement will be those with highest maintenance cost and the lowest record of reliability. The replacements for 35' buses will take place between FY2020 and FY2028 and the 30' fleet will be replaced between FY2021 and FY2023. The fuel type will likely change due to excessive maintenance and failures of diesel emission controls on diesel buses. The future fuel strategy and selection for the next fleet transition will be completed by the end of 2018 to provide time for the creation of bid specifications and bid letting.

Fuel Station	A fuel station acquistion strategy may be developed to prepare for the next generation of transit buses, based on the fuel selected for the next generation of transit buses.

Work Plans & Schedules

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

Appendices

Appendix A	Asset Register
Appendix B	Asset Condition Data
Appendix C	Proposed Investment Project List

Appendix A: Asset Register

Asset Category	Asset Class	Asset Name	Make	Model	ID/Serial No.	Asset Owner	Age (Yrs)	Replacement Cost/Value
Facilities	Passenger Station	Downtown Bus Station	N/A	N/A	BLD71	TPCG Public Transit Division	19	$498,493.00
Facilities	Admin/Maintenance Facility	Good Earth Transit Bus Garage	N/A	N/A	N/A	TPCG Public Transit Division	5	$2,248,160.00
Rolling Stock	HD Bus	601G	2011 Gillig	30' LF	15GGE2719B1092113	TPCG Public Transit Division	5	$332,934.00
Rolling Stock	HD Bus	602G	2011 Gillig	30' LF	15GGE2710B1092114	TPCG Public Transit Division	5	$332,934.00
Rolling Stock	HD Bus	603G	2011 Gillig	30' LF	15GGE2712B1092115	TPCG Public Transit Division	5	$332,934.00
Rolling Stock	HD Bus	604G	2011 Gillig	30' LF	15GGE2714B1092116	TPCG Public Transit Division	5	$332,934.00
Rolling Stock	HD Bus	609	2008 Gillig	35' LF	15GGB271281078796	TPCG Public Transit Division	8	$303,288.00
Rolling Stock	HD Bus	610	2008 Gillig	35' LF	15GGB271481078797	TPCG Public Transit Division	8	$303,288.00
Rolling Stock	HD Bus	611	2008 Gillig	35' LF	15GGB271681078798	TPCG Public Transit Division	8	$303,288.00

Rolling Stock	HD Bus	612	2008 Gillig	35' LF	15GGB271881078799	TPCG Public Transit Division	8	$303,288.00
Rolling Stock	HD Bus	613	2008 Gillig	35' LF	15GGB271881078799	TPCG Public Transit Division	8	$303,288.00
Rolling Stock	HD Bus	614	2008 Gillig	35' LF	15GGB271071078801	TPCG Public Transit Division	8	$303,288.00
Rolling Stock	HD Bus	615	2008 Gillig	35' LF	15GGB271481078802	TPCG Public Transit Division	8	$303,288.00
Rolling Stock	HD Bus	616	2008 Gillig	35' LF	15GGB271681078803	TPCG Public Transit Division	8	$303,288.00
Equipment	Service Vehicle	620	2007 Ford	Freestar	2FM7A51697BA14620	TPCG Public Transit Division	9	$18,970.00
Equipment	Service Vehicle	619	2009 Ford	F150	1FTPF12V09KC17481	TPCG Public Transit Division	7	$15,516.00
Equipment	Service Vehicle	621	2009 Ford	F150	1FTPF12V29KC17482	TPCG Public Transit Division	7	$15,516.00
Equipment	Service Vehicle	622	2009 Ford	F150	1FTPF12V49KC17483	TPCG Public Transit Division	7	$15,516.00
Equipment	Service Vehicle	618	2011 Ford	F250	1FDBF2A68CEC56024	TPCG Public Transit Division	5	$29,178.00
Equipment	Service Vehicle	617	2014 Ford	F150	1FTFW1CF8EKG22971	TPCG Public Transit Division	2	$35,182.00

Rolling Stock	14-6 Bus	634	2011 Goshen	CGII	1GB6G5BL5B1114264	TPCG Public Transit Division	5	$98,464.00
Rolling Stock	14-6 Bus	635	2011 Goshen	CGII	1GB6G5BL3B1114456	TPCG Public Transit Division	5	$98,464.00
Rolling Stock	14-6 Bus	636	2011 Goshen	CGII	1GB6G5BL2B1114352	TPCG Public Transit Division	5	$98,464.00
Rolling Stock	12-2 Bus	632	2009 Eldorado	Transtech	1FDFE45P39DA54631	TPCG Public Transit Division	7	$53,221.00
Rolling Stock	12-2 Bus	633	2009 Eldorado	Transtech	1FDFE45P59DA54632	TPCG Public Transit Division	7	$53,221.00
Facilities	Fuel Station					TPCG Public Transit Division	5	$112,000.00
Facilities	Bus Wash					TPCG Public Transit Division	5	$128,213.00

Appendix B: Asset Condition Data

Equipment Assets

Asset Category	Asset Class	Asset Name	ID/Serial No.	Age (Yrs)	Replacement Cost/Value	Useful Life Benchmark (Yrs)	Past Useful Life Benchmark
Equipment	Service Vehicle	620	2FM7A51697B/	9	$18,970.00	10	No
Equipment	Service Vehicle	619	1FTPF12V09KC	7	$15,516.00	10	No
Equipment	Service Vehicle	621	1FTPF12V29KC	7	$15,516.00	10	No
Equipment	Service Vehicle	622	1FTPF12V49KC	7	$15,516.00	10	No
Equipment	Service Vehicle	618	1FDBF2A68CEC	5	$29,178.00	10	No
Equipment	Service Vehicle	617	1FTFW1CF8EKC	2	$35,182.00	10	No

Facilities Assets

Asset Category	Asset Class	Asset Name	ID/Serial No.	Age (Yrs)	TERM Scale Condition	Replacement Cost/Value	Useful Life Benchmark (Yrs)	Past Useful Life Benchmark
Facilities	Passenger Stati	Downtown Bus Stati	BLD71	19	4	$498,493.00	50	No
Facilities	Admin/Mainter	Good Earth Transit E	N/A	5	5	$2,248,160.00	50	No
Facilities	Fuel Station			5	5	$112,000.00	20	No
Facilities	Bus Wash			5	4	$128,213.00	15	No

Rolling Stock Assets

Asset Category	Asset Class	Asset Name	ID/Serial No.	Age (Yrs)	Replacement Cost/Value	Useful Life Benchmark (Yrs)	Past Useful Life Benchmark
Rolling Stock	HD Bus	601G	15GGE2719B1C	5	$332,934.00	10	No
Rolling Stock	HD Bus	602G	15GGE2710B1C	5	$332,934.00	10	No
Rolling Stock	HD Bus	603G	15GGE2712B1C	5	$332,934.00	10	No
Rolling Stock	HD Bus	604G	15GGE2714B1C	5	$332,934.00	10	No
Rolling Stock	HD Bus	609	15GGB271281C	8	$303,288.00	12	No
Rolling Stock	HD Bus	610	15GGB271481C	8	$303,288.00	12	No
Rolling Stock	HD Bus	611	15GGB271681C	8	$303,288.00	12	No
Rolling Stock	HD Bus	612	15GGB271881C	8	$303,288.00	12	No
Rolling Stock	HD Bus	613	15GGB271881C	8	$303,288.00	12	No
Rolling Stock	HD Bus	614	15GGB271071C	8	$303,288.00	12	No
Rolling Stock	HD Bus	615	15GGB271481C	8	$303,288.00	12	No
Rolling Stock	HD Bus	616	15GGB271681C	8	$303,288.00	12	No
Rolling Stock	14-6 Bus	634	1GB6G5BL5B11	5	$98,464.00	5	Yes
Rolling Stock	14-6 Bus	635	1GB6G5BL3B11	5	$98,464.00	5	Yes
Rolling Stock	14-6 Bus	636	1GB6G5BL2B11	5	$98,464.00	5	Yes
Rolling Stock	12-2 Bus	632	1FDFE45P39DA	7	$53,221.00	8	No
Rolling Stock	12-2 Bus	633	1FDFE45P59DA	7	$53,221.00	8	No

Appendix C: Proposed Investment Project List

Project Year	Project Name	Asset/Asset Class	Cost	Priority
2018	Replace 2 Paratransit Buses	12-2 Bus	$150,000.00	Medium
2018	Replace 3 COT Buses	14-6 Bus	$240,000.00	High
2020	Replace two 35' buses	Heavy Duty Bus	$800,000.00	High
2021	Replace two 30' buses	Heavy Duty Bus	$800,000.00	High
2022	Replace two 35' buses	Heavy Duty Bus	$800,000.00	High
2022	Replace two 30' buses	Heavy Duty Bus	$800,000.00	High
2023	Replace two 35' buses	Heavy Duty Bus	$800,000.00	High
2023	Replace Paratransit Buses	12-2 Bus	$170,000.00	High
2023	Replace COT Buses	14-6 Bus	$270,000.00	High
2024	Replace two 35' buses	Heavy Duty Bus	$800,000.00	High