TRANSIT ASSET MANAGEMENT PLAN

Mission Statement

The City of Gainesville Regional Transit System (RTS), through the operation of fixed route and on demand services, seeks to provide high quality affordable public transportation services that are safe, reliable, useful, accessible and efficient. To this end, all employees shall conduct themselves in a professional manner; work to ensure the safety and security of passengers; seek new opportunities to improve and/or expand services; and coordinate public transit services with other agencies, organizations, and transit providers.

Revision History

Agency Name: City of Gainesville, FTA Recipient ID: 1084

Accountable Executive: Anthony Lyons, City Manager

Initial RTS Adoption Date:

Original Effective Date: 10/1/2018

Last Modified By (Name):	Last Modified (Date):

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Executive Summary

A Transit Asset Management Plan (TAMP) 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 a State of Good Repair (SGR). By implementing a TAMP, 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 an SGR include:

- Safety risks
- Decreased system reliability (On-time performance)
- Higher maintenance costs; and/or
- Lower system performance (Missed runs due to breakdown).

Transit Asset Management Plan (TAMP) Policy:

City of Gainesville Regional Transit System has developed this TAMP 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:

The City of Gainesville Regional Transit System provides fixed route bus service and has an extensive core inventory of vehicles and capital assets, including the following:

- 135 Fixed route buses;
- 19 Paratransit vehicles;
- A centrally-located Administration/Operations/Vehicle storage/Refueling & Maintenance facility.
- 2 Transit Stations

Local operating conditions of the transit system consist of Weekday, Saturday and Sunday service hours. Warmer weather conditions place a strain on the A/C and climate controls of revenue service vehicles during the varying seasons experienced in the service area.

RTS has maintained an asset management approach for fleet replacement and facility maintenance. As funding has been available vehicle replacement and building maintenance and upgrades have been completed. The TAMP is further aiding RTS 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

RTS is committed to operating a public transportation system that offers reliable, accessible and convenient service with safe vehicles and facilities. 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 a *State of Good Repair* (SGR).

RTS is currently operating as a FTA-defined *Tier I* transit operator in compliance with (49 CFR § 625.45 (b)(1). Tier I transit providers are those transit agencies that do not operate rail fixed-guideway public transportation systems and have in excess of 100 vehicles in fixed-route revenue service during peak regular service.

This TAMP provides an outlay of how RTS will assess, monitor, and report the physical condition of assets utilized in the operation of the public transportation system. The agency'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 9/30/2022) This TAMP shall be amended during the four-year horizon period when there is a significant change to staff, assets, and/or operations occurring at RTS.

The Accountable Executive:

Per FTA TAM requirements, each transit operator receiving FTA funding shall designate an "Accountable Executive" to implement the TAM Plan. The agency's Accountable Executive shall be the City Manager. The Accountable Executive must balance transit asset management, safety, day-to-day operations, and expansion needs in approving and carrying out the TAM Plan and a public transportation agency safety plan.

The Accountable Executive shall be responsible to ensure the development and implementation of the TAM Plan, in accordance with §625.25 (*Transit Asset Management Plan requirements)*. Additionally, the Compliance & TAM Program Coordinator shall be responsible to ensure the reporting requirements, in accordance with both §625.53 (*Recordkeeping for Transit Asset Management*) and §625.55 (*Annual Reporting for Transit Asset Management*) are completed. Furthermore, the Accountable Executive shall approve the annual asset performance targets, TAMP document, and SGR Policy. These required approvals shall be self-certified by the City Manager via the annual FTA Certifications and Assurances forms in TrAMS.

TAMP Elements:

As a Tier I public transportation provider, the agency has developed and implemented a TAMP containing the following elements:

(1) An inventory of the number and type of capital assets to include: Rolling Stock, Facilities, and Equipment.

(2) A condition assessment of those inventoried assets for which the agency has direct ownership and capital responsibility.

(3) A description of the analytical processes and decision-support tools that the agency uses to estimate capital investment needs over time, and develop its investment prioritization.

(4) The RTS project-based prioritization of investments,

(5) TAM and SGR Policies

(6) Implementation Strategy

(7) List of Key annual Activities

(8) Identification of Resources

(9) Evaluation Plan

State of Good Repair (SGR) Standards Policy:

(See Appendix D).

Annual Goals:

Table 1.1

RTS Annual TAM goals			**FY2018**
Criteria	**Measure**	**Goal**	**Actual**
Safety Risk	Number of facility related accidents	0	0
Maintenance Resources	Vehicles out of service for 30 or more days (MB)	1	2
System performance	Mean distance between failures (MB)	4500	4347

It is the belief of City of Gainesville Regional Transit System that TAMP implementation and monitoring provides a framework for maintaining a SGR by considering the condition of its assets in relation to the local operating environment.

RTS 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 RTS to determine and predict the cost to improve asset condition(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 Benchmarks (ULB), the agency 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 TAMP, RTS utilized FTA ULB measure for transit assets and rolling stock.

Assets cited in this document are financed with federal funding.

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

FTA Min Useful Life Benchmark (ULB)

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
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

FTA NTD Max Useful Life Benchmark (ULB)

Vehicle Type		Default ULB (in years)
AO	Automobile	8
BU	Bus	14
CU	Cutaway bus	10
MV	Minivan	8
VN	Van	8

Table 1.4

RTS Useful Life Benchmarks

Asset Classification	Asset Item	ULB Years	ULB Mileage
Rolling Stock Revenue vehicles (DR) 23Ft	Glaval 23' Cutaway	5	200,000
Rolling Stock Revenue vehicles (DR) 23Ft	Champion 23' Cutaway	5	200,000
Rolling Stock Revenue vehicles (DR) 23Ft	Goshen 23' Cutaway	5	200,000
Rolling Stock Revenue vehicles (MB) 40ft	Gillig Phantom	14	500,000
Rolling Stock Revenue vehicles (MB) 40ft	Gillig Lowfloor Diesel	14	500,000
Rolling Stock Revenue vehicles (MB) 40ft	Gillig Lowfloor Hybrid Diesel Electric	14	500,000
Rolling Stock Revenue vehicles (MB) 35ft	Gillig Lowfloor	14	500,000
Rolling Stock Revenue vehicles(MB) 40ft	Gillig Phantom	14	500,000
Facility: Administration, Maintenance Garage	34 SE 13th Rd, Gainesville, FL 32601	40	N/A
Facility Transit Station	Rosa Parks	40	N/A
Facility Transit Station	Butler Plaza	40	N/A
Facility: Administration, Maintenance Garage	100 SE 10th Ave, Gainesville,	40	N/A
Equipment Non- Revenue service vehicles	Sedans, Pick-up Trucks and Vans	8	60,000
Equipment Non- Revenue service vehicles	Cutaways 23’	5	200,000

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 TAMP SGR Standards, the agency requires each vehicular asset and facility meeting FTA TAMP criteria to have a physical condition assessment conducted on an annual basis, where applicable. The condition assessments uses 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 information on condition assessments.

SGR Performance Measures & Targets:

SGR performance measures combine the measures of ULB and physical condition to create a performance measures 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 annual 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 exceeded 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 RTS owns, operates and has a direct capital responsibility, included in the TAMP asset inventory, are comprised of: Rolling Stock, Equipment, and Facilities (at the time of this writing, RTS is not a grantee that operates passenger rail service). Therefore, RTS does not have any associated rail infrastructure in its asset portfolio.

Assets are inventoried and tracked by entering into AMS Accounting Software. The City of Gainesville property control procedures require annual inventory of all assets that include condition reporting that are performed by RTS staff. The RTS maintenance division utilizes FleetNet EAM software system to track and schedule fleet and facility maintenance and manage parts room inventory.

Table 2.1

Asset Inventory Summary

Description	Count
Rolling Stock - Fixed route buses	135
Rolling Stock - Cutaways/Para-Transit	19
Equipment - Service Vehicles	48
Equipment - Non-Vehicle	10
Facilities	11

Rolling Stock

Rolling stock is an RTS-owned and operated revenue service vehicle used in the provision of providing public transportation, and includes vehicles used to primarily transport passengers. RTS does not utilize or operate any third-party rolling stock assets. In addition to the TAMP, data for rolling stock assets is maintained and updated in our AMS accounting system by Finance and Inventory control by the Maintenance Supervisors and Managers. The following required data fields are maintained for each rolling stock asset (public transit vehicle):

External Vehicle ID
Asset Description
Vehicle Type
Expected Useful Life
Expected Useful Miles
Useful Life Benchmark (ULB)
Anticipated Replacement
License Plate
Gross Vehicle Weight
Vehicle Features
Capacity
Purchase Status (New/Used)
Purchase Source (Dealer/Vendor)
Fuel Type
Asset Tag #
Classification
Vehicle Title Ownership
Mileage
VIN Number
Manufacturer
Year Built/In Service Date/Age
Reported Condition Assessment
Purchase Cost
Purchase Date
Seating/Standing/Wheelchair
Length of Vehicle
Current Status of Vehicle
Storage location

Make/Model
Grant Source Used for Purchase (State/Federal/ %)

Disposition Date, Cost & Buyer
Grant Number

Table 2.2

RTS Fleet Inventory

Rolling Stock - Fixed Route Buses

Vehicle Type	Vehicle #	Model Year	Life Years	Life Mileage	Policy Year Replace
GILLIG LOW FLOOR TRANSIT BUS, 35FT	19-111	2000	14	500,000	2014
GILLIG 40FT BUS	551-558	2001	14	500,000	2015
GILLIG PHANTOM TRANSIT BUS, 40FT	2502-2517	2002	14	500,000	2016
GILLIG PHANTOM TRANSIT BUS, 40FT	2520-2538	2004	14	500,000	2018
GILLIG PHANTOM TRANSIT BUS, 40FT	559-568	2005	14	500,000	2019
GILLIG PHANTOM TRANSIT BUS, 40FT	569-572	2006	14	500,000	2020
GILLIG PHANTOM TRANSIT BUS, 40FT	573-577	2007	14	500,000	2021
GILLIG LOW FLOOR TRANSIT BUS, 40FT	701-712	2007	14	500,000	2021
GILLIG LOW FLOOR TRANSIT BUS, 40FT	801-804	2009	14	500,000	2023
GILLIG LOW FLOOR TRANSIT BUS, 40FT	1001-1017	2010	14	500,000	2024
GILLIG LOW FLOOR TRANSIT BUS, 40FT	1102-1106	2011	14	500,000	2025
GILLIG LOW FLOOR TRANSIT BUS, 40FT	1202-1207	2012	14	500,000	2026
GILLIG LOW FLOOR TRANSIT BUS, 40FT	1401-1403	2015	14	500,000	2029
GILLIG LOW FLOOR TRANSIT BUS, 40FT	1501-1502	2015	14	500,000	2029
GILLIG LOW FLOOR TRANSIT BUS, 40FT	1601-1607	2016	14	500,000	2030
GILLIG LOW FLOOR HYBRID TRANSIT BUS, 40FT	1200-1201	2012	14	500,000	2026
GILLIG LOW FLOOR HYBRID TRANSIT BUS, 40FT	1300-1302	2013	14	500,000	2027
GILLIG LOW FLOOR TRANSIT BUS, 40FT	1800-1811	2018	14	500,000	2032

Rolling Stock - Cutaways/Paratransit

Vehicle Type	Vehicle #	Model Year	Life Years	Life Mileage	Policy Year Replace
FORD E-450 CUTAWAY PARATRANSIT VAN	3716	2012	5	200,000	2017

CHAMPION CUTAWAY CRUSADER	3962	2015	5	200,000	2020
CHEVROLET CHAMPION CRUSADER	3990	2015	5	200,000	2020
CHEVROLET CHAMPION CRUSADER	3991	2015	5	200,000	2020
CHEVROLET CHAMPION CRUSADER	3992	2015	5	200,000	2020
CHEVROLET CHAMPION CRUSADER	3993	2015	5	200,000	2020
GLAVAL CUTAWAY ADA VAN	4039	2015	5	200,000	2020
GLAVAL CUTAWAY ADA VAN	4040	2015	5	200,000	2020
GLAVAL CUTAWAY ADA VAN	4041	2015	5	200,000	2020
GLAVAL CUTAWAY ADA VAN	4042	2015	5	200,000	2020
GLAVAL CUTAWAY VAN	4062	2016	5	200,000	2021
GLAVAL CUTAWAY VAN	4063	2016	5	200,000	2021
GLAVAL CUTAWAY VAN	4064	2016	5	200,000	2021
GLAVAL CUTAWAY VAN	4065	2016	5	200,000	2021
GLAVAL CUTAWAY VAN	4066	2016	5	200,000	2021
GLAVAL CUTAWAY VAN	4067	2016	5	200,000	2021
GLAVAL CUTAWAY VAN	4069	2016	5	200,000	2021
GLAVAL CUTAWAY VAN	4159	2016	5	200,000	2021

Equipment:

Equipment evaluated per FTA requirements includes all non-revenue service vehicles regardless of value, and any agency -owned equipment with a cost of $50,000 or under 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. RTS does not utilize or operate any third-party non-revenue service vehicle equipment assets. All non-revenue service vehicle equipment assets are owned and operated by RTS.

In addition to the TAMP, data for non-revenue service vehicle equipment assets is updated in AMS Accounting system by Finance, internal spreadsheets and maintained through FleetNet EAM by Maintenance Supervisors and Managers. The following required data fields are maintained for each non-revenue service vehicle equipment asset:

External Vehicle ID
Asset Description
Vehicle Type
Vehicle Title Ownership
Mileage
VIN Number
Manufacturer
Year Built/In Service Date/Age
Reported Condition Assessment
Purchase Cost
Purchase Date
Asset Tag #
Classification
Last Maintenance Performed
Expected Useful Life
Expected Useful Miles
Useful Life Benchmark (UBL)
Anticipated Replacement or Rehab Year
License Plate
Gross Vehicle Weight
Vehicle Features
Capacity: Seating

Purchase Status (New/Used)
Purchase Source (Dealer/Vendor)
Fuel Type
Make/Model
Grant Source Used for Purchase (State/Federal %)
Length of Vehicle
Current Status of Vehicle
Storage location
Disposition Date, Cost & Buyer
Grant Number

Table 2.3

RTS Equipment Inventory - Support Fleet

Vehicle Type	Vehicle #	Model Year	Life Years	Life Mileage	Policy Year Replace	Replacement Cost
F350 Service Truck	2691	2003	8	60,000	2011	$58,535.00
Taurus 4 Dr Sedan	3132	2006	8	60,000	2014	$16,500.00
Focus 4 Dr Sedan	3240	2007	8	60,000	2015	$16,500.00
Focus 4 Dr Sedan	3241	2007	8	60,000	2015	$16,500.00
Focus 4 Dr Sedan	3242	2007	8	60,000	2015	$16,500.00
F-450 / Utility Bed	3337	2008	8	60,000	2016	$58,535.00
138 Econoline Van	3351	2008	8	60,000	2016	$46,267.00
Ford Escape Hybrid	3595	2010	8	60,000	2018	$32,900.00
Ford Focus	3596	2010	8	60,000	2018	$16,500.00
Ford Focus	3597	2010	8	60,000	2018	$16,500.00
F-150 / Pick Up	3637	2011	8	60,000	2019	$19,755.00
F-250 / Pick Up	3638	2011	8	60,000	2019	$23,367.00
Ford Escape Hybrid	3639	2011	8	60,000	2019	$32,900.00
Ford Escape Hybrid	3640	2011	8	60,000	2019	$32,900.00
Ford Escape Hybrid	3646	2011	8	60,000	2019	$32,900.00
F-450 / Utility Bed	3647	2011	8	60,000	2019	$58,535.00
Focus 4 Dr Sedan	3648	2012	8	60,000	2020	$16,500.00
Focus 4 Dr Sedan	3649	2012	8	60,000	2020	$16,500.00
Focus 4 Dr Sedan	3650	2012	8	60,000	2020	$16,500.00
Focus 4 Dr Sedan	3651	2012	8	60,000	2020	$16,500.00
Focus 4 Dr Sedan	3652	2012	8	60,000	2020	$16,500.00
Ford Escape Hybrid	3712	2012	8	60,000	2020	$32,900.00
Ford Focus	3885	2013	8	60,000	2021	$16,500.00

Ford Focus	3886	2013	8	60,000	2021	$16,500.00
Ford Focus	3887	2013	8	60,000	2021	$16,500.00
Grand Caravan SE	3627	2011	8	60,000	2019	$46,267.00
Uplander Van	3478	2008	8	60,000	2016	$46,267.00
Uplander Van	3479	2008	8	60,000	2016	$46,267.00
Uplander Van	3480	2008	8	60,000	2016	$46,267.00
Uplander Van	3481	2008	8	60,000	2016	$46,267.00
Ford Focus	4049	2015	8	60,000	2023	$16,500.00
Ford Focus	4050	2015	8	60,000	2023	$16,500.00
Ford Focus	4051	2015	8	60,000	2023	$16,500.00
Mobile Ventures MV-1	4052	2014	8	60,000	2022	$46,267.00
Mobile Ventures MV-1	4053	2014	8	60,000	2022	$46,267.00
Ford Focus	4190	2017	8	60,000	2025	$16,500.00
Mobile Ventures MV-1	4207	2016	8	60,000	2024	$46,267.00
Ford Focus	4208	2017	8	60,000	2025	$16,500.00
Ford Focus	4209	2017	8	60,000	2025	$16,500.00
Ford Focus	4210	2017	8	60,000	2025	$16,500.00
Ford Focus	4211	2017	8	60,000	2025	$16,500.00
Champion Challenger CU	4269	2017	5	200,000	2022	$71,019.00
Champion Challenger CU	4270	2017	5	200,000	2022	$71,019.00
Champion Challenger CU	4271	2017	5	200,000	2022	$71,019.00
Champion Challenger CU	4272	2017	5	200,000	2022	$71,019.00
Champion Challenger CU	4378	2019	5	200,000	2024	$71,019.00
Champion Challenger CU	4379	2019	5	200,000	2024	$71,019.00
Champion Challenger CU	4380	2019	5	200,000	2024	$71,019.00

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

Equipment is any agency-owned asset item (single line item or group) with a cost at or over $50,000 in acquisition value. Equipment includes items that are utilized in the operations of providing public transportation service. RTS does not utilize or operate any third-party equipment assets. All equipment assets are owned and operated by RTS.

In the provision of operating a public transportation system, RTS utilizes five key equipment elements that have an acquisition value of $50,000 or more (Table 2.4). These five equipment elements are all part of the Facility asset class, specifically, RTS (HQ) Administration & Maintenance Facility, and Fuel Island Facilities.

In addition to the TAMP, data for non-vehicle equipment assets is maintained and updated in AMS Accounting system, FleetNet EAM and internal spreadsheets on an annual basis by Finance and Maintenance Supervisors and Managers. The following required data fields are maintained for each non-vehicle equipment asset with an acquisition value of $50,000 or more:

Type	Book Value
Asset Tag	Location
Description	Acquisition Date
Status	Purchase Source
Age	Cost
Condition	Item Serial Number
Rehabilitation Year	Model
Replacement Year	Grant Source Used for Purchase (State/Federal %)
Vendor	Grant Number
Quantity	Disposition Date, Cost & Buyer
Units	SGR Status

Table 2.4

RTS Equipment Inventory - Fixtures, Furnishings & Equipment

Description	Asset #	Acquisition Date	Life Years	Policy Year Replace	Replacement Cost
ROSA PARKS TRANSFER STATION CCTV	29179	8/9/2015	5	2020	$90,607.37
RTS ADMIN FIXED ROUTE SCHEDULING SOFTWARE	29611	5/29/2017	2	2019	$446,282.00
MVTRANSPORTATION PASS ON SOFTWARE	27576	11/14/2010	2	2012	$80,753.40
RTS ADMIN - APC SOFTWARE	27641	6/12/2011	2	2013	$58,500.00
RTS CAMPUS, BLDG A, B, & PARKING LOT - SECURITY 101 ACCESS CONTROL VIDEO SYSTEM	29533	1/1/2017	5	2022	$117,891.30
FLEETNET SOFTWARE	27187	8/23/2009		2011	$159,395.00
RTS CAMPUS GARAGE, BLDG C STERTIL-KONI IN-GROUND LIFT	29126	10/1/2014	5	2019	$140,866.00
RTS CAMPUS GARAGE, BLDG E STERTIL-KONI PLATFORM LIFT, SKY-250-48	29134	10/1/2014	5	2019	$108,390.50
RTS CAMPUS GARAGE, BLDG C STERTIL-KONI PLATFORM LIFT, SKY250-40	29135	10/1/2014	5	2019	$93,824.50
RTS CAMPUS GARAGE, BLDG C STERTIL-KONI PLATFORM LIFT	29133	10/1/2014	5	2019	$92,992.00

Facilities

Facilities are any structure used in providing public transportation where RTS owns and has a direct capital responsibility. Facilities utilized and owned or operated by RTS Include: operations, maintenance and administrative buildings, and two passenger stations.

Table 2.5

RTS Facilities

Facility Name	Address	Active/ Excess	Placed In Service	Expected life (years)	Year Useful Life Met	Construction or Purchase Price	Replacement Cost Estimate
RTS Campus - Bldg E - Bus Wash	34 SE 13th Rd, Gainesville, FL 32601	Active	2/28/2016	40	2056	$3,973,312.90	$3,973,312.90
RTS Campus - Bldg D - Fueling Station	34 SE 13th Rd, Gainesville, FL 32601	Active	2/28/2016	40	2056	$5,056,942.80	$5,056,942.80
RTS Campus - Bldg A	34 SE 13th Rd, Gainesville, FL 32601	Active	2/28/2016	40	2056	$10,113,886.60	$10,113,886.60
RTS Campus - Bldg C - Garage	34 SE 13th Rd, Gainesville, FL 32601	Active	2/28/2016	40	2056	$15,532,040.00	$15,532,040.00
RTS Campus - Bldg B	34 SE 13th Rd, Gainesville, FL 32601	Active	2/22/2015	40	2055	$1,409,942.00	$1,409,942.00
RTS Campus - Land	34 SE 13th Rd, Gainesville, FL 32601	Active	8/11/2013	40	2043	$1,379,265.82	$1,379,265.82
Rosa Parks Downtown Station	700 SE 3rd St, Gainesville, FL 32601	Active	9/30/2007	40	2047	$2,307,449.29	$2,307,449.29
100 SE 10th Ave	100 SE 10th Ave	Excess	1/31/1978	40	2018	$12,760,056.98	$12,760,056.98
Modular Building	100 SE 10th Ave	Excess	12/31/2009	10	2019	$435,331.80	$435,331.80
Employee Parking	99 SE 10th Ave	Excess	5/16/20005	20	2025	$262,759.91	$262,759.91
Butler Transfer Station (Land+Improvements)	4231 SW 30th Ave	Active	11/17/2015	40	2055	$2,946,658.50	$2,946,658.50

RTS currently utilizes one complex for operations, administration, maintenance, storage, and refueling. RTS has two separate transit stations in the City of Gainesville. The main transfer station is located close to the downtown area less than a mile from the main RTS complex.

In addition to the TAMP, data for facility assets is maintained and updated in AMS Accounting System, and internal spreadsheets on an annual basis by Finance and the Facility Coordinator and Maintenance Managers. The following required data fields are maintained for each facility asset:

- Asset Ownership
- Asset Description/Name
- Physical Location/Address
- Asset Tag #
- External ID
- Classification
- Asset Type
- Status
- Age/Year Built
- Reported Condition
- Book Value
- Rehabilitation Year
- Replacement Year
- Vendor/Builder
- Features & Amenities (ADA)
- Disposition Date
- Lot Size
- Build Cost
- Purchase Date
- In-Service Date
- Purchase Status (New/Used)
- Expected Useful Life
- Land Owner
- Building Owner
- Facility Size
- Section of Larger Facility
- Last Maintenance
- Number of Floors
- Number of Elevators or Escalator
- Number of Parking Spaces (Public, Private, ADA)
- FTA Facility Classification
- Interior (Sq. Ft.)
- Cost & Buyer
- Grant # and Source Used for Purchase (State/Federal %)

SECTION 3: ASSET CONDITION ASSESSMENT

RTS assesses the condition of its assets by utilizing a visual condition rating assessment scale (Table 3.1). This rating scale assigns a numerical value or rank based on the physical condition(s) presented by each individual asset throughout its life cycle. The rating scale is based on numbers 1 to 5, with five being new and one being poor. Assets with a rating of 2.5 or higher are considered to be in a SGR. The inspection process and documentation forms utilized to assess facility and vehicle assets are detailed in the following TAMP companion documents:

- FDOT Maintenance Plan (see Appendix C1).
  - SGR Facility/Building/Equipment Inspection Procedures & Inspection Assessment Standards
- FTA Maintenance Plan (see Appendix C2).
- RTS Preventive Maintenance Guidelines (see Appendix C3).
  - SGR Revenue & Non-Revenue Vehicle Inspection Procedures & Inspection Assessment Standards

Table 3.1

Vehicle & Facility Condition Rating Scale

Score	Rating	Description
5	Excellent	New, original, could not be improved upon.
4	Good	May show signs of use, but otherwise close to excellent.
3	Fair	Shows definite signs of use, but no repairs are needed.
2	Poor	In use but minor repairs will make more serviceable
1	-	Major Repairs needed to bring to SGR; usable condition.

Rolling Stock

The TAMP Rolling Stock condition assessment consists of assigning a condition rating to all rolling stock assets for which the agency owns and has a direct capital responsibility. A condition assessment ranking is not conducted in the TAMP for rolling stock assets for which the agency does not own the rolling stock asset, the rolling stock asset is owned by a 3rd party, and/or where the agency does not have a direct capital responsibility for the rolling stock asset. However, for the purposes of NTD reporting (Inventory & Condition Submittal), all agency owned and 3rd party owned rolling stock assets (regardless of direct capital responsibility) are assigned an asset condition rating. At the time of this writing, the agency owns and operates all fixed route and Demand Response paratransit rolling stock (revenue vehicles).

Condition assessments for fixed route bus rolling stock and demand response para-transit rolling stock can be found on Table 3.2.

Equipment: Non-Revenue Service Vehicles

The TAMP Equipment condition assessment consists of assigning a TERM 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 agency owns and has a direct capital responsibility.

A condition assessment ranking is not conducted in the TAMP for equipment assets for which the agency 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 agency does not have a direct capital responsibility.

However, for the purposes of NTD reporting (Inventory & Condition Submittal), all agency owned equipment (with direct capital responsibility) that is a non-revenue service vehicle is only reported. At the time of this writing, the agency owns and operates all equipment that is either a non-revenue service vehicle or a non-vehicle equipment asset with an acquisition cost at or above $50,000.

The non-revenue service vehicle equipment condition assessment can be found on (Table 3.2).

Table 3.2

RTS Vehicle Condition Rating Report

Rolling Stock - Buses

Vehicle #	Description	Model Year	Condition
19	GILLIG LF 35'	2000	2
107	GILLIG LF 35'	2001	2
110	GILLIG LF 35'	2001	2
111	GILLIG LF 35'	2001	2
540	GILLIG PHANTOM	2001	2
541	GILLIG PHANTOM	2001	2
542	GILLIG PHANTOM	2001	2
543	GILLIG PHANTOM	2001	2
544	GILLIG PHANTOM	2001	2
545	GILLIG PHANTOM	2001	2
546	GILLIG PHANTOM	2001	2
547	GILLIG PHANTOM	2001	2
548	GILLIG PHANTOM	2001	2
549	GILLIG PHANTOM	2001	2
550	GILLIG PHANTOM	2001	2
551	GILLIG 2001/2494	2001	2
552	GILLIG/2001/2526	2001	2

553	GILLIG/2001/2527	2001	2
554	GILLIG/2001/2528	2001	2
555	GILLIG/2001/2529	2001	2
556	GILLIG/2001/2530	2001	2
557	GILLIG/2001 2544	2001	2
558	GILLIG/2001 2545	2001	2
559	GILLIG C29D096N4	2004	3
560	GILLIG C29D096N4	2004	3
561	GILLIG C29D096N4	2004	3
562	GILLIG C29D096N4	2005	3
563	GILLIG C29DO96N4	2005	3
564	GILLIG C29DO96N4	2005	3
565	GILLIG C29DO96N4	2005	3
566	GILLIG C29D097N4	2005	3
567	GILLIG C29ND096N4	2005	3
568	GILLIG C29D102N4	2005	3
569	GILLIG PHANTOM	2006	3
570	GILLIG PHANTOM	2006	3
571	GILLIG PHANTOM	2006	3
572	GILLIG PHANTOM	2006	3
573	GILLIG C29D102N4	2007	3
574	GILLIG C29D102N4	2007	3
575	GILLIG C29D102N4	2007	3
576	GILLIG C29D102N4	2007	3
577	GILLIG C29D102N4	2007	3
701	GILLIG 40' LOW FLOOR	2007	3
702	GILLIG 40' LOW FLOOR	2007	3
703	GILLIG 40' LOW FLOOR	2007	3
704	GILLIG 40' LOW FLOOR	2007	3
705	GILLIG 40' LOW FLOOR	2007	3
706	GILLIG 40' LOW FLOOR	2007	3
707	GILLIG 40' LOW FLOOR	2007	3
708	GILLIG 40' LOW FLOOR	2007	3

709	GILLIG 40' LOW FLOOR	2007	3
710	GILLIG 40' LOW FLOOR	2007	3
711	GILLIG 40' LOW FLOOR	2007	3
712	GILLIG 40' LOW FLOOR	2007	3
801	GILLIG LOWFLOOR	2009	3
802	GILLIG LOWFLOOR	2009	3
803	GILLIG LOWFLOOR	2009	3
804	GILLIG LOWFLOOR	2009	3
1001	G27D102N4 GILLIG	2010	3
1002	G27D102N4 GILLIG	2010	3
1003	G27D102N4 GILLIG	2010	3
1004	G27D102N4 GILLIG	2010	3
1005	G27D102N4 GILLIG	2010	3
1006	G27D102N4 GILLIG	2010	3
1007	G27D102N4 GILLIG	2010	3
1008	G27D102N4 GILLIG	2010	3
1009	G27D102N4 GILLIG	2010	3
1010	G27D102N4 GILLIG	2010	3
1011	G27D102N4 GILLIG	2010	3
1012	G27D102N4 GILLIG	2010	3
1013	G27D102N4 GILLIG	2010	3
1014	G27D102N4 GILLIG	2010	3
1015	G27D102N4 GILLIG	2010	3
1016	G27D102N4 GILLIG	2010	3
1017	G27D102N4 GILLIG	2010	3
1101	G27D102N4 GILLIG	2011	4
1102	G27D102N4 GILLIG	2011	4
1103	G27D102N4 GILLIG	2011	4
1104	G27D102N4 GILLIG	2011	4
1105	G27D102N4 GILLIG	2011	4
1106	G27D102N4 GILLIG	2011	4
1200	12 GILLIG HYBRID LF	2012	4
1201	12 GILLIG HYBRID LF	2012	4

1202	12' GILLIG LOWFLOOR	2012	4
1203	12' GILLIG LOWFLOOR	2012	4
1204	12' GILLIG LOWFLOOR	2012	4
1205	12' GILLIG LOWFLOOR	2012	4
1206	12' GILLIG LOWFLOOR	2012	4
1207	12' GILLIG LOWFLOOR	2012	4
1300	13 GILLIG HYBRID LF	2013	4
1301	13 GILLIG HYBRID LF	2013	4
1302	13 GILLIG HYBRID LF	2013	4
1401	2014 LOWFLOOR GILLIG	2014	4
1402	2014 LOWFLOOR GILLIG	2014	4
1403	2014 LOWFLOOR GILLIG	2014	4
1501	2015 LOWFLOOR GILLIG	2015	4
1502	2015 LOWFLOOR GILLIG	2015	4
1601	2016 LOWFLOOR GILLIG	2016	4
1602	2016 LOWFLOOR GILLIG	2016	4
1603	2016 LOWFLOOR GILLIG	2016	4
1604	2016 LOWFLOOR GILLIG	2016	4
1605	2016 LOWFLOOR GILLIG	2016	4
1606	2016 LOWFLOOR GILLIG	2016	4
1607	2016 LOWFLOOR GILLIG	2016	4
1801	GILLIG LOW FLOOR	2018	5
1802	GILLIG LOW FLOOR	2018	5
1803	GILLIG LOW FLOOR	2018	5
1804	GILLIG LOW FLOOR	2018	5
1805	GILLIG LOW FLOOR	2018	5
1806	GILLIG LOW FLOOR	2018	5
1807	GILLIG LOW FLOOR	2018	5
1808	GILLIG LOW FLOOR	2018	5
1809	GILLIG LOW FLOOR	2018	5
1810	GILLIG LOW FLOOR	2018	5
1811	GILLIG LOW FLOOR	2018	5
2502	PHANTOM GILLIG 40'	2002	2

2504	PHANTOM GILLIG 40'	2002	2
2507	PHANTOM GILLIG 40'	2002	2
2509	PHANTOM GILLIG 40'	2002	2
2512	PHANTOM GILLIG 40'	2002	2
2517	PHANTOM GILLIG 40'	2002	2
2520	PHANTOM GILLIG 40'	2004	2
2533	PHANTOM GILLIG 40'	2004	2
2538	PHANTOM GILLIG 40'	2004	2
2571	GILLIG LOWFLOOR 40'	2006	3
2572	GILLIG LOWFLOOR 40'	2006	3
2574	GILLIG LOWFLOOR 40'	2006	3
2575	GILLIG LOWFLOOR 40'	2006	3
2577	GILLIG LOWFLOOR 40'	2006	3
2578	GILLIG LOWFLOOR 40'	2006	3
2580	GILLIG LOWFLOOR 40'	2006	3
2581	GILLIG LOWFLOOR 40'	2006	3
2582	GILLIG LOWFLOOR 40'	2006	3
2583	GILLIG LOWFLOOR 40'	2006	3
2601	GILLIG LOWFLOOR 40'	2007	3
Rolling Stock - Cutaways/Para-Transit			
Vehicle #	**Description**	**Model Year**	**Condition**
3716	FORD E-450 CUTAWAY PARATRANSIT VAN	2012	2
3962	CHAMPION CUTAWAY CRUSADER	2015	3
3990	CHEVROLET CHAMPION CRUSADER	2015	3
3991	CHEVROLET CHAMPION CRUSADER	2015	3
3992	CHEVROLET CHAMPION CRUSADER	2015	3
3993	CHEVROLET CHAMPION CRUSADER	2015	3
4039	GLAVAL CUTAWAY ADA VAN	2015	3
4040	GLAVAL CUTAWAY ADA VAN	2015	3
4041	GLAVAL CUTAWAY ADA VAN	2015	3
4042	GLAVAL CUTAWAY ADA VAN	2015	3

4062	GLAVAL CUTAWAY VAN	2016	4
4063	GLAVAL CUTAWAY VAN	2016	4
4064	GLAVAL CUTAWAY VAN	2016	4
4065	GLAVAL CUTAWAY VAN	2016	4
4066	GLAVAL CUTAWAY VAN	2016	4
4067	GLAVAL CUTAWAY VAN	2016	4
4069	GLAVAL CUTAWAY VAN	2016	4
4159	GLAVAL CUTAWAY VAN	2016	4
4273	CHAMPION CHALLENGER	2017	5

RTS Non-Revenue Support Vehicles

Vehicle #	Description	Model Year	Condition
2691	FORD/350 SER/TRK	2003	2
3132	FORD TAURUS	2006	2
3240	FORD FOCUS 4DR SEDAN	2007	3
3241	FORD FOCUS 4DR SEDAN	2007	3
3242	FORD FOCUS 4DR SEDAN	2007	3
3337	FORD F450 TRUCK	2008	3
3351	FORD VAN	2008	3
3478	2008 CHEVVAN UPLANDR	2008	2
3479	2008 CHEVVAN UPLANDR	2008	2
3480	2008 CHEVVAN UPLANDR	2008	2
3481	2008 CHEVVAN UPLANDR	2008	2
3595	FORD ESCAPE HYBRID	2010	3
3596	FORD FOCUS	2010	3
3597	FORD FOCUS	2010	3
3627	DODGE GRAND CARAVAN	2010	3
3637	FORD F150 1/2 TON PU	2011	3
3638	FORD F250 3/4 TON PU	2011	3
3639	FORD ESCAPE HYBRID	2011	3
3640	FORD ESCAPE HYBRID	2011	3
3646	FORD ESCAPE HYBRID	2011	3

3647	FORD F450 UTILITYBED	2011	3
3648	FORD FOCUS 4DR SEDAN	2012	3
3649	FORD FOCUS 4DR SEDAN	2012	3
3650	FORD FOCUS 4DR SEDAN	2012	3
3651	FORD FOCUS 4DR SEDAN	2012	3
3652	FORD FOCUS 4DR SEDAN	2012	3
3712	FORD ESCAPE HYBRID	2012	3
3885	2013 FORD FOCUS	2013	3
3886	2013 FORD FOCUS	2013	3
3887	2013 FORD FOCUS	2013	3
4049	2015 FORD FOCUS 4D	2015	4
4050	2015 FORD FOCUS 4D	2015	4
4051	2015 FORD FOCUS 4D	2015	4
4052	2014 MOB VENT MV-1	2014	4
4053	2014 MOB VENT MV-1	2014	4
4190	2017 FORD FOCUS	2017	5
4207	2016 MOVT MV-1	2016	4
4208	FORD FOCUS SE	2017	5
4209	FORD-FOCUS SE	2017	5
4210	FORD FOCUS SE	2017	5
4211	FORD/FOCUS SE	2017	5
4269	Champion Challenger	2017	5
4270	Champion Challenger	2017	5
4271	Champion Challenger	2017	5
4272	Champion Challenger	2017	5

Equipment: Over $50,000 in Acquisition Value (Non-Vehicle)

Table 3.3

RTS Non-Vehicle Equipment Condition Rating Report

Description	Acquisition Date	Condition
ROSA PARKS TRANSFER STATION CCTV	8/9/2015	4
RTS ADMIN FIXED ROUTE SCHEDULING SOFTWARE	5/29/2017	4
MVTRANSPORTATION PASS ON SOFTWARE	11/14/2010	4
RTS ADMIN - APC SOFTWARE	6/12/2011	4
RTS CAMPUS, BLDG A, B, & PARKING LOT - SECURITY 101 ACCESS CONTROL VIDEO SYSTEM	1/1/2017	4
FLEETNET SOFTWARE	8/23/2009	4
RTS CAMPUS GARAGE, BLDG C STERTIL-KONI IN-GROUND LIFT	10/1/2014	4
RTS CAMPUS GARAGE, BLDG E STERTIL-KONI PLATFORM LIFT, SKY-250-48	10/1/2014	3
RTS CAMPUS GARAGE, BLDG C STERTIL-KONI PLATFORM LIFT, SKY250-40	10/1/2014	4
RTS CAMPUS GARAGE, BLDG C STERTIL-KONI PLATFORM LIFT	10/1/2014	4

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 RTS owns and has a direct capital responsibility. A condition assessment ranking is not conducted in the TAM Plan for facility assets for which RTS does not own the asset, the facility asset is owned by a 3rd party, and/or where RTS does not have a direct capital responsibility for the facility asset.

However, for the purposes of NTD reporting (Inventory & Condition Submittal), all RTS owned and 3rd party owned facility assets (regardless of direct capital responsibility) are included in the Facility Asset Inventory (Table 2.4). Only RTS owned facility assets with a direct capital responsibility are assigned a facility asset condition rating (Table 3.1). At the time of this writing, RTS only owns, operates, and has a direct capital responsibility for its administration, operations, and maintenance headquarters, fuel islands and two transit stations. However, each of these facility assets were inspected and assessed individually.

As detailed in RTS's Maintenance Plan, each condition assessment inspection will take place around July/August of each calendar year. The inspection of major facility components and subcomponents will be conducted by the Maintenance Supervisor and a RTS staff member, with results and data reported to the

Transit Director. Facility equipment assets that have an acquisition vale of $50,000 or greater will be included in the facility condition assessment inspection.

As detailed in RTS's Maintenance Plan (SGR Facility/Building/Equipment Inspection Procedures & Inspection Assessment Standards), the process developed to assess the condition of the facilities where RTS has direct capital responsibility and ownership is as follows:

1. Define the facility components and sub-components;
2. Establish the condition assessment language based on the FTA Scale;
3. Conduct the assessment on an annual basis, to be conducted around July/August of each year;
4. Calculate the overall condition by using the *Median Value Method*; and
5. Document and report the assessed condition. Retain the following data:

    - Agency inspection & maintenance procedures/schedules found in the Fleet and Facility Maintenance Plans
    - Inspection schedule/alignment with reporting schedule
    - Warranty status & age of components
    - Third-party inspection records
    - Previous inspection records

The components and sub-components that will be inspected for a condition assessment in an Administrative/Maintenance and/or Passenger facility can be found in the RTS Transit Facility Field Inspection Guide (Appendix A). The 2018 facility condition assessment rating scale can be found on Table 3.1. The 2018 facility inspection data showed that all RTS facilities had an average condition rating of 3.5.

Table 3.4

RTS Facility Condition Rating Report

Description	Acquisition Date	Condition
RTS Campus - Bldg E - Bus Wash	2/28/2016	4
RTS Campus - Bldg D - Fueling Station	2/28/2016	5
RTS Campus - Bldg A	2/28/2016	4
RTS Campus - Bldg C - Garage	2/28/2016	4
RTS Campus - Bldg B	2/22/2015	4
RTS Campus - Land	8/11/2013	4
Rosa Parks Downtown Station	9/30/2007	3
100 SE 10th Ave	1/31/1978	2
Modular Building	12/31/2009	3
Employee Parking	5/16/05	3
Butler Transfer Station (Land+Improvements)	11/17/2015	4

SECTION 4: DECISION SUPPORT TOOLS & MANAGEMENT APPROACH

Sections 4 and 5 of this document are interrelated and detail the process and tools used to manage the lifecycle planning of capital public transportation assets. RTS staff within the maintenance, finance/grants, compliance, operations & safety, and executive departments utilizes a variety of management practices, policies, and technology to manage, maintain, and plan throughout the life cycle 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). RTS has electronic software, FleetNet EAM that shows the utilization for asset lifecycle management, manuals and Bus Replacement Schedule spreadsheets are also used. An explanation of the decision support tools can be found in (Table 4.2).

Table 4.1	
RTS TAM Decision Support & Capital Asset Investment Planning Process	
Annual management meeting to assess performance and set goals.	
1	Maintenance, Operations, IT, Grants, and Transit Director review needs based on safety deficiencies, asset ULD, agency capacity, customer demand, maintenance needs,
2	Prioritize projects based on funding availability
3	Development of asset investment priority list to report for Program of Projects
4	Contract advertising RFP and award process
5	City Commission approval for approved RFP awards
6	Placement on TIP/STIP
7	Project/Program implementation and monitoring

Table 4.2	
RTS TAM Decision Support Tools	
Documents	**Description**
Facility and Maintenance Plans	Details procedures related to City owned assets includes PM schedules, work order process
Preventative Maintenance Guidelines Rolling Stock	Details procedures related to City owned Rolling stock and vehicles

	includes PM schedules and inspection processes.
Purchasing Procedure & RTS supplemental Procurement Policies and Procedures	RTS supplemental policies list all FTA purchasing policies and requirement for the acquisition and disposal of assets.
Capital Plan/List of Prioritization of Projects/Programs	The Plan of Capital projects is updated annually based on the level of funding and priority of projects.

Management Approach to Asset Management:

The primary management approach utilized to maintain an 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, RTS 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 RTS encounters and identifies as unacceptable safety risk associated with an asset, the asset shall be given higher investment prioritization, to the extent practicable.

Performing an analysis of the asset life cycle at the individual asset level is just one management approach RTS 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 snapshot of each asset's current status. The asset lifecycle stages consist of the following strategies:

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

Table 4.3		
Acquisition and Renewal Strategy		
Asset Category	**Asset Class**	**Acquisition and Renewal Strategy**

Rolling Stock	BU - Bus	Transition to 100 % low or no emission buses. Replacement based on ULB and funding availability
Rolling Stock	CU - Para-transit cutaway	5 year 200,000 project from birth of asset
Equipment - Non-revenue vehicles	SUP - Support Vehicles	Replace support vehicles based on ULB and funding availability
Facility	Administration, Maintenance, Transit Stations, Fuel Stations	Maintained on a semiannual basis to extend ULB

Table 4.4

Maintenance Strategy

Asset Category	**Asset Class**	**Maintenance Activity**	**Frequency**
Rolling Stock	BU - Bus	Clean, Wash & Vacuum	Daily
		Pre-trip Inspection	Daily
		PM Service	Mileage - 6k
		SGR Inspection	Annually
		Transmission Inspection	Mileage - 6k
		Rear End Inspection	Mileage - 6k
		Air Dryer Inspection	Mileage - 6k
		Engine Breather Inspection	Mileage - 6k
		A/C Inspection	Annually
		Farebox Inspection	Mileage - 6k
		Tire Inspection	Daily
		ADA Systems Inspection	Mileage - 6k
Rolling Stock	CU - Paratransit Cutaway	Clean, Wash & Vacuum	Daily
		Pre-trip Inspection	Daily
		PM Service	Mileage - 5k

		SGR Inspection	Annually
		Transmission Inspection	Mileage - 5k
		Rear End Inspection	Mileage - 5k
		A/C Inspection	Annually
		Farebox Inspection	Mileage - 5k
		Tire Inspection	Daily
		ADA Systems Inspection	Mileage - 5k
Equipment	SUP - Support Vehicles	Clean, Wash & Vacuum	Quarterly
		Pre-trip Inspection	Daily
		Post-trip Inspection	Daily
		PM Service	Mileage - 5k
		SGR Inspection	Mileage - 5k
Facilities	Administrative, Maintenance, Transit Stations	Facility and Equipment Inspection	Semi-annually

Table 4.5

Overhaul Strategy

Asset Category	Asset Class	Acquisition and Renewal Strategy
Rolling Stock	BUS - Bus	It is RTS policy to repair damaged or non-functioning assets and components on an "as-needed" basis. RTS performs mid-life engine replacements in (BU). Assets are replaced once the following conditions are met: (1) the asset's ULB has been met and funding is available or (2) the asset is considered a total loss by covering insurance.
Rolling Stock	CU - Paratransit Cutaway VN - Van	
Equipment - Non revenue vehicles	SUP - Support Vehicles	
Facilities	Administration, Maintenance, Transit Stations, Fuel Stations	

Table 4.6

Disposal Strategy

Asset Category	Asset Class	Disposal Strategy
Rolling Stock	BUS - Bus	Buses, once ULB is met or exceeded, are disposed of using the following method: Online auction.
Rolling Stock	CU - Paratransit Cutaway VN - Van	Paratransit vans and cutaways vans, once ULB is met or exceeded, are disposed of using the following method: online auction.
Equipment - Non revenue vehicles	SUP - Support Vehicles	Non-revenue service vehicles, once ULB is met or exceeded, are disposed of using the following method: Public Auction.
Facilities	Administration, Maintenance, Transit Stations, Fuel Stations	Facilities and real estate, once ULB is met or exceeded, are disposed of using the following method: Obtain appraisals solicit sealed bids.

Table 4.7

Risk Management Strategy

Risk	Mitigation Strategy
Loss of significant amounts of federal/state/local funding	Extend ULB, if possible adjust service and maintenance activities that are in balance with budget.
Fuel supply chain disruption	Fuel off site or with another municipality and/or private sector organization
Parts supply chain disruption	Partner with other transit agencies and OEMs to retain a parts supply chain.
Catastrophic loss of asset(s) due to natural or man-made disasters and hazards	Use backup facility, reserve vehicles from other transit agencies adjust service during recovery

SECTION 5: PRIORITIZED LIST of INVESTMENTS

Investment Prioritization Process:

RTS shall perform an investment prioritization analysis on an 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 5.1).

The investment prioritization analysis aids RTS 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 RTS estimates would achieve its SGR goals, and a ranking of projects and programs based on implementation priority over the TAMP horizon period of four (4) years.

RTS will rank selected projects and programs to improve or manage the SGR of capital assets for which RTS has a direct capital responsibility. The ranking criteria of projects and programs shall be consistent throughout the TAMP. 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 the alteration of transit facilities. Furthermore, when developing an investment prioritization list, RTS 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 TAMP 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 agency 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.

Table 5.1

Investment Prioritization

Project Year	Project Name	Asset/Asset Class	Cost	Priority
2018	Diesel Bus Acquisition	Revenue Vehicles	1,001,912.00	high
2018	Electric Bus Acquisition	Revenue Vehicles	2,420,000.00	high
2018	Support Vehicles	NR Vehicles	45.000.00	low
2018	Cutaway 23’	NR Vehicle	72,200.00	med
2018	Radio Equipment	P25 compliant 2 way radios	150,000.00	med
2019	Electric Bus Acquisition	Revenue Vehicles	1,000,000.00	high
2019	Voice annunciation equipment Upgrade	Equipment	1,348,312.00	high

2019	Cutaway 23’	NR Vehicle	72,200.00	med
2020	Diesel Bus Acquisition	Revenue Vehicles	1,000,000.00	high
2020	Support Vehicles	NR Vehicles	45,000.00	low
2020	Cutaway 23’	NR Vehicle	72,500.00	med
2021	Diesel Bus Acquisition	Revenue Vehicles	1,000,000.00	high
2021	Support Vehicles	NR Vehicles	45,000.00	low
2021	Cutaway 23’	NR Vehicles	72,500.00	med
2021	Diesel Bus Acquisition	Revenue Vehicles	1,000,000.00	high
2022	Support Vehicles	NR Vehicles	45,000.00	low
2022	Cutaway 23’	NR Vehicle	72,500.00	med

SECTION 6: ANNUAL PERFORMANCE TARGETS & MEASURES

This section lists the process, data sources, and methodology used in the development of the FTA requirement for RTS 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 RTS's SGR performance targets (Table 6.1).

RTS shall 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, RTS 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 December meeting of the City Commission. *TAMP 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 RTS 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 quarterly 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
REVENUE VEHICLES					
Age - % of revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB)	BU - Bus	34%	32%	31%	31%
	CU - Cutaway Bus	14%	23%	47%	9%
EQUIPMENT					

Age - % of vehicles that have met or exceeded their Useful Life Benchmark (ULB)	Non-Revenue/ Service Automobile	47%	40%	33%	30%
FACILITIES					
Condition - % of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) scale	Administration	0%	0%	0%	0%
	Maintenance	0%	0%	0%	0%
	Passenger Facilities	0%	0%	0%	0%

SECTION 7: RECORDKEEPING & NTD REPORTING

RTS shall maintain all supporting TAM Plan records and documents. RTS shall make TAMP records available to Federal (FTA), State (FDOT) and MPO's entities that provide(s) funding to the agency, and to aid in the planning process. RTS 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 agency's 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 RTS's fiscal year ends on September 30, annual TAM data reporting to NTD shall be completed by the agency by the last business 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 quarterly basis, updated, and incorporated into RTS’s capital and budget planning, and reporting processes. Beginning in 2019, TAMP 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 9/30/2022) beginning with the completion of the initial TAM plan in 2018, continuing with full implementation in FY 2019, and ending four years later on FY 2023.

Projected Fleet Replacement will change annually as new data is entered into the TAM Plan Template. The initial projections from TAMP data can be seen in RTS Fleet Replacement Schedules (see Appendix G, Table G1, Table G2, and Table G3). This TAMP shall be updated annually in conjunction with annual NTD reporting.

Table 8.1

Continuous Improvement Fleet Replacement

Year	Projected Needs to Achieve SGR	Anticipated Funding
2018	28,431,121.00	1,117,000.00
2019	4,898,675.25	1,117,000.00
2020	1,073,559.38	1,117,000.00
2021	4,841,918.79	1,117,000.00
2022	7,406,909.77	1,117,000.00

SECTION 9: CONCLUSION

Management team, staff, and employees of the City of Gainesville Regional Transit System firmly believe that by implementing this *Transit Asset Management Program* (TAMP), that it will allow the transportation system to meet its mission and offer safe, efficient, reliable, and accessible public transportation options to the general public of the Gainesville community. In addition, RTS believes that by implementing this TAMP, 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.

APPENDIX A

RTS Transit Facility Field Assessment Guide

This document was drafted based on recommendations from the FTA Facility Condition Assessment Guidebook

Background

This form has been created to assist RTS Transit develop a Transit Asset Management (TAM). Part of the process of developing the TAM plan is completing required facility assessments of facilities. These assessments are required by the FTA to be a part of the plan. Per the FTA direct capital responsibility is defined as:

> "Direct capital responsibility means that you as a transit operator can influence the condition of the asset with your financial resources. You have financial responsibility for an asset if you have or will have financial resources that can influence the condition of the asset. For example, if the asset is part of a project that is part of your program of capital projects, then you have capital responsibility for that asset. If you are leasing an asset, you may have capital responsibility for that asset, depending on the terms of the lease."

To elaborate on and clarify the FTA definition, direct capital responsibility means that you are doing more than simply paying rent to use the facility. If you are helping to pay for improvements to the facility or are expected to pay for repairs if the facility becomes damaged or dilapidated then you have direct capital responsibility. **It is critical to note that you must complete a facility assessment using this form and the RTS Transit Facility Assessment Spreadsheet for any facility you hold direct capital responsibility for.**

Instructions

There are 3 sections of this form: the Facility Assessment Master List, the Individual Facility Assessment: Administrative/Maintenance forms, the Individual Facility Assessment: Passenger forms, and the Facility Component Descriptions. Details on each section are as follows:

- *Individual Facility Forms:* There are 2 versions of this form, the Administrative/Maintenance form and the Passenger form. There are 2 versions because there is a slight difference in the facility components that are assessed between Administrative/Maintenance facilities and Passenger facilities. The difference is in component I), for Administrative/Maintenance facilities I) is equipment and for Passenger facilities I) is fare collection. Use the Administrative/Maintenance form for Administrative and Maintenance facilities and use the Passenger form for Passenger facilities. Within these forms there are 2 sections: one for basic information and one for the ratings of sub-components. The assessment process will be focused on rating facility sub-components on a 1-5 scale. The sub-components are broken out from 10 components that comprise the entire facility. Your job is to assign a 1-5 rating for each of these sub-components using the Facility Component Descriptions.
- *Facility Component Descriptions:* In this section there are descriptions of each component group and their sub-components and what constitutes each level of rating 1-5, pulled from the FTA Facility Condition Assessment Guidebook. You will use this section to help determine how to rate the subcomponents of your facilities.

The following is the process that should be used to complete the facility assessments:

1. Determine which facilities you have direct capital responsibility for using the FTA definition found in the background section of this document.
2. Determine if the facility is an Administrative, Maintenance, or Passenger facility. For Administrative and Maintenance facilities use the Individual Facility Assessment: Administrative/Maintenance form. For Passenger facilities use the Individual Facility Assessment: Passenger form.
3. List out the basic facility information on the chosen form: Facility Name, Facility Address, Facility Age. If the facility does not have a name use a combination of the street address and facility type to describe the facility. For example, a maintenance facility found at 1234 Peachtree St would be named as Peachtree St Maintenance if it does not already have a name.
4. Estimate the replacement cost of the facility. What it would take to build from scratch. Including all costs.
5. List the name of the person completing the assessment and the date in which they are completing the assessment.

Individual Facility Assessment: Administrative/Maintenance/Garage

Facility Name: _____

Facility Address: _____

Facility Age: _____

Estimated Replacement Cost: $_____

Assessment Date: _____

Signature certifying the information on this form is accurate: _____

Sub-Component Rating Summary

Component	Sub-components	1-5 Rating	Component	Sub-components	1-5 Rating
Substructure	Foundation		**HVAC**	Energy supply	
	Basement			Generation/distribution	
Shell	Superstructure			Controls	
	Roof			Chimneys/Vents	
	Exterior		**Fire Protection**	Sprinklers	
	Shell appurtenances			Standpipes	
Interiors	Partitions			Hydrants	
	Stairs		**Electrical**	Distribution	
	Finishes			Wiring	
Conveyance	Elevators			Communications	
	Escalators			Other	
	Lifts		**Equipment**		
Plumbing	Fixtures		**Site**	Roadways/Driveways	
	Water Distribution			Signage	
	Sanitary Waste			Parking lots	
	Rain water drainage			Pedestrian Areas	
HVAC	Energy supply			Fences/Walls	
	Generation/distribution			Landscaping	
	Controls			Site Utilities	
	Chimneys/Vents				

Does any portion of the facility pose an immediate safety risk?

If yes, please describe the risk and attach photos of the risk.

Write any additional comments about the facility here.

Individual Facility Assessment: Transit

Facility Name: _____

Facility Address: _____

Facility Age: _____

Estimated Replacement Cost: $_____

Assessment Date: _____

Signature certifying the information on this form is accurate: _____

Ratings Table

Component	Sub-components	1-5 Rating
Substructure	Foundation	
	Basement	
Shell	Superstructure	
	Roof	
	Exterior	
	Shell appurtenances	
Interiors	Partitions	
	Stairs	
	Finishes	
Conveyance	Elevators	
	Escalators	
	Lifts	
Plumbing	Fixtures	
	Water Distribution	
	Sanitary Waste	
	Rain water drainage	
HVAC	Energy supply	
	Generation/distribution	
	Controls	
	Chimneys/Vents	

Component	Sub-components	1-5 Rating
HVAC	Energy supply	
	Generation/distributio n	
	Controls	
	Chimneys/Vents	
Fire Protection	Sprinklers	
	Standpipes	
	Hydrants	
Electrical	Distribution	
	Wiring	
	Communications	
	Other	
Fare Collection		
Site	Roadways/Driveways	
	Signage	
	Parking lots	
	Pedestrian Areas	
	Fences/Walls	
	Landscaping	
	Site Utilities	

APPENDIX B

DEFINITIONS

Accountable Executive: *M*eans a single, identifiable person who has ultimate responsibility for carrying out the safety management system of a public transportation agency; responsibility for carrying out transit asset management practices; and control or direction over the human and capital resources needed to develop and maintain both the agency's public transportation agency safety plan, in accordance with 49 U.S.C. 5329(d), and the agency's transit asset management plan in accordance with 49 U.S.C. 5326.

Asset Category: Means a grouping of asset classes, including a grouping of equipment, a grouping of rolling stock, a grouping of infrastructure, and a grouping of facilities.

Asset Class: Means a subgroup of capital assets within an asset category. For example, buses, trolleys, and cutaway vans are all asset classes within the rolling stock asset category.

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

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

Decision Support Tool: Means an analytic process or methodology: (1) To help prioritize projects to improve and maintain the state of good repair of capital assets within a public transportation system, based on available condition data and objective criteria; or (2) To assess financial needs for asset investments over time.

Direct Recipient: *M*eans an entity that receives Federal financial assistance directly from the Federal Transit Administration.

Equipment: Means an article of nonexpendable, tangible property having a useful life of at least one year.

Exclusive-Use Maintenance Facility: Means a maintenance facility that is not commercial and either owned by a transit provider or used for servicing their vehicles.

Facility: Means a building or structure that is used in providing public transportation.

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

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

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

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

Investment Prioritization: Means a transit provider's ranking of capital projects or programs to achieve or maintain a state of good repair. An investment prioritization is based on financial resources from all sources that a transit provider reasonably anticipates will be available over the TAM plan horizon period.

Key Asset Management Activities: Means a list of activities that a transit provider determines are critical to achieving its TAM goals.

Life-Cycle Cost: Means the cost of managing an asset over its whole life.

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

Performance Measure: Means an expression based on a quantifiable indicator of performance or condition that is used to establish targets and to assess progress toward meeting the established targets.

Performance Target: *M*eans a quantifiable level of performance or condition, expressed as a value for the measure, to be achieved within a time period required by the Federal Transit Administration (FTA).

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

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

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

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

Service Vehicle: Means a unit of equipment that is used primarily either to support maintenance and repair work for a public transportation system or for delivery of materials, equipment, or tools.

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

Subrecipient: *M*eans 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.

Transit Asset Management (TAM): Means the strategic and systematic practice of procuring, operating, inspecting, maintaining, rehabilitating, and replacing transit capital assets to manage their performance, risks, and costs over their life cycles, for the purpose of providing safe, cost-effective, and reliable public transportation.

Transit Asset Management (TAM) Plan: Means a plan that includes an inventory of capital assets, a condition assessment of inventoried assets, a decision support tool, and a prioritization of investments.

Transit Asset Management (TAM) Policy: Means a transit provider's documented commitment to achieving and maintaining a state of good repair for all of its capital assets. The TAM policy defines the transit provider's TAM objectives and defines and assigns roles and responsibilities for meeting those objectives.

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

Transit Asset Management (TAM) System: Means a strategic and systematic process of operating, maintaining, and improving public transportation capital assets effectively, throughout the life cycles of those assets.

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

Useful life: Means either the expected life cycle of a capital asset or the acceptable period of use in service determined by FTA.

Useful life benchmark (ULB): *M*eans 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.

APPENDIX C

C1.

FDOT Maintenance Plan

Introduction

The mission of the Regional Transit System (RTS) is to provide safe, reliable, clean, and well-maintained vehicles throughout the useful life of the asset. The function of the maintenance plan is to provide a consistent systematic program that will enable RTS to properly inspect, maintain and service vehicles while following the manufacturer's recommended maintenance schedule(s).

Maintenance Plan Goals

It is the goal of RTS to operate a maintenance program using proven fleet management practices. Scheduling work allows time, materials, tools, equipment, and labor to be effectively managed. A maintenance plan has been adopted to make these goals attainable.

The maintenance plan is a "living document" including schedules and reports which will be updated periodically to reflect changes in maintenance policies, equipment, and program improvements.

The goals of the maintenance plan include:

- An effective preventive maintenance program;
- Defect Reporting;
- The proper management of parts, equipment, and fleet;
- A warranty recovery program;
- Quality assurance

Fleet Summary

A physical inventory of equipment is kept on file by both the City's property control personnel and RTS. The fleet information is updated as changes occur in the fleet inventory.

COUNT	VEH MFR	VEH #	YEAR MANUFACTURED	VIN#	WC LIFT	WC POS
1.	GIL	**19**	2000	15GGD211XY1071328	STEP	2
2.	GIL	**107**	2001	15GGB211211071992	STEP	2
3.	GIL	**110**	2001	15GGB211411071346	STEP	2
4.	GIL	**111**	2001	15GGB211X11071349	STEP	2
5.	GIL	**540**	2001	15GCD201611089440	STEP	2
6.	GIL	**541**	2001	15GCD201X11089442	STEP	2
7.	GIL	**542**	2001	15GCD201X11089444	STEP	2
8.	GIL	**543**	2001	15GCD201111089445	STEP	2
9.	GIL	**544**	2001	15GCD201311089446	STEP	2
10.	GIL	**545**	2001	15GCD201511089447	STEP	2
11.	GIL	**546**	2001	15GCD201711089448	STEP	2
12.	GIL	**547**	2001	15GCD201311110910	STEP	2
13.	GIL	**548**	2001	15GCD201511110911	STEP	2
14.	GIL	**549**	2001	15GCD201711110912	STEP	2
15.	GIL	**550**	2001	15GCD201911110913	STEP	2
16.	GIL	**551**	2001	15GCD201311110857	STEP	2
17.	GIL	**552**	2001	15GCD201511110858	STEP	2
18.	GIL	**553**	2001	15GCD201711110859	STEP	2
19.	GIL	**554**	2001	15GCD201311110860	STEP	2

COUNT	VEH MFR	VEH #	YEAR MANUFACTURED	VIN#	WC LIFT	WC POS
20.	GIL	**555**	2001	15GCD201511110861	STEP	2
21.	GIL	**556**	2001	15GCD201711110862	STEP	2
22.	GIL	**557**	2001	15GCD201911110863	STEP	2
23.	GIL	**558**	2001	15GCD201011110864	STEP	2
24.	GIL	**559**	2004	15GCD291X41112483	STEP	2
25.	GIL	**560**	2004	15GCD291141112484	STEP	2
26.	GIL	**561**	2004	15GCD291341112485	STEP	2
27.	GIL	**562**	2005	15GCD291351112486	STEP	2
28.	GIL	**563**	2005	15GCD291551112487	STEP	2
29.	GIL	**564**	2005	15GCD291751112488	STEP	2
30.	GIL	**565**	2005	15GCD291951112489	STEP	2
31.	GIL	**566**	2005	15GCD291551112490	STEP	2
32.	GIL	**567**	2005	15GCD291751112491	STEP	2
33.	GIL	**568**	2005	15GCD291351112746	STEP	2
34.	GIL	**569**	2006	15GCD291361112747	STEP	2
35.	GIL	**570**	2006	15GCD291561112748	STEP	2
36.	GIL	**571**	2006	15GCD291761112749	STEP	2
37.	GIL	**572**	2006	15GCD291361112750	STEP	2
38.	Gil	**573**	2007	15GCD29171112806	STEP	2
39.	Gil	**574**	2007	15GCD291471112807	STEP	2
40.	Gil	**575**	2007	15GCD291671112808	STEP	2
41.	Gil	**576**	2007	15GCD291871112809	STEP	2
42.	Gil	**577**	2007	15GCD291471112810	STEP	2
43.	GIL	**701**	2007	15GGD271471078081	RAMP	2

COUNT	VEH MFR	VEH #	YEAR MANUFACTURED	VIN#	WC LIFT	WC POS
44.	GIL	**702**	2007	15GGD271671078082	RAMP	2
45.	GIL	**703**	2007	15GGD271871078083	RAMP	2
46.	GIL	**704**	2007	15GGD271X71078084	RAMP	2
47.	GIL	**705**	2007	15GGD271171078085	RAMP	2
48.	GIL	**706**	2007	15GGD271371078086	RAMP	2
49.	GIL	**707**	2007	15GGD271571078087	RAMP	2
50.	GIL	**708**	2007	15GGD271771078088	RAMP	2
51.	GIL	**709**	2007	15GGD271971078089	RAMP	2
52.	GIL	**710**	2007	15GGD271571078090	RAMP	2
53.	GIL	**711**	2007	15GGD271771078091	RAMP	2
54.	GIL	**712**	2007	15GGD271971078092	RAMP	2
55.	GIL	**801**	2009	15GGD271991177014	RAMP	2
56.	GIL	**802**	2009	15GGD271091177015	RAMP	2
57.	GIL	**803**	2009	15GGD271291177016	RAMP	2
58.	GIL	**804**	2009	15GGD271491177017	RAMP	2
59.	GIL	**1001**	2010	15GGD271XA1178306	RAMP	2
60.	GIL	**1002**	2010	15GGD2711A1178309	RAMP	2
61.	GIL	**1003**	2010	15GGD2713A1178309	RAMP	2
62.	GIL	**1004**	2010	15GGD2715A1178309	RAMP	2
63.	GIL	**1005**	2010	15GGD2711A1178310	RAMP	2
64.	GIL	**1006**	2010	15GGD2713A1178311	RAMP	2
65.	GIL	**1007**	2010	15GGD2715A1178312	RAMP	2
66.	GIL	**1008**	2010	15GGD2717A1178313	RAMP	2
67.	GIL	**1009**	2010	15GGD2719A1178314	RAMP	2

COUNT	VEH MFR	VEH #	YEAR MANUFACTURED	VIN#	WC LIFT	WC POS
68.	GIL	**1010**	2010	15GGD2710A1178315	RAMP	2
69.	GIL	**1011**	2010	15GGD2712A1178316	RAMP	2
70.	GIL	**1012**	2010	15GGD2714A1178317	RAMP	2
71.	GIL	**1013**	2010	15GGD2716A1178318	RAMP	2
72.	GIL	**1014**	2010	15GGD2718A1178319	RAMP	2
73.	GIL	**1015**	2010	15GGD2714A1178320	RAMP	2
74.	GIL	**1016**	2010	15GGD2716A1178321	RAMP	2
75.	GIL	**1017**	2010	15GGD2718A1178322	RAMP	2
76.	GIL	**1101**	2011	15GGD2718B1178435	RAMP	2
77.	GIL	**1102**	2011	15GGD2718B1178435	RAMP	2
78.	GIL	**1103**	2011	15GGD2717B1179558	RAMP	2
79.	GIL	**1104**	2011	15GGD2715B1179560	RAMP	2
80.	GIL	**1105**	2011	15GGD2717B1179561	RAMP	2
81.	GIL	**1106**	2011	15GGD2719B1179562	RAMP	2
82.	GIL	**1200**	2012	15GGD3019C1180342	RAMP	2
83.	GIL	**1201**	2012	15GGD3010C1180343	RAMP	2
84.	GIL	**1202**	2012	15GGD2713C1180336	RAMP	2
85.	GIL	**1203**	2012	15GGD2715C1180337	RAMP	2
86.	GIL	**1204**	2012	15GGD2717C1180338	RAMP	2
87.	GIL	**1205**	2012	15GGD2719C1180339	RAMP	2
88.	GIL	**1206**	2012	15GGD2715C1180340	RAMP	2
89.	GIL	**1207**	2012	15GGD2717C1180341	RAMP	2
90.	GIL	**1300**	2013	15GGD3015D1181859	RAMP	2
91.	GIL	**1301**	2013	15GGD3011D1181860	RAMP	2

COUNT	VEH MFR	VEH #	YEAR MANUFACTURED	VIN#	WC LIFT	WC POS
92.	GIL	**1302**	2013	15DGD3013D1181861	RAMP	2
93.	GIL	**1401**	2014	15GGD2715E1183998	RAMP	2
94.	GIL	**1402**	2014	15DGD2717E1183999	RAMP	2
95.	GIL	**1403**	2014	15DGD2718E1184000	RAMP	2
96.	GIL	**1501**	2015	15GGD271811845595	RAMP	2
97.	GIL	**1502**	2015	15GGD2718F1184595	RAMP	2
98.	GIL	**1601**	2016	15GGD2714G1188886	RAMP	2
99.	GIL	**1602**	2016	15GGD2716G1188887	RAMP	2
100.	GIL	**1603**	2016	15GGD2718G1188888	RAMP	2
101.	GIL	**1604**	2016	15GGD271XG1188889	RAMP	2
102.	GIL	**1605**	2016	15GGD2716G1188890	RAMP	2
103.	GIL	**1606**	2016	15GGD2718G1188891	RAMP	2
104.	GIL	**1607**	2016	15GGD271XG1188892	RAMP	2
105.	GIL	**1801**	2018	15GGD2711J3191434	RAMP	2
106.	GIL	**1802**	2018	15GGD2713J3191435	RAMP	2
107.	GIL	**1803**	2018	15GGD2715J3191436	RAMP	2
108.	GIL	**1804**	2018	15GGD2717J3191437	RAMP	2
109.	GIL	**1805**	2018	15GGD2719J3191438	RAMP	2
110.	GIL	**1806**	2018	15GgD2710J3191439	RAMP	2
111.	GIL	**1807**	2018	15GGD2717J3191440	RAMP	2
112.	GIL	**1808**	2018	15GGD2719J3191441	RAMP	2
113.	GIL	**1809**	2018	15GGD2710J3191442	RAMP	2
114.	GIL	**1810**	2018	15GGD2712J3191443	RAMP	2
115.	GIL	**1811**	2018	15GD271XJ3191772	RAMP	2

COUNT	VEH MFR	VEH #	YEAR MANUFACTURED	VIN#	WC LIFT	WC POS
116.	GIL	**2502**	2002	15GCD271321111353	RAMP	2
117.	GIL	**2504**	2002	15GCD271721111355	RAMP	2
118.	GIL	**2507**	2002	15GCD271221111358	RAMP	2
119.	GIL	**2509**	2002	15GCD271021111360	RAMP	2
120.	GIL	**2512**	2002	15GCD271621111363	RAMP	2
121.	GIL	**2517**	2002	15GCD271421111653	RAMP	2
122.	GIL	**2520**	2004	15GCD291941113605	RAMP	2
123.	GIL	**2533**	2004	15GCD291741112618	RAMP	2
124.	GIL	**2538**	2004	15GCD291041112623	RAMP	2
125.	GIL	**2571**	2006	15GGD291861077351	RAMP	2
126.	GIL	**2572**	2006	15GGD291X61077352	RAMP	2
127.	GIL	**2574**	2006	15GGD291361077354	RAMP	2
128.	GIL	**2575**	2006	15GGD291561077355	RAMP	2
129.	GIL	**2577**	2006	15GGD291961077357	RAMP	2
130.	GIL	**2578**	2006	15GGD291061077358	RAMP	2
131.	GIL	**2580**	2006	15GGD291961077360	RAMP	2
132.	GIL	**2581**	2006	15GGD291061077361	RAMP	2
133.	GIL	**2582**	2006	15GGD291261077362	RAMP	2
134.	GIL	**2583**	2006	15GGD291461077363	RAMP	2
135.	GIL	**2601**	2007	15GGD291171077922	RAMP	2

Vehicle History File

RTS currently utilizes fleet management software (FleetNet) to ensure each vehicle has written record's documenting preventive maintenance, regular maintenance, inspections, lubrication and repairs performed. A vehicle's history

provides information critical to identify trends with vehicle or components. This information is used in determining the useful life of components, and to employ predictive maintenance measures. The history also provides a data to identify fleet defects.

The following records are maintained for the life of the vehicle and include at a minimum the following information:

- Identification of the vehicle, including make, model, license number or other means of positive identification and ownership;
- Date, mileage, and description of each inspection, maintenance, repair or lubrication performed;
- If not owned by the transit agency, the name of the person or company furnishing service with this vehicle; and
- The name and address of any business firm performing an inspection, maintenance, lubrication or repair.

Preventative Maintenance

Preventative maintenance inspections are scheduled by mileage projections. When a vehicle is due for an inspection it will be taken out of service until the inspection is completed. This allows a series of repairs to be carried out while minimizing costs and optimizing the number of operational vehicles.

The checklists for preventive maintenance are consistent with the current operating fleet and in particular with the minimum maintenance requirements for vehicles under warranty to ensure maximum vehicle longevity.

Vehicles are scheduled in “A,” “B,” “C “, “D”, “E” and “F” inspections. These will be performed at 6,000, 12,000, 24,000, 48,000, 96,000 and 192,000 miles throughout the useful life of the vehicle in the following the sequence:

A 6,000 B 12,000 A 18,000 C 24,000 A 30,000 B 36,000

A 6,000 D 48,000 A 54,000 B 60,000 A 66,000 C 72,000

A 78,000 B 84,000 A 90,000 E 96,000 A 102,000 B 108,000

A 114,000 C 120,000 A 126,000 B 132,000 A 138,000 D 144,000

A 150,000 B 156,000 A 162,000 C 168,000 A 174,000 B 180,000

A 186,000 F 192,000

Bus Type II Preventative Maintenance Inspection and Service Checklist: Gillig Low Floor

14-90.009 BUS SAFETY ITEMS INSPECTED ARE IN "( )"WITH CORRESPONDING NUMBER. Example (3a)

0000	NOTE WHEN PROMPTED FOR A "YES" OR "NO" ANSWER ENTER Y OR N IN CHECK BOX
00aa	Pull in steam bay, put vehicle in neutral, set spring brakes. Dump air to doors and shut vehicle down
00ad	remove rear settee fasteners, but leave settee in place
00af	Remove and clean HVAC return filter (replace if needed)
00ah	Inspect evaporator compartment for cleanliness, loose and damaged parts. Any signs of leaks?
00aj	Clean A/C control panel & sensor using canned air (unit not running)
00an	Raise vehicle, completely steam clean under body.
00at	lower vehicle
00ba	Open all exterior compartment doors, pull battery trays out, all engine compartment doors (note any fluid leaks)
00ca	Steam clean all exterior door hinges, top of batteries, and engine compartment
00cd	Inspect all rims condition (cracks, rust) and security **(3O)**
00cg	remove settee and from inside bus steam clean rear of engine area
00da	Using garden hose clean radiator and hydraulic cooler till water runs clear
00ea	Check specific gravity in batteries before filling cells with water record below. Use g=good, f= fair, rc =recharge
00fa	Battery 1 - Start at positive post cell1 _____cell 2_____cell3_____cell4_____cell5_____cell6_____
00ga	Battery 2 - Start at positive post cell1 _____cell 2_____cell3_____cell4_____cell5_____cell6_____
00ha	Fill each battery cell to proper level using distilled water
00ia	Check general battery condition, terminals for corrosion (clean if necessary) apply anti-corrosion protection **(3D)**
00ja	Lube battery tray slides and secure batteries.
00ka	Inspect battery equalizer condition, corrosion, damage

00la	Check battery shut off switch for corrosion, damage and dirt build up
00ma	Fill windshield washer fluid
00na	.ubricate all exterior door hinges, locks, bike rack, windshield wiper pivot post, w/c step edge closeout and outer hinge
00ng	check electric radiator fans protective caps and retain rings
00nn	inspect radiator fan blades for cleanliness and damage
00nt	check radiator fan power cable ends for corrosion
00oa	Close all exterior compartment doors and secure
05aa	Start vehicle, supply air to doors, stow lift and raise bus to proper ride height
05ba	Mount brake test equipment and enter bus number
05ca	Perform three brake test - pull reading from machine and attach to inspection sheet, after returning to garage **(3E)**
05da	Drive test route for "talking bus" system, is it operating correct?
05dg	Check condition and security of radio and handset.
05dm	Prior to leaving for road test perform radio check. Is it operating correctly?
05ea	Drive vehicle on predetermined road test route
05fa	Speedometer, dash gauges all operating correctly? **(3V)**
05ga	Note any warning lights **(3F)**
05ha	Note any unusual operating condition, engine performance, transmission shift, vibration, steering play, noises, etc.
05ia	Operate HVAC system along with defroster working normally?
05ja	Before pulling in garage, at slow speed open entrance and exit door. Did interlock activate and throttle deactivate? **(3L)**
05ka	Bring vehicle in garage, set parking brake, activate fast idle, and operate both doors through all door control positions, ok?
10aa	Check for proper operation of exit door sensitive edge
10ba	Check driver's seat & seat belt condition and assure all functions operate correctly **(3S)**
10ca	Inspect condition of all driver's console, dash and saw tooth panels

10da	Inspect condition and operation of all driver's controls (switches)
10ea	Release parking brake, perform brake pump down. Did low air alarm activate and parking brake "pop" up @ 60 psi?**(3E)**
10fa	check condition and covers of both brake and throttle pedals
10ga	Check proper windshield wiper and washer operation. **(3B)**
10ha	Check driver's shades for condition & operation
10ja	Check steering wheel condition and blow horn **(3A)**
10ka	Check steering column for condition and operation of up/down and back /forth positions
10la	Check condition and security of fire extinguisher, safety triangles **(3T)**
10ma	Push "push to test" on AMEREX display, did audio alarm sound & all LEDs light up? Push "Relay Reset" to return to normal operation
10mb	Assure Amerex display "System Ok" led is illuminated **(3T)**
10mf	Check that all Amerex dash components are present & in their original location, and are in good working order. Check that all Amerex manual actuation switches/remote actuators are unobstructed by vehicle modifications or clutter
10mh	check that Amerex tamper indicators, lock wire seal, pull pins and "In Case Of Fire" instruction label are intact
10mj	Check that Amerex maintenance tag/certificate is in place. Record date of inspections and initial of inspector
10na	Lubricate driver's seat track, brake & throttle pedals
10nn	inspect all i/o panels (four) for chaffing wires, loose connection
15aa	Check condition and security of interior mirrors to include exit door mirror **(3C)**
15ba	With entrance door open check "stop request" signal and sign for proper operation **(3I)**
15ca	Check condition & operation of (3) w/c jump seats (release handle, locking in both the up/down positions) **(3U)**
15da	Check condition & operation of the (8) tie down straps **(3U)**
15ea	Check condition & operation passenger restraints (2) **(3S)(3U)**
15fa	Check condition & operation of the Advance Restraint Module (A.R.M.), lubricate slide lightly
15ga	Check condition and security of all passenger seats

15ha	Check condition and security of all stanchions **(3J)**
15ia	Check wall panel, roof, flooring and standee line condition **(3K)**
15im	Check egress windows for proper operation. lube release bolts and cable **(3N)**
15ja	Check condition, operation of roof hatches **(3N)**
15ka	Check interior dome lights for proper operation **(3I)**
20ca	Activate destination signs and exterior lights test modes
20da	Inspect exterior lights, destination signs for proper operations **(3G)(3H)(3I)**
20fa	Inspect all exterior panels and glass for any damage
20ga	Check windshield wiper arms and exterior mirrors for security **(3C)**
20ha	Drain air tanks, drain wet tank completely first, then the rest. Check for pressure and moisture.
20ia	Check all engine, transmission, surge tank, hydraulic system for proper fluid levels
20ja	Pull in bay, set parking brake and deploy w/c ramp **(3U)**
25aa	Dump air to entrance door, shut engine down
25ba	Open w/c rising floor asm. and vacuum drive platform
25ca	Using penetrating oil clean and then lubricate lightly (using 30w motor oil) drive chain and counter balance asm.
25da	Re-install rising floor, start engine, supply air to entrance door and stow w/c ramp. Shut engine down
25ea	Prepare lift(s) to raise bus
25fa	Release parking brake, raise vehicle. Assure that safety locks are engaged on vehicle lift(s)
25ga	Replace primary fuel filter. Pre-fill before installing.
25gg	replace air dryer cartridge
25gn	check air dryer security
25ha	Supply vehicle air system with shop air
25hn	Replace hydraulic filter
25hn	Change hydraulic fluid (refill with 15w-40 motor oil)
25ia	Change engine oil and filter, take oil sample, prefill filter. **DO NOT LEAVE ENGINE WITHOUT OIL**

25in	Change transmission fluid, take sample. **DO NOT LEAVE TRANSMISSION WITHOUT OIL**
25ja	Visually inspect entire undercarriage front to back for any damage, leaks of any kind, all hose and wire condition
25jg	Replace secondary fuel filter DO NOT PRE-FILL
25jj	Replace DEF filter
25jn	Change coolant filter
25jt	Change Skinner II kit #73642
25jw	Change main & lube filters
25ka	Check Spinner II oil filter, for leaks, damage
25la	Check engine, all fluid lines for leaks, chaffing, bad clamps
25ma	Check radiator and all coolant lines for leaks, chaffing, bad clamps
25na	Inspect condition of engine intake system
25nm	Check charge air cooler and piping, for security, damage
30aa	Check general condition of bottom half of engine compartment
30am	Check all Amerex nozzle blow-off caps are intact, nozzles outlets must be unobstructed to hazard its protecting
30ap	check all Amerex control heads, actuators, hoses, wiring and detectors secure and in good working order
30at	Check all Amerex wiring connections are sealed from weather and good condition
30ba	Check all steering components. tie rod ends, u-joints, box, and pitman arm **(3Q)**
30ca	Check general condition of front axle, fasteners, mud flaps, leveling valves
30cg	Check front shocks and bushings for wear and leaks **(3P)**
30cn	Check front axle, external bump stops and rings for wear or damage **(3P)**
30ct	Check front axle for proper ride height s/b 9" (+/- 1/4")
30cw	Check front axle for loose or damaged mounting parts
30da	Clean and grease fittings, driveshaft (3), camshaft bushings (4), slack adjusters (4), tie rod ends (2), kingpins* (4)

30ea	Clean and grease fittings continue: intermediate shaft (2) drag link (2)
30en	Grease output shaft(1) (use hand gun only) use #2 grease
30fa	Inspect all brake lining condition, wear **(3E)**
30ga	Check all inner wheel seals, outer gaskets for signs of leakage
30gm	Replace front wheel bearing oil
30ha	Check proper wheel bearing oil level
30hn	Clean rear axle breather
30ht	Change rear axle fluid
30ia	Check rear axle for signs of leaks and check for proper gear oil level & twist vent cap
30in	Check driveline fastener torque s/b 115-135 ft. lb.
30ja	Check general condition of tires (side walls/tread) **(3O)**
30ka	Check tire depth and record: lf_____/32, rf_____/32,lri_____/32, lro____/32, rri_____/32, rro_____/32 **(3O)**
30la	Check tire pressure and correct to proper air pressure 110lbs all way around
30ma	Check slack adjuster condition and operation
30na	Remove rear brake chamber end cap, inspect spring for alignment. If misaligned replace piggy back
30oa	Check slack adjuster strokes record: rf_____, lf_____, lr_____, rr_____fr (max strokes, front 2" rear 2.5")**(3E)**
35aa	While checking brake stroke listen for any air leaks
35ba	Check general condition of rear axle, fasteners, mud flaps, leveling valves
35bd	Check rear shocks and bushings for wear and leaks **(3P)**
35bg	Check rear axle for loose or damaged mounting parts **(3P)**
35bn	Check rear axle ride height s/b 11 1/2" (+/- 1/8")
35ca	Lower vehicle, set parking brake.
35da	Visually inspect engine compartment for damaged items (i.e. clamps, loose bolts chaffed line/wires)
35ea	Check condition and security of alt, a/c & air compressor, radiator fans, starter and hydraulic pump
35en	Check hydraulic pump mounting bolts

35fa	Check engine and transmission mounts
35ga	Check condition of all engine drive belts
35gg	Check belt tensioners for wear and security
35gj	inspect engine vibration damper
35hn	replace engine air filter
35ia	Check coolant DCA level and record _____ Add DCA if needed
35id	Replaced DPF filter
35ig	Check exhaust bellows for leaks and alignment **(3R)**
35in	Check exhaust system for leaks, loose fasteners and straps **(3R)**
35iq	Set overhead
35it	Replace secondary fuel filter DO NOT PRE-FILL
35it	replace crankcase breather element
35iv	inspect rear engine area for leaks, lines chaffing, any damaged parts
35iw	re-install settee and fasteners
35jd	Replace air compressor
35je	Replace air compressor discharge line
35jn	Start engine and run for a few minutes, shut down. Check engine and hydraulic fluid levels make necessary adjustments
35ka	Check a/c compressor oil for color and proper level (proper level of oil 1/4 to 1/2 of site glass)
35la	Visually inspect clutch armature for wear & overheating caused by slippage
35lg	check and adjust clutch air gap and check for warp pulley
35lm	Check jump start plug and cables for cracks, chafing, damage and security. Verify boot is in place
35ma	Check Amerex agent cylinder gauge, is it in "green pie zone"? Assure all labels are intact, clean and legible and are secure
35mm	Check all Amerex cylinder, wiring, hose, actuators are secure and good working order
35na	check a/c refrigerant charge (ball floating in receiver tank sight glass)
35oa	Check a/c dry eye in receiver tank & liquid line site glass. Record color here _____

35on	Check heat detector wires for chaffing, kinks, or cuts. Perform cable test **(3T)**
35pa	Inspect a/c condenser for damage and cleanliness
35pn	check wheel stud torque s/b 450 to 500 ft. lbs. **(3O)**
40aa	Park bus clean area

6000 mile A inspection items - no fill

12000 mile B inspection items - yellow fill

24000 mile C inspection items - green fill (annual)

48000 mile D inspection - blue fill

96000 mile E inspection - orange fill

e 192000 mile F inspection - purple fill

Maintenance Guidelines

Six (6) thousand mile A-inspection (typical) to include:

00aa Pull in steam bay, put vehicle in neutral, set spring brakes. Dump air to doors and shut vehicle down

00af Remove and clean HVAC return filter (replace if needed)

00ah Inspect evaporator compartment for cleanliness, loose and damaged parts. Any signs of leaks?

00ba Open all exterior compartment doors, pull battery trays out, all engine compartment doors (note any fluid leaks)

00ca Steam clean all exterior door hinges, top of batteries, and engine compartment

00cd Inspect all rims condition (cracks, rust) and security

00da Using garden hose clean radiator and hydraulic cooler till water runs clear

00ea Check specific gravity in batteries before filling cells with water record below. Use g=good, f= fair, rc =recharge

00fa Battery 1 - Start at positive post cell1 _____cell 2_____cell3_____cell4_____cell5_____cell6_____

00ga Battery 2 - Start at positive post cell1 _____cell 2_____cell3_____cell4_____cell5_____cell6_____

00ha Fill each battery cell to proper level using distilled water

00ia Check general battery condition, battery terminals for corrosion (clean if necessary) apply anti-corrosion protection

00ja Lube battery tray slides and secure batteries.

00ka Inspect battery equalizer condition, corrosion, damage

00la Check battery shut off switch for corrosion, damage and dirt build up

00ma Fill windshield washer fluid

00na Lubricate all exterior door hinges, locks, bike rack, windshield wiper pivot post, w/c step edge closeout and outer hinge

00oa Close all exterior compartment doors and secure

05aa Start vehicle, supply air to doors, stow lift and raise bus to proper ride height

05ba Mount brake test equipment and enter bus number

05ca Perform three brake test - pull reading from machine and attach to inspection sheet, after returning to garage

05da Drive test route for "talking bus" system, is it operating correct?

05dg Check condition and security of radio and handset.

05dm Prior to leaving for road test perform radio check. Is it operating correctly?

05ea Drive vehicle on predetermined road test route

05fa Speedometer, dash gauges all operating correctly?

05ga Note any warning lights

05ha Note any unusual operating condition, engine performance, transmission shift, vibration, steering play, noises, etc.

05ia Operate HVAC system along with defroster working normally?

05ja Before pulling in garage bay, at slow speed open entrance and exit door. Did interlock activate and throttle deactivate?

05ka Bring vehicle in garage, set parking brake, activate fast idle, and operate both doors through all door control positions, ok?

10aa Check for proper operation of exit door sensitive edge

10ba Check driver's seat & seat belt condition and assure all functions operate correctly

10ca Inspect condition of all driver's console, dash and saw tooth panels

10da Inspect condition and operation of all driver's controls (switches)

10ea Release parking brake, perform brake pump down. Did low air alarm activate and parking brake "pop" up @ 60 psi?

10fa check condition and covers of both brake and throttle pedals

10ga Check proper windshield wiper and washer operation.

10ha Check driver's shades for condition & operation

10ja Check steering wheel condition and blow horn

10ka Check steering column for condition and operation of up/down and back /forth positions

10la Check condition and security of fire extinguisher, safety triangles

10ma Push "push to test" on AMEREX display, did audio alarm sound & all LEDs light up? Push "Relay Reset" to return to normal operation

10mb Assure Amerex display "System Ok" led is illuminated

10md check that all Amerex dash components are present & in their original location, and are in good working order

10mf Check that all Amerex manual actuation switches/remote actuators are unobstructed by vehicle modifications or clutter

10mh check that Amerex tamper indicators, lock wire seal, pull pins and "In Case Of Fire" instruction label are intact

10mj Check that Amerex maintenance tag/certificate is in place. Record date of inspections and initial of inspector

10na Lubricate driver's seat track, brake & throttle pedals

15aa Check condition and security of interior mirrors to include exit door mirror

15ba With entrance door open check "stop request" signal and sign for proper operation

15ca Check condition & operation of (3) w/c jump seats (release handle, locking in both the up/down positions)

15da Check condition & operation of the (8) tie down straps

15ea Check condition & operation passenger restraints (2)

15fa Check condition & operation of the Advance Restraint Module (A.R.M.), lubricate slide lightly

15ga Check condition and security of all passenger seats

15ha Check condition and security of all stanchions

15ia Check wall panel, roof, flooring and standee line condition

15ja Check condition, operation of roof hatches

15ka Check interior dome lights for proper operation

20ca Activate destination signs and exterior lights test modes

20da Inspect exterior lights, destination signs for proper operations

20fa Inspect all exterior panels and glass for any damage

20ga Check windshield wiper arms and exterior mirrors for security

20ha Drain air tanks, drain wet tank completely first, then the rest. Check for pressure and moisture.

20ia Check all engine, transmission, surge tank, hydraulic system for proper fluid levels

20ja Pull in bay, set parking brake and deploy w/c ramp

25aa Dump air to entrance door, shut engine down

25ba Open w/c rising floor asm. and vacuum drive platform

25ca Using penetrating oil clean and then lubricate lightly (using 30w motor oil) drive chain and counter balance asm.

25da Re-install rising floor, start engine, supply air to entrance door and stow w/c ramp. Shut engine down

25ea Prepare lift(s) to raise bus

25fa Release parking brake, raise vehicle. Assure that safety locks are engaged on vehicle lift(s)

25ga Replace primary fuel filter. Pre-fill before installing.

25ha Supply vehicle air system with shop air

25hn Replace hydraulic filter

25ja Visually inspect entire undercarriage front to back for any damage, leaks of any kind, all hose and wire condition

25ka Check Spinner II oil filter, for leaks, damage

25la Check engine, all fluid lines for leaks, chaffing, bad clamps

25ma Check radiator and all coolant lines for leaks, chaffing, bad clamps

25na Inspect condition of engine intake system

30aa Check general condition of bottom half of engine compartment

30am Check all Amerex nozzle blow-off caps are intact, nozzles outlets must be unobstructed to hazard its protecting

30ap check all Amerex control heads, actuators, hoses, wiring and detectors secure and in good working order

30at Check all Amerex wiring connections are sealed from weather and good condition

30ba Check all steering components. tie rod ends, u-joints, box, and pitman arm

30ca Check general condition of front axle, fasteners, mud flaps, leveling valves

30da Clean and grease fittings, driveshaft (3), camshaft bushings (4), slack adjusters (4), tie rod ends (2), kingpins* (4)

30ea Clean and grease fittings continue: intermediate shaft (2) drag link (2)

30fa Inspect all brake lining condition, wear

30ga Check all inner wheel seals, outer gaskets for signs of leakage

35ia Check coolant DCA level and record _____ Add DCA if needed

35jn Start engine and run for a few minutes, shut down. Check engine and hydraulic fluid levels make necessary adjustments

35ka Check a/c compressor oil for color and proper level (proper level of oil 1/4 to 1/2 of site glass)

35la Visually inspect clutch armature for wear & overheating caused by slippage

35ma Check Amerex agent cylinder gauge, is it in "green pie zone"? Assure all labels are intact, clean and legible and are secure

35mm Check all Amerex cylinder, wiring, hose, actuators are secure and good working order

35na check a/c refrigerant charge (ball floating in receiver tank sight glass)

35oa Check a/c dry eye in receiver tank & liquid line site glass. Record color here _____

35pa Inspect a/c condenser for damage and cleanliness

40aa Park bus clean area

<u>Twelve (12) thousand mile B-inspection</u>

This inspection will incorporate a complete A-inspection plus the following:

25hn Change hydraulic fluid (refill with 15w-40 motor oil)

25jg Replace secondary fuel filter DO NOT PRE-FILL

25jn Change coolant filter

25nm Check charge air cooler and piping, for security, damage

30hn Clean rear axle breather

35bn Check rear axle ride height s/b 11 1/2" (+/- 1/8")

35ig Check exhaust bellows for leaks and alignment

35in Check exhaust system for leaks, loose fasteners and straps

35it Replace secondary fuel filter DO NOT PRE-FILL

35lm Check jump start plug and cables for cracks, chafing, damage and security. Verify boot is in place

35on Check heat detector wires for chaffing, kinks, or cuts. Perform cable test

35qm replace trim unit in fare box

Twenty-four (24) thousand mile annual C-inspection

This inspection will incorporate a complete A & B inspection plus the following:

00ai Clean A/C control panel & sensor using canned air (unit not running)

00ng check electric radiator fans protective caps and retain rings

00nn inspect radiator fan blades for cleanliness and damage

00nt check radiator fan power cable ends for corrosion

10nn inspect all i/o panels (four) for chaffing wires, loose connection

15im Check egress windows for proper operation. lube release bolts and cable

25gn check air dryer security

30cg Check front shocks and bushings for wear and leaks

30cn Check front axle, external bump stops and rings for wear or damage

30ct Check front axle for proper ride height s/b 9" (+/- 1/4")

30cw Check front axle for loose or damaged mounting parts

30en Grease output shaft(1) (use hand gun only) use #2 grease

30in Check driveline fastener torque s/b 115-135 ft. lb.

35bd Check rear shocks and bushings for wear and leaks

35bg Check rear axle for loose or damaged mounting parts

35en Check hydraulic pump mounting bolts

35gg Check belt tensioners for wear and security

35lg check and adjust clutch air gap and check for warp pulley

35pn check wheel stud torque s/b 450 to 500 ft. lbs.

Forty-Eight (48) thousand mile D-inspection

This inspection will incorporate a complete A, B & C inspection plus the following:

00ad remove rear settee fasteners, but leave settee in place

00an raise vehicle, completely steam clean under body.

00at lower vehicle

00cg remove settee and from inside bus steam clean rear of engine area

25gg replace air dryer cartridge

25jt Change Skinner II kit #73642

25jw Change transmission main & lube filters

35gj inspect engine vibration damper

35hn replace engine air filter

35it replace crankcase breather element

35iv inspect rear engine area for leaks, lines chaffing, any damaged parts

35iw re-install settee and fasteners

Ninety-Six (96) thousand mile E-inspection

This inspection will incorporate a complete A, B, C & D inspection plus the following:

25je Change transmission fluid, take sample. **DO NOT LEAVE TRANSMISSION WITHOUT OIL**

25jj Replace DEF filter

30gm Replace front wheel bearing oil

30ht Change rear axle fluid

35id Replaced DPF filter

35iq Set overhead

One Hundred and Ninety-Two (192) thousand mile F-inspection

This inspection will incorporate a complete A, B, C, D & E inspection plus the following:

35jd Replace air compressor

35je Replace air compressor discharge line

Safety Defect – Safety cannot be compromised. The vehicle cannot be placed into service until repairs are completed.

Mechanical Defect – A defect that will gradually get worse and increase cost. The vehicle cannot be placed into service until repairs are completed, except for emergencies.

Elective Mechanical Defect – An elective mechanical defect is a defect that does not compromise safety, but can if operated beyond a pre-determined mileage. This defect can be scheduled on or before the next preventive maintenance inspection depending on mileage.

Elective or Cosmetic Defect – The defect will not compromise safety and will not cause further damage or cost as it is an aesthetic defect. This vehicle can be scheduled for an off-peak time in the future or at the next preventive maintenance inspection to be repaired.

CITY OF GAINESVILLE
every path starts with passion
FLORIDA

CITY OF GAINESVILLE REGIONAL TRANSIT SYSTEM Vehicle Condition Report

RTS REGIONAL TRANSIT SYSTEM

PRETRIP AND IN-SERVICE BUS INSPECTION

Start Hub Reading: _____ End Hub Reading: _____

Date: _____ #1 Driver's Name: _____ Driver #: _____ ❑ Bus Okay Route: _____ Run: _____

#2 Driver's Name: _____ Driver #: _____ ❑ Bus Okay Route: _____ Run: _____

Bus #: _____ #3 Driver's Name: _____ Driver #: _____ ❑ Bus Okay Route: _____ Run: _____

NOTE: Law requires legible signature (no initials).

PRETRIP INSPECTION: Before departing garage, review previous drivers' maintenance copy found on bus. Cycle wheelchair lift/kneeler. Contact radio dispatch if any noted defects from previous driver have not been repaired. Upon relieving another driver, contact radio dispatch to resolve any outstanding or newly found DOT or "shaded block" defects.

BUS RETURN INSPECTION: Upon returning to garage, park bus in fuel lane and turn in defect report to dispatch.

Driver	Check Defect #1	#2	#3	DOT DEFECTS
				Air Brake Operation
				Air System Leaks
				Driver Seat/Belt
				Exhaust System
				Fluid Leaks
				Fire Extinguisher
				Horn
				Lights-Exterior
				Mirrors-In/Outside
				Rims/Lugs-Wheel Crack
				Suspension System
				Tires
				Triangles
				Windsh./Wipers/Washers
				WHEEL CHAIR
				Lift Operable? Yes No
				No Power
				Lower/Raise/Stow
				Barriers
				Securement Device (straps)
				BRAKES
				Slack
				Pulls Left and/or Right
				Grabs/Squeals/Spongy
				Unequal Front/Rear
				Won't Release
				Warning Signal
				LIGHTS
				Ceiling
				Steps - Front/Rear
				Tell/Tale Dash
				Stop Request
				Destin. Sign - Front/Rear

Driver	Check Defect #1	#2	#3	TIRES
				Low Air
				Cut/Damaged
				Cap Loose
				Worn
				SUSPENSION
				Bellows
				Shock
				Leans/Sways
				MISCELLANEOUS
				Registration Card
				License Card
				Safety Pouch
				Bio Kit
				First Aid Kit
				ENGINE
				Lacks Power
				Hot
				No Start/No Stop
				Races/Stalls
				Oil/Water Leak
				Exhaust Smoke
				Noisy
				No Fast Idle
				TRANSMISSION
				Slips/Jumps Out of Gear
				Rough Shift
				No Shift/Reverse
				Fluid Leak

Driver	Check Defect #1	#2	#3	STEERING
				Hard/Loose/Pulls
				Shimmies
				Tilt Wheel
				A/C AND HEATING
				No A/C or Heat
				Too Warm/Cool
				No Defroster
				A/C On and Off
				Noisy
				BODY
				Damage (circle below)
				Steps
				Windows
				Bumpers
				Compartment Doors
				Roof Hatch - Front/Rear
				Passenger Seats
				Bike Rack
				Advertising - In/Outside
				DOORS
				Fast/Slow - Front/Rear
				Damaged - Front/Rear
				Sensitive Edge
				ELECTRONIC
				Radio Receiver/Transmit
				Farebox Power/Jam/Date
				Destin. Sign-Front/Side
				Passenger Chime

Further Define Problem/Comments:

_____

_____

_____

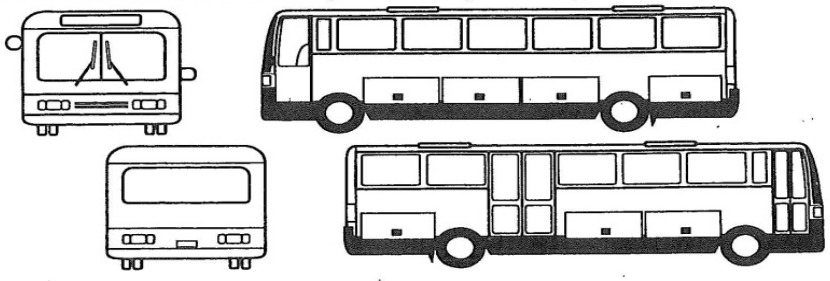
_____

_____

_____

_____

BODY DAMAGE COMMENTS (mark damage to body):



GENERAL NOTES ABOUT THE DAILY VEHICLE INSPECTION CHECKLIST

An important part of preventive maintenance is the establishment of strong communication ties between drivers, mechanics / repair garages, and management. An easy way to ensure and document this communication link is by way of the drivers Vehicle Condition Report Inspection (VCR) Checklist.

The Vehicle Service Attendant (VSA) shall take possession of bus and remove the VCR, found on driver's seat and drop it in the "black box" designated for completed reports in Service Lanes one (1), two (2) and three (3) located on the south side of the RIH. The 2nd and 3rd shift supervisors are responsible for collecting all VCRs. When a VCR indicates a defect maintenance supervisor on duty shall create a work order and assign the proper maintenance personnel to make necessary repair(s) of any driver noted defects.

The sample checklist provided on page 35 meets or exceeds the minimum requirements in Rule 14.90.006 (7) (a) Florida Administrative Code. All collected VCR must be kept on file for a period of fourteen (14) days. When a VCR has a reported defect a copy of the work order created to make the repairs shall be attached and filed along with the other VCRs for a period of 14 days.

Road Calls

Monitoring road calls is arguably the single most important indicator of an agency's overall performance. Road calls are categorized as listed below.

Major Mechanical
A failure of some mechanical element of the revenue vehicle that prevents the vehicle from completing a scheduled revenue trip or from starting the next scheduled revenue trip because actual movement is limited or because of safety concerns.

Other Mechanical
A failure of some other mechanical element of the revenue vehicle that, because of local agency policy, prevents the revenue vehicle from completing a scheduled revenue trip or from starting the next scheduled revenue trip even though the vehicle is physically able to continue in revenue service.

Classifying failures into specific bus subsystems allows Maintenance to identify trends, determines the underlying cause of the problem, and can help in making modifications to the Preventive Maintenance Program as needed to minimize failures. Road call reports will include types of failures and mean distance between failures.

Prior arrangements with a towing service that is competent in recovering vehicles the size and type operated by the transit agency will be made. After a determination is made of the status of a downed vehicle the towing service will be contacted in a timely manner to have the vehicle moved.

In-House Maintenance

Each individual performing bus safety inspections shall be qualified as follows:

a) Can identify defective components.

b) Is knowledgeable of and has mastered the methods, procedures, tools, and equipment used when performing an inspection.

c) Has at least one year of training and/or experience as a mechanic or inspector in vehicle maintenance program and has sufficient general knowledge of buses owned and operated by the bus transit system to recognize deficiencies or mechanical defects.

Outsourced Services

Outsourcing will be utilized for services that require specialized tools and/or equipment such as automatic transmission rebuild, radiator repair, upholstery and windshield/glass replacement. At initial delegation of services, contractor is contacted and provided with all pertinent information. Upon return of all outsourced services RTS staff inspects work to ensure the quality of the service is acceptable. All outsourced materials and labor are recorded in the Fleet Management software applicable to the appropriate asset.

Contractor/Lessee Oversight Procedures

When a contractor/lessee is responsible for maintaining RTS the vehicles, the contractor must follow the RTS maintenance plan. The maintenance activities of the contractor will be monitored by performing annual vehicle inspections (quality assurance checks) and preventative maintenance audits on approximately 25% of the leased vehicles. (See example of inspection form below.) Periodic inspections of the contractor's facility by a designated representative are performed to ensure the conditions are adequate to meet their contractual obligations.

Vehicle Inspection Form

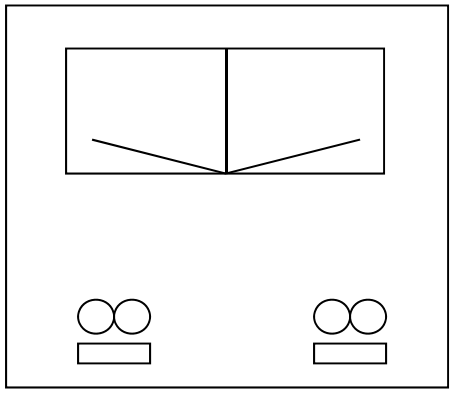
Vehicle Identification:
Vehicle Number: _____
Vehicle Type: ☐ Type I (over 22' including bumpers)
☐ Type II (22' or less including bumpers)
License Tag Number: _____ Mileage:_____
Registration: ☐ Yes ☐ No ☐ Expired Insurance Card: ☐ Yes ☐ No ☐ Expired

Current Maintenance:
Undergoing Maintenance? ☐ Yes ☐ No
Maintenance Items:_____

Vehicle Exterior Inspection

Front & Driver Side Vehicle Inspection:

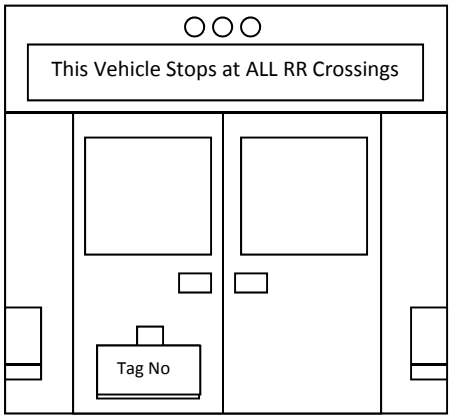
Park Lights:	☐ Works	☐ Does Not Work
Dim Lights:	☐ Works	☐ Does Not Work
Bright Headlights:	☐ Works	☐ Does Not Work
L/R Turn Signals:	☐ Works	☐ Does Not Work
Four Way Flashers:	☐ Works	☐ Does Not Work
Wiper Blades:	☐ Works	☐ Does Not Work
Windshields:	☐ Cracks	☐ No Cracks
Windows:	☐ Cracks	☐ No Cracks
Horn:	☐ Works	☐ Does Not Work
Emergency Brakes:	☐ Works	☐ Does Not Work



Exterior Damage:_____

Rear Vehicle Inspection:

Tail Lights:	☐ Works	☐ Does Not Work
Brake Lights:	☐ Works	☐ Does Not Work
Back-Up Lights: (white lights)	☐ Works	☐ Does Not Work
Reverse Warning Alarm:	☐ Works	☐ Does Not Work
L/R Turn Signals:	☐ Works	☐ Does Not Work
Four Way Flashers:	☐ Works	☐ Does Not Work
Tag Lights:	☐ Works	☐ Does Not Work
Windows:	☐ Cracks	☐ No Cracks
Running Lights:	☐ Works	☐ Does Not Work



Tire Tread Depth & Wear: (Measure Tread Only if Tire Appears Unsafe)
Left Front Tread Depth: (4/32"Min) _____ Right Front Tread Depth: (4/32" Min)_____
Left Rear Tread Depth: (2/32" Min)_____ Right Rear Tread Depth: (2/32" Min) _____

Additional Comments (also use the graphics):
_____

Vehicle Interior Inspection

Standee Line (Yellow) Present? ☐ Yes ☐ No

Steps/Aisles Clear & Clean? ☐ Yes ☐ No

Fire Extinguisher Secure? ☐ Yes ☐ No

Fire Extinguisher Charged? ☐ Green ☐ Red

Vehicle Cleanliness: ☐ Clean ☐ Dirty

Seat Cleanliness: ☐ Clean ☐ Dirty

Floor Cleanliness: ☐ Clean ☐ Dirty

Driver Area Cleanliness (Broom/Unsecured Cargo Present?) ☐ Yes ☐ No

Wheel Chair (W/C) Security – All tie downs (Four per W/C position): ☐ Yes ☐ No

Wheel Chair (W/C) Security – Operational: ☐ Yes ☐ No

Wheel Chair (W/C) Security – Condition: ☐ Yes ☐ No

In Bag? ☐ Yes ☐ No

Clean? ☐ Yes ☐ No

Flares/Triangles Present on Board? ☐ Yes ☐ No

Flares/Triangles Bolted? ☐ Yes ☐ No

A/C Temperature Reading: _____

Driver Seat Belt Retracts Quickly? ☐ Yes ☐ No

Inspected By: _____

Date:
_____

Contractor/Lessee Maintenance Plan

The function of the maintenance plan is to provide a consistent systematic program to properly maintain and service vehicles to meet or exceed the manufacturer's recommended maintenance schedule. MV Transportation's vehicle maintenance program will ensure that all buses operated, and all parts and accessories on such buses, including those specified in Rule 14-90.007, F.A.C., and any additional parts and accessories which may affect safety of operation, including frame and frame assemblies, suspension systems, axles and attaching parts, wheels and rims, and steering systems, are regularly and systematically inspected, maintained, and lubricated to standards that meet or exceed the bus manufacturer's recommendations and requirements. The Maintenance Manager is responsible for ensuring that all vehicles operated are regularly and systematically inspected, maintained, and lubricated according to agency's Maintenance Plan and Preventative Maintenance Guidelines.

1.1 Daily Vehicle Inspections (DVI)

Drivers are required to perform daily vehicle inspections prior to operating the assigned vehicle, during routes, and after all route schedules are completed. The pre-trip inspection includes an inspection of the following parts and devices to ascertain that they are in safe condition and in good working order:
Service brakes
Parking brakes
Tires and wheels
Steering
Horn
Lighting devices
Windshield wipers
Rear vision mirrors
Passenger doors
Exhaust system
Equipment for transporting wheelchairs
Safety, security, and emergency equipment

During the scheduled trips and at the end of the day, the operator will note any additional findings and submit the daily vehicle inspection forms. The process and form/s to be utilized for daily vehicle inspections is included in agency's preventative maintenance guidelines. The daily vehicle inspection forms must be complete with the operator's signature and a check in each box to document that the items are "OK" or a defect is noted in the comments section. If the driver finds any mechanical or other problems that could compromise the safety of the vehicle at any point, the drivers will immediately inform the Maintenance Manager and the vehicle will not be scheduled for service until repaired. Failure to report deficiencies by drivers will lead to disciplinary action.
The Maintenance Manager will review the daily inspections and document the corrective actions taken as a result of any deficiencies identified by the operator. The Maintenance Manager will also periodically conduct vehicle inspections behind the drivers who have completed the vehicle inspections to ensure that the daily vehicle inspections are adequately performed. Once defects are noted they will be prioritized and sorted into categories for repairs. Daily inspection records will be retained for a minimum of two weeks. Once a defect is noted on the inspection form and repaired, the documentation will be attached to the work/repair order and filed in the maintenance files.

1.2 Preventive Maintenance

A preventative maintenance schedule is implemented to inspect for safety hazards and to maintain vehicles in a manner conforming to safety regulations. MV Transportation will perform scheduled preventive maintenance on all vehicles at every 3,000-mile interval following the sequence “A”-“A”-“A”-“B”-“A”-“A”-“A”-“C”-“A”-“A”-“A”-“D”, or every 90days when the vehicle doesn’t reach 3,000 miles. As preventative maintenance inspections are scheduled by projected mileage, the agency will allow ±300 mile deviations in mileage interval, so long as the actual mileage interval meets the manufacturer’s recommended maintenance schedule. Inspection A will be performed every 3,000 miles, inspection B will be performed every 12,000 miles, and inspection C will be performed every 24,000 miles on each vehicle. MV Transportation’s A inspection covers all sections required by Florida Rule 14-90 Safety Inspection. The first A inspection of the year will be marked as the required yearly Safety Inspection. When a vehicle is due for an inspection, it will be taken out of service until the inspection is completed. This allows a series of repairs to be carried out while minimizing costs and optimizing the number of operational vehicles. If a vehicle is “down” for an extended period of time due to unavoidable circumstances, preventative maintenance will not be scheduled. However, the annual inspection will be conducted on all vehicles regardless of “up/down” status and/or mileage accrued.

The Maintenance Manager will regularly perform Quality Control (QC)/Quality Assurance (QA) checks to ensure that the inspections and repairs, both in-house and contracted, are completed and documented properly. Each vehicle will have a written record documenting preventive maintenance, regular maintenance, inspections, lubrication and repairs performed. Such records will be maintained for at least five years and include, at a minimum, the following information: Identification of the bus, the make, model, and license number or other means of positive identification and ownership

Date, mileage, description, and each type of inspection, maintenance, lubrication, or repair performed

If not owned by MV Transportation, the name of any person furnishing a bus

The name and address of any entity or contractor performing an inspection, maintenance, lubrication, or repair

For tracking purposes, a maintenance log will be kept containing vehicle ID, make and type of vehicle, year, model, special equipment, inspections, maintenance and lubrication intervals, and date or mileage when services are due.

1.3 Bus Safety Inspections

Safety inspections are part of the maintenance inspections and are performed at least once every year on all buses operated by MV Transportation and contracted service providers. The Maintenance Manager is responsible for ensuring that each individual performing a bus safety inspection is qualified as follows:
Understands the requirements set forth in Rule 14-90 and can identify defective components.

Is knowledgeable of and has mastered the methods, procedures, tools, and equipment used when performing an inspection.

Has at least one year of training and/or experience as a mechanic or inspector in a vehicle maintenance program and has sufficient general knowledge of buses owned and operated by the bus transit system to recognize deficiencies or mechanical defects.

Each bus receiving a safety inspection shall be checked for compliance with the requirements for safety devices and equipment as referenced or specified by Rule 14-90. Specific operable equipment and devices as required by Rule 14-90 include the following as applicable to Type I and II buses:

Horn
Windshield wipers
Mirrors
Wiring and batteries

Service and parking brakes
Warning devices
Directional signals
Hazard warning signals
Lighting systems and signaling devices
Handrails and stanchions
Standee line and warning
Doors and brake interlock devices
Step-wells and flooring
Emergency exits
Tires and wheels
Suspension system
Steering system
Exhaust system
Seat belts
Safety equipment
Equipment for transporting wheelchairs
Working speedometer

A safety inspection report will be prepared by the individual(s) performing the inspection and will include the following:
Identification of the individual(s) performing the inspection

Identification of the bus transit system operating the bus

The date of the inspection

Identification of the bus inspected

Identification of the equipment and devices inspected including the identification of equipment and devices found deficient or defective

Identification of corrective action(s) for any deficient or defective items found and date(s) of completion of corrective action(s)

Records of annual safety inspections and documentation of any required corrective actions will be retained for a minimum of five years for compliance review.

Cleaning

During pre-trip inspections it is the duty of the operator to perform a walkthrough on the vehicle and ensure that any debris on the flooring or step wells that could result any falls or slips. Any unsafe conditions must be corrected before any scheduled trips.

The driver must report all graffiti/etchings, gum, spills, or any other issues in the interior that would warrant extra material and labor from normal clean-up, on their post-trip report.

It is the responsibility of the Fleet Manager to inspect the interior and exterior of the vehicles and determine if the cleaning is being performed to company standards.

Accidents

All accidents are tracked by the frequency, type, and which party was at fault. An investigation will be performed and documented. In the case of an accident in which the mechanical condition of the bus comes into question, the Fleet Manager or designated employee will decide if the bus can be placed into service before repairs are made.

Accident Investigation Report

- Events are investigated and documented in a final report
- Description of investigation activities
- Identified causal factors
- Corrective actions
- Schedule of implementation of corrective actions

In the event of an accident the primary responsibility of all staff is to ensure the safety of the passengers. The driver will immediately report the time and location of the accident to the Supervisor/Dispatcher. Because accident situations are unpredictable, it is standard that procedures allow enough flexibility to accommodate for each condition.

Information Management

The work order, also referred to as a repair order, is the backbone of any maintenance performance monitoring program. Information on all aspects of maintenance performance can be obtained from work orders. RTS maintenance utilizes fleet management software to enter work orders into a computerized management information system (MIS), which summarizes data and identifies recurring problems.

Material Handling

RTS provides employees with instruction on safe handling, first aid treatment, emergency procedures, and proper clean up procedures of chemicals in the workplace. Also knowing the potential flammability, explosion, and reactivity of chemicals in the workplace are the rights of the employees under the Right-To-Know-Law.

Material Safety Data Sheets

All chemicals, lubricants, cleaners etc., purchased must accompany a Material Safety Data Sheet. A MSDS binder will be maintained and made available to the employee upon request. The binder will have a cover sheet index for quick reference in case of an emergency.

When a chemical is taken out of inventory the MSDS sheet will be taken out of the binders and placed in a dead file. All MSDS sheets must be kept on file for thirty years.

When purchasing products for different functions careful consideration will be taken as to the toxicity and flammability of chemicals used. Environmentally friendly products will be taken into consideration when purchasing products. Some include:

- Propylene-glycol antifreeze
- Re-refined motor oil
- Retread tires
- Water-based part cleaner and brake cleaner
- Reconditioned batteries

Parts Inventory

The potential effect on inventory include fleet size, fleet mix by vehicle type, number of different vehicle models, average annual miles per vehicle, and the average age of the fleet.

The higher the inventory turnover the more efficiently the inventory level is managed relative to the demand for usage.

Indicators to be considered in inventory management:

- Percent of items out of stock when requested.
- Number of open backorders.
- Vehicles out of service due to unavailability of parts.

Warranty

The fleet management software contains an inventory management system that provides information to initiate warranty claims. The warranty, recovery, warranty records, and annual summaries of warranty claims are submitted, received and will be maintained by the transit agency.

Warranty repairs will be identified by maintaining a list of items from the manufacturer that are under warranty and when the warranty expires. When a component fails it can be checked against the list for time and/or mileage to determine if it is still under warranty. Documentation of warranty repairs, claims, and a recovery program will be kept on file to guarantee the cost of the defects under warranty is paid by the equipment manufacturer and not the agency. All warranty claims will be pursued until the claim is settled.

On Site Fueling

RTS will keep on file:

- The storage tank fuel inventory including tank water level.
- Monthly leak detection results.
- Monthly maintenance visual examinations.
- A copy of all test data results. Tightness, pressure and integrity.
- Repair, operation and maintenance records.
- Certificate of Financial Responsibility

APPENDIX C

C2.

Gainesville Regional Transit System

Facilities and Equipment FTA Maintenance Plan

1. PURPOSE

The mission of the Facility Maintenance Department is tomaintain all asset in a state of good repair throughout their useful life expectancy providing safe, clean, and reliable facilities and equipment to our patrons and personnel.

2. OVERVIEW

The Facilities Maintenance Department has the responsibility of maintaining all equipment and facilities used to continue transit service. A large portion of the equipment is used for the repair of transit vehicles, such as the bus lifts, fueling and fluid systems, and air compressors are serviced by Facility Maintenance personnel.

In order to meet our goal of providing a high standard of service as efficiently as possible this plan has been developed.

A. Condition-Based

Preventive Maintenance Inspections

Repairs or maintenance performed on equipment in accordance with manufacturer's recommendations and/or mechanical condition.

Strategy

- Performed by both Skilled and Semi-Skilled Labor
- Inspection performed in accordance with manufacturer recommendations
- Inspection types are scheduled and condition-based

B. Corrective-Based

Corrective repair performed on equipment due to unscheduled mechanical failures.

Strategy

- Performed by Skilled Labor
- Performed as a result of reported failure

3. GOALS

Goals for maintaining the facilities/ equipment are t these assets are maintained in a state of good repair throughout their useful life expectancy.

A. Equipment is maintained at the administration/operations and maintenance facilities, and several transit centers.

B. In addition to the equipment manufacturer's requirements, facility maintenance personnel perform daily visual inspections of safety items.

C. Facilities are evaluated to ensure safe and clean environments for patrons and employees. Maintenance employees undergo training to update their skills to ensure equipment is properly maintained and operational.

D. The Department uses performance standards to judge its efficiency and effectiveness. The goals are as follows:

1. No equipment damage due to improperly maintained facilities.
2. No bodily injury to patrons or employees due to a facility defect.
3. No environmental impacts due to improperly maintained facility equipment.

4. FACILITY PROFILE INCLUDING MISSION CRITICAL ASSETS/SYSTEMS AND ELEMENTS

Facility Maintenance is responsible for maintaining the buildings and grounds of the Corinne Brown Facilities, Rosa Parks Transfer Station, Butler Plaza Park n Ride, and NW 34th Ave Park n Ride. Other responsibilities include the monitoring of all capital improvement projects and assisting in the creation of project specifications. Maintenance of the facilities, landscaping, lawn service, and certain facility upgrades are all cost drivers.

The facilities equipment used in support of the transit will be maintained at a minimum to the specifications of the Operation and Maintenance manual provided with the equipment. The Facility Manager will insure the following routine maintenance and care functions are provided by staff or an outside contractor:

FUELING INFRASTRUCTURE- This includes fuel management hardware and software as well as fuel storage vessels , pumps nozzles and related dispensers and equipment. Equipment is inspected monthly. Any equipment failure is considered and emergency and immediately corrected,

Overhead Doors – Each overhead door for the heavy maintenance and preventive maintenance buildings will be inspected quarterly and lubricated semiannually. In addition the technician will generate a new demand work order to complete any needed repairs.

Plumbing – The facility technician will inspect all plumbing fixtures and associated restroom equipment on a quarterly basis to check for faulty equipment. This inspection includes toilets, urinals, partitions, dispensers and hand dryers.

HVAC – (Chillers, Air Handlers, Chill Water Pumps, Split System's and Mini-split Units). The listed systems will be serviced quarterly. The contractor will perform PM responsibilities listed on the task sheet at the quarterly intervals. All units will be maintained to operate at peak efficiency by completing regularly scheduled maintenance. The condenser coils are cleaned annually.

Generators -- The back-up power systems will be inspected quarterly through a maintenance agreement to ensure proper operation and to verify the unit is serviced quarterly as per the contract. A facilities technician completes quarterly visual inspections on each generator and reports and deficiencies to the Facilities Manager.

Painting & Exterior Care -- The exterior of the building will be inspected quarterly and needed repairs noted and requested. This inspection shall include, but not be limited to: gutters, doors, sidewalks, windows, flashings, roof, vents, all extrusions, caulking, signage and general appearance issues.

Landscaping -- The Facility Supervisor will ensure that all landscaped areas are maintained. Fences shall also be inspected.

Parking Lots -- The parking lots will inspected for large cracks, holes, crumbling, etc. The Facility Manager will help determine when re-striping and sealing need to be completed.

Roof -- The maintenance worker will inspect all ceilings quarterly to look for any stains or other signs of roof failure and inspect outside gutters. Inspecting gutters during hard rains will be important to finding faults.

Building Elevator -- The elevators shall be inspected annually and verification of more comprehensive inspections being performed by an official inspector**.** A service contract is in place to provide regular maintenance for all elevators. A Contractor completes monthly testing for the emergency phone lines and fire recall phase I & II.

Vehicle Lifts -- The maintenance workers will inspect and lubricate the lifts

monthly.

Bus Wash -- Maintenance workers completes scheduled maintenance at monthly, quarterly and annual intervals.

Fire Extinguishers – Maintenance workers will conduct a monthly inspection of all fire extinguishers and initial the inspection tag on all extinguishers. The annual inspections are completed by an outside contractor.

Emergency Spill Kits – There are emergency spill kits located in the service truck, fuel center, and maintenance building.

Equipment -- Maintenance workers shall maintain all needed tools and equipment. A physical inventory of the grounds and maintenance equipment will be prepared annually and maintained throughout the year.

General -- The Facility Supervisor will walk each facility and note any and all repairs to both minor and major equipment items and create demand work orders to correct any deficiencies.

Facilities Maintenance is responsible for the maintenance of over 1,100 bus stops, 100 shelters, 820 benches, 315 trash receptacles and 2 park-and-ride lots. The bus stops must be cleaned and maintained on a scheduled basis. A bus stop sign identification and tracking program has been completed to identify location of needed repair. A number of ADA compliant new shelters with passenger amenities such as benches, trash receptacles and bicycle racks at bus stops are being added to the existing inventory, which is resulting in additional demands for maintenance. The park-and-ride lots are cleaned, repaired and maintained on a daily, monthly, or as needed schedule.

A. The present RTS transit facilities consist of the following: administration, operations and maintenance facilities, also included are remote transit centers and park and ride locations within Gainesville. The breakdown of facility locations is listed below:

RTS Facilities			
Facility Name	**Address**	**Active/ Excess**	**Placed In Service**
RTS Campus - Bldg E - Bus Wash	34 SE 13th Rd, Gainesville, FL 32601	Active	2/28/2016
RTS Campus - Bldg D - Fueling Station	34 SE 13th Rd, Gainesville, FL 32601	Active	2/28/2016
RTS Campus - Bldg A	34 SE 13th Rd, Gainesville, FL 32601	Active	2/28/2016
RTS Campus - Bldg C - Garage	34 SE 13th Rd, Gainesville, FL 32601	Active	2/28/2016
RTS Campus - Bldg B	34 SE 13th Rd, Gainesville, FL 32601	Active	2/22/2015
RTS Campus - Land	34 SE 13th Rd, Gainesville, FL 32601	Active	8/11/2013
Rosa Parks Downtown Station	700 SE 3rd St, Gainesville, FL 32601	Active	9/30/2007
100 SE 10th Ave	100 SE 10th Ave	Excess	1/31/1978
Modular Building	100 SE 10th Ave	Excess	12/31/2009
Employee Parking	99 SE 10th Ave	Excess	5/16/20005
Butler Transfer Station (Land + Improvements)	4231 SW 30th Ave	Active	11/17/2015

B. One of the park and ride facilities has a combination of patron shelters, benches, kiosk, and trash containers. Park and ride facilities and amenities are maintained by facilities maintenance personnel. Maintenance of the facilities is documented and maintained through work orders in electronic format.

5. LABOR ALLOCATION

The Maintenance Department has the responsibility to ensure that all RTS facilities are safe, clean, and maintained to standards that ensure employee safety and passenger satisfaction. Maintenance has the responsibility to ensure that employees are appropriately assigned to shifts that best support daily operational needs.

PREVENTIVE MAINTENANCE

A. RTS Equipment Preventive Maintenance Program is designed to maintain system safety and efficiency, which includes monthly, quarterly and annual inspections. Maintenance personnel or contracted services conduct inspections and repairs on all equipment per manufacturers' recommendations.

6. UNSCHEDULED MAINTENANCE

A. When an inspection defect is noted, the Transit Facilities Supervisor will generate an electronic work order for completing the repair(s).

B. When an unscheduled repair is requested, the Supervisor is notified via an electronic work request form, e-mail or personal contact. The repair is then scheduled and a work order is generated and distributed to either a facilities technician or a general maintenance attendant depending on the severity of the task.

C. Maintenance worker completing the necessary repair(s) will record all work that was performed, the time it took to complete the repair(s) and parts or material used on the work order. The technician completing the repair(s) will indicate that the repair(s) is complete and the item is ready for service.

7. WARRANTY

A. Manufacturer's Warranty

1. During all phases of maintenance, an emphasis is placed on the proper identification and processing of items under warranty. Any part under warranty requiring repair/replacement will be removed and returned to the manufacturer for replacement.

2. On large, stationary equipment the factory representative or the contractor responsible for installation of the equipment will be notified and a site visit will be schedule to facilitate repair. Smaller, mobile equipment may be returned to the vendor for repair or replacement.

3. The Facilities Maintenance is responsible for processing the warranty claim through to its conclusion.

The following are examples of preventive maintenance checklists:

Gainesville RTS
Inspection Checklist Items

Inspection Id: GEN
Type: A

Item Number	Description
01	Analysis of engine lube oil. Provide record for future comparison
01A	Change all lube oil and fuel oil filters.
01B	Drain and replenish engine lube oil.
02	Test coolant solution for proper feeze protection and corrosion inhibitors and record results
03	Service batteries, checking for proper electrolyte levels and replenishing as needed.
04	Check battery volts/gravity and record results
05	Inspect and clean battery connections and coat connections with applicable corrosion inhibitor.
06	Verify proper operation of battery charger and record voltage and charging rate.
07	Inspect radiator/heat exhange assemblies (conditions and leaks)
07A	Inspect and lubricate generator bearings
07B	Inspect and lubricate airflow louvers
07C	Inspect manifold and piping.
08	Inspect air cleaner assembies
09	Inspect air inlet piping
10	Inspect water hoses for pliability, tighten clamps as needed.
11	Inspect engine mounts, vibration isolators.
12	Inspect electrical wiring for loose connections, frayed wires.
13	Inspect fuel system, which includes verification of proper day tank operation, priming pump operation, and fuel injection system (conditon and leaks)
14	Inspect and adjust all belts
15	Inspect and clean crankcase breather.
16	Inspect generator field and stator windings
17	Inspect and clean rectifier bridge.
18	Check operation of starter motor (cranking ability, voltage dro on start)
19	Check engine smoke at start and during operation.
20	Verify proper operation of gauges, metering, indicators (operation, condition and adjustments as needed)
21	Check and record batter charge rate from unit mounted alternator (if applicable)
22	Check fuel transfer pump (PSI, valves, conditons and leaks)
23	Check lubrication system (PSI and leaks)
24	Check jacket water heater (operation/condition)
25	Check temperature regulators (operation, record temperature)
26	Verify governor settings (operations, stability, and response)
27	Check turbocharger (operation)

Gainesville RTS
Inspection Checklist Items

Inspection Id: GWH
Type: SA

Item Number	Description
01	Remove sediment from tank by flushing.
01A	Remove lime scale from tank by using a lime removal technic.
02	Test T&P valve

Gainesville RTS
Inspection Checklist Items

Inspection Id: GWH
Type: A

Item Number	Description
1	Clean deposits from Anode rods and inspect
2	Inspect vent system- terminations, joints, repair/reseal as necessary, clean screens

Gainesville RTS
Inspection Checklist Items

Inspection Id: 31
Type: Q

Item Number	Description
01A	check hydraulic fluid level and replenish as necessary
02A	Check the emergency release mechanism
03A	check the mechanical safety lock
04A	examine the lifting system for fluid leaks
04B	Examine the lifting system for signs of damaged/worn parts
05A	examine the elec cables and connectors for signs of damage
06A	oil the dry piston shaft
07A	check the gas spring for its proper functioning
08A	check the general operation of the lifting columns
09A	Every 2 years the hydraulic oil must be changed;DATE:_____

Gainesville RTS
Inspection Checklist Items

Inspection Id: 29
Type: A

Item Number	Description
01A	Check condition & operation of doors, is lock operational?
01B	Check condition & operation of windows/blinds
01C	Check wall condition, paint/drywall/etc.
01D	Check condition of flooring/carpet/tile/etc
01E	Are ceiling tiles intact, undamaged and in place?
01F	Is furniture (desks/chairs/etc)in good and safe condition?
02A	Is overhead storage used properly,to create safe work envir?
02B	Are storage areas clean and clear of debris or clutter?
03A	Are staff lounge and eating areas clean and sanitary?
03B	Refrigerator operation (if applicable)
03C	Refrig./replace walter filter (if necessary)
04A	Is unused equipment kept in a safe and orderly manner?
05A	Are ext building/trailer id#s posted for emergency response?
06A	Check condition of stairway handrails/treads (if applicable)
07A	HVAC/check operation. INSPECT FILTERS CLEAN AND OR REPLACE.
07B	INSPECT HVAC EQUIPMENT FOR SIGNS OF TAMPERING OR INTRUSION
08A	Are electrical closets free of storage?
08B	Are electrical panels labeled properly?
08C	Interior lighting, replace bulbs if necessary
08D	Exterior lighting
08E	Condition of receptacles
08F	Switch functionality
08G	Motion detector function
08H	Lighted exits
09A	Are exit-access corridors free of storage?
10A	Use of extension cords/appropriate recepticle load
11A	Is/are fire extinguisher(s) operational?
12A	Condition of restrooms
12B	Urinal/toilet leakage & operational
12C	Faucets/leakage & operational
12D	Dispensers-condition & functionality
12E	Wall & door condition
12F	Stall locks operational

Gainesville RTS
Inspection Checklist Items

Inspection Id: EF
Type: SA

em Number	Description
1	Inspect bolts and setscrews for tightness. Tighten as necessary.
2	Inspect belt wear and alignment. Replace worn belts with new belts and adjust alignment as needed.
3	Inspect for cleanliness. Clean exterior surfaces only. Removing dust and grease on motor housing assures proper motor cooling.
4	Lubricate fan bearings with a NLGI #2 Grease. No more than 3 pumps with a hand operated grease gun.

Gainesville RTS
Inspection Checklist Items

Inspection Id: EF
Type: A

Item Number	Description
1	Inspect bolts and setscrews for tightness. Tighten as necessary.
2	Inspect belt wear and alignment. Replace worn belts with new belts and adjust alignment as needed.
3	Inspect for cleanliness. Clean exterior surfaces only. Removing dust and grease on motor housing assures proper motor cooling.
4	Lubricate fan bearings with a NLGI #2 Grease. No more than 3 pumps with a hand operated grease gun.
5	Replace belt, unless it has been change on SemiAnnual PM or after.

Gainesville RTS
Inspection Checklist Items

Inspection Id: Lawn
Type: 2Week

em Number	Description
1	Cut Lawn
2	Weed Eat areas not able to be cut with mower
3	Edge sidewalks, curbs, and flowerbed to lawn conversions
4	Deweed flower beds
5	Deweed sidewalks
6	Dispose of loose debris

Gainesville RTS
Inspection Checklist Items

Inspection Id: 29
Type: B

Item Number	Description
01A	Check condition & operation of doors, is lock operational?
01B	Check condition & operation of windows/blinds
01C	Check wall condition, paint/drywall/etc.
01D	Check condition of flooring/carpet/tile/etc
01E	Are ceiling tiles intact, undamaged and in place?
01F	Is furniture (desks/chairs/etc)in good and safe condition?
02A	Is overhead storage used properly,to create safe work envir?
02B	Are storage areas clean and clear of debris or clutter?
03A	Are staff lounge and eating areas clean and sanitary?
03B	Refrigerator operation (if applicable)
03C	Refrig./replace walter filter (if necessary)
04A	Is unused equipment kept in a safe and orderly manner?
05A	Are ext building/trailer id#s posted for emergency response?
06A	Check condition of stairway handrails/treads (if applicable)
07A	HVAC/check operation
07B	HVAC/replace filter (if necessary)
08A	Are electrical closets free of storage?
08B	Are electrical panels labeled properly?
08C	Interior lighting, replace bulbs if necessary
08D	Exterior lighting
08E	Condition of receptacles
08F	Switch functionality
08G	Motion detector function
08H	Lighted exits
09A	Are exit-access corridors free of storage?
10A	Use of extension cords/appropriate recepticle load
11A	Is/are fire extinguisher(s) operational?
12A	Condition of restrooms
12B	Urinal/toilet leakage & operational
12C	Faucets/leakage & operational
12D	Dispensers-condition & functionality
12E	Wall & door condition
12F	Stall locks operational

Gainesville RTS
Inspection Checklist Items

Inspection Id: AirC
Type: A

Item Number	Description
01	Oil Change
02	Test Blowdown
03	Adjust Belts replace if worn
04	Replacei Intake Filters
05	Replace Hankinson Filters if needed
06	4 quarts oil R-40 compressors Champlub
07	6 1/3 quarts oil R-70 compressors Champlub
08	Intake filter PO5051A
09	Belts B100

Gainesville RTS
Inspection Checklist Items

Inspection Id: AirC
Type: Q

Item Number	Description
01	Oil Change
02	Test Blowdown
03	Adjust Belts
04	Clean Intake Filters
05	Replace Hankinson Filters if needed
06	4 quarts oil R-40 compressors Champlub
07	6 1/3 quarts oil R-70 compressors Champlub
08	Intake filter PO5051A
09	Belts B100

Gainesville RTS
Inspection Checklist Items

Inspection Id: EW
Type: M

Item Number	Description
01	Pull handle to test shower system for 2 minutes
02	Push handle to test eye wash for 2 minutes

APPENDIX C

C3.

Preventive Maintenance Guidelines

TYPE I & TYPE II BUSES

Introduction

The City of Gainesville's Regional Transit System (RTS) currently has one (1) maintenance facility located at 34 SE 13th Road, Gainesville, FL 32601. This site includes fueling infrastructure and a bus wash. RTS has an established and effective Preventative Maintenance program. The elements of this program are formally described in the Preventative Maintenance Plan

Preventive Maintenance Arrangements

RTS personnel schedule, perform and manage all the activities associated with the Preventative Maintenance program. The following describes the process that is currently in practice for PM scheduling:

Vehicle Service Attendants perform daily bus maintenance activities which are listed below.

Daily Bus Maintenance

1. **Check for fluid leaks.** Inspect underneath the bus for sign of leakage. Visually inspect engine and compartment to include all lines, piping and hoses.

2. **Check exterior lights.** Make sure all exterior lights are illuminated.

3. **Inspect all drive belts.** Look for cracks, tears or burns. Check tension.

4. **Inspect tires.** Check air pressure (120 PSI). Visually inspect for damage and/or unusual wear.

5. **Inspect wheels.** Look for cracks, damage and loose lugs.
6. **Check coolant level.** Adjust as required. (Refer to lubrication chart)

7. **Check engine oil level.** Adjust as required. (Refer to lubrication chart)

8. **Check transmission level.** Adjust as required. (Refer to lubrication chart)

9. **Check hydraulic fluid level.** Adjust as needed. (Refer to lubrication chart)

10. **Fill DEF tank.** If applicable.

11. **Check air intake restriction indicator.** If restriction is indicated advise shift supervisor.

12. **Report any defects discovered during service line activities to the shift supervisor**

Fuel System Operation

1. Pull bus into fueling bay. Follow Instructions found under the Fleetwatch Remote Island Head (RIH).

2. After swiping your badge. Fleetwatch will prompt you to verify vehicle # before uploading vehicle information (i.e. mileage). If vehicle # is correct hit "send" on RIH

3. Turn pump on and attach fuel nozzle to bus.

4. When fueling is complete turn pump off and hang up hose.

5. Check all fluid levels and make any necessary adjustments, (Fleetwatch turns required fluids on)

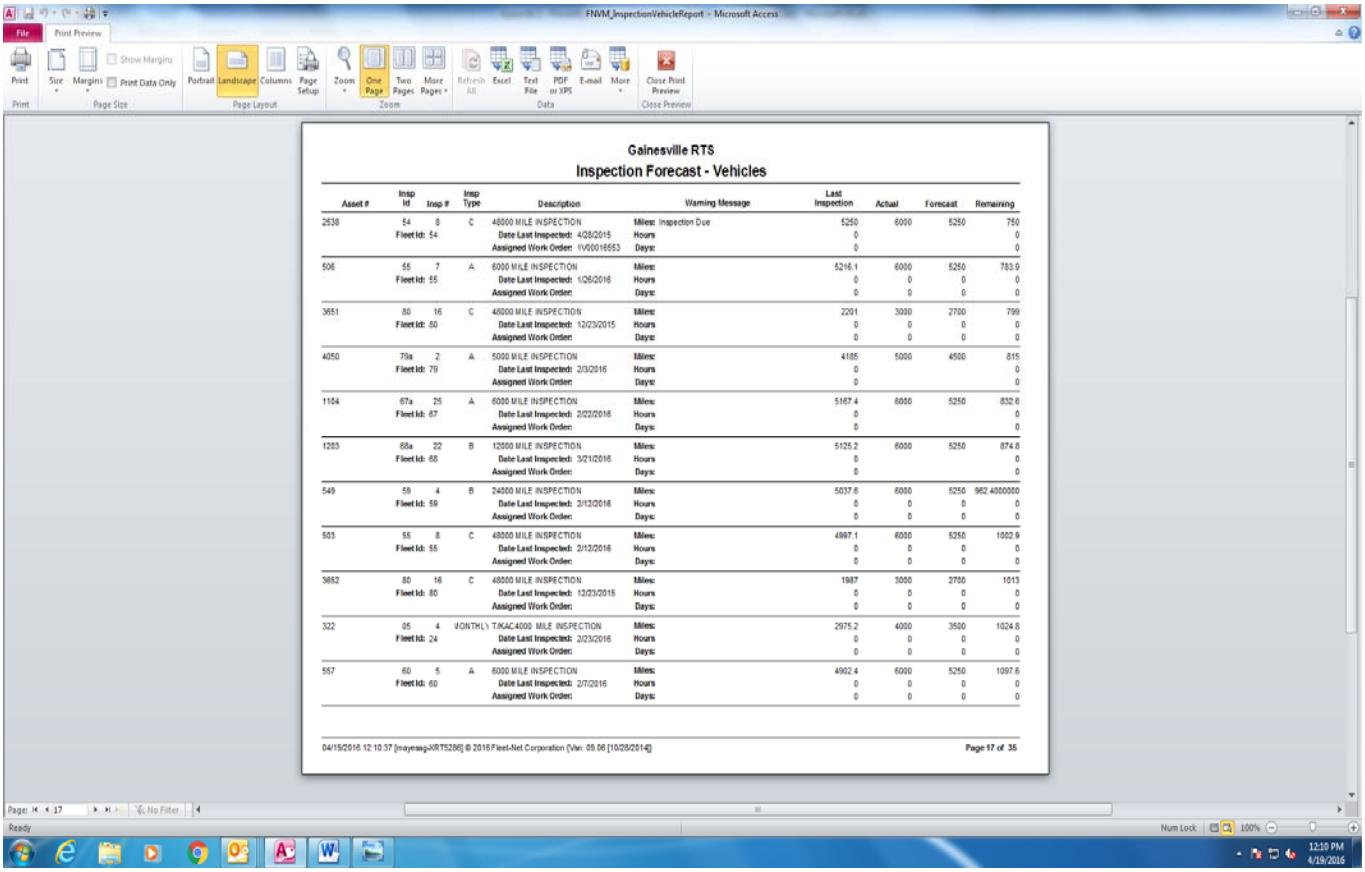
Lane # Pump # Product

1	1	Diesel Low Sulfur – On Road
2	2	Diesel Low Sulfur – On Road
3	3	Diesel Low Sulfur – On Road
4	4	Diesel Low Sulfur – On Road
4	5	Gasoline Unleaded

Any defects discovered during the daily bus maintenance are reported and corrected in conjunction any defects noted on the post trip inspection form.

The mileage and fluid usage from bus refueling is uploaded daily from the Fluid Management software, FleetWatch to the Fleet Maintenance Management software FleetNet. A Preventative Maintenance forecast report is generated daily and used to schedule inspections for the following day.

The following is an example of the PM forecast report:



Gainesville RTS

Inspection Forecast - Vehicles

Asset #	Insp Id	Insp #	Insp Type	Description	Warning Message	Last Inspection	Actual	Forecast	Remaining
2638	54	8	C	48000 MILE INSPECTION	Miles: Inspection Due	5250	6000	5250	750
	Fleet Id: 54			Date Last Inspected: 4/28/2015	Hours	0			0
				Assigned Work Order: IV00016553	Days:	0			0
506	55	7	A	6000 MILE INSPECTION	Miles:	5216.1	6000	5250	783.9
	Fleet Id: 55			Date Last Inspected: 1/26/2016	Hours	0	0	0	0
				Assigned Work Order:	Days:	0	0	0	0
3651	80	16	C	48000 MILE INSPECTION	Miles:	2201	3000	2700	799
	Fleet Id: 80			Date Last Inspected: 12/23/2015	Hours	0	0	0	0
				Assigned Work Order:	Days:	0	0	0	0
4050	79a	2	A	5000 MILE INSPECTION	Miles:	4185	5000	4500	815
	Fleet Id: 79			Date Last Inspected: 2/3/2016	Hours	0			0
				Assigned Work Order:	Days:	0			0
1104	67a	25	A	6000 MILE INSPECTION	Miles:	5167.4	6000	5250	832.6
	Fleet Id: 67			Date Last Inspected: 2/22/2016	Hours	0			0
				Assigned Work Order:	Days:	0			0
1203	68a	22	B	12000 MILE INSPECTION	Miles:	5125.2	6000	5250	874.8
	Fleet Id: 68			Date Last Inspected: 3/21/2016	Hours	0			0
				Assigned Work Order:	Days:	0			0
549	59	4	B	24000 MILE INSPECTION	Miles:	5037.6	6000	5250	962.4000000
	Fleet Id: 59			Date Last Inspected: 2/12/2016	Hours	0	0	0	0
				Assigned Work Order:	Days:	0	0	0	0
503	55	8	C	48000 MILE INSPECTION	Miles:	4997.1	6000	5250	1002.9
	Fleet Id: 55			Date Last Inspected: 2/12/2016	Hours	0	0	0	0
				Assigned Work Order:	Days:	0	0	0	0
3652	80	16	C	48000 MILE INSPECTION	Miles:	1987	3000	2700	1013
	Fleet Id: 80			Date Last Inspected: 12/23/2015	Hours	0	0	0	0
				Assigned Work Order:	Days:	0	0	0	0
322	05	4		MONTHLY TA/AC4000 MILE INSPECTION	Miles:	2975.2	4000	3500	1024.8
	Fleet Id: 24			Date Last Inspected: 2/23/2016	Hours	0	0	0	0
				Assigned Work Order:	Days:	0	0	0	0
557	60	5	A	6000 MILE INSPECTION	Miles:	4902.4	6000	5250	1097.6
	Fleet Id: 60			Date Last Inspected: 2/7/2016	Hours	0	0	0	0
				Assigned Work Order:	Days:	0	0	0	0

The selected vehicles are removed from service and Preventative Maintenance work order's are generated and assigned to appropriate personnel. During the inspection RTS personnel uses the PM checklist and notes any defects discovered during the inspection. Once the PM checklist is complete the assigned personnel signs and dates the checklist. If required a work order is then generated and assigned to the appropriate personnel to correct any defects noted on the checklist. The work orders are closed and a copy is printed for the vehicle file and the electronic version remains a part of the permanent vehicle records in the fleet management software.

RTS utilizes Fleet Mechanic II, Fleet Mechanic I and Vehicle Service Attendants to perform vehicle maintenance. All personnel that perform vehicle maintenance have a minimum of one year of training and/or experience as a mechanic or inspector in a vehicle maintenance program and has sufficient general knowledge of the vehicles owned and operated by your agency in order to recognize deficiencies or mechanical defects. All RTS personnel performing maintenance, inspections or repair of buses are knowledgeable of the requirements set forth in Rules 14-90.007, 14-90.008, 14-90.009, Florida Administrative Code.

The following are the position descriptions that perform maintenance and repair vehicles. These positions are listed by experience requirements in a progression to the highest skilled vehicle maintenance personnel in the RTS organizational structure:

VEHICLE SERVICE ATTENDANT

NATURE OF WORK

Entry level work performing scheduled and unscheduled maintenance and minor repairs on vehicles including buses.

CLASSIFICATION STANDARDS

Positions allocated to this classification report to a designated supervisor and work under direct supervision. Work in this class is distinguished from higher classes by its lack of technical skill and from lower classes by its emphasis on vehicle repair and maintenance.

EXAMPLES OF WORK**

ESSENTIAL JOB FUNCTIONS

Performs daily bus maintenance and refueling, checking and replenishing fluid levels including engine oil, engine coolant, power steering and transmission fluids..

Repairs and maintains tires. Makes field tire service calls.

Repairs and replaces lights, turn signals, and parts including mirrors, fan belts, and water hoses.

Assists mechanics in performing general labor related tasks and repairs of greater complexity.

Washes, cleans, and vacuums automobiles, buses, trucks, and other automotive equipment.

Performs scheduled and unscheduled maintenance on automobiles, light trucks, buses and transit equipment in accordance with manufacturers' recommendations statutory requirements and departmental policy and procedures.

Attends work on continuous and regular basis.

NON-ESSENTIAL JOB FUNCTIONS

Performs emergency road service to vehicles and buses, cleans up petroleum or coolant discharge on the roadway and completes required documentation.

Performs general maintenance duties in and around garage, including cleaning of fueling facility and bus parking areas.

Performs other related duties as assigned.

MINIMUM REQUIREMENTS

Completion of high school or possession of an acceptable equivalency diploma, and one year experience in automotive vehicle or heavy equipment repair and servicing, preferably in a public works or utility

fleet, or an equivalent combination of education and experience which provide the required knowledge, skills and abilities.

LICENSES/CERTIFICATES

CDL class "B" license, with passenger transport endorsement is required within one (1) month of the date of employment.

NOTES

For employment with RTS, pre-employment medical examination required, including satisfactory drug screening.

Must supply and maintain own tools as specified.

Work requires physical strength and agility to safely perform all essential functions.

Work requires bending, kneeling, crawling, and pushing/pulling up to a maximum of 100 lbs.

Work requires climbing/working at heights with the use of ladders, scaffolding and stairs.

Work may require performing tasks in and around heavy traffic.

Work may require exposure to hazardous conditions and noxious chemicals, including fiberglass materials and resins.

Work may require exposure to prolonged high noise levels.

Work may require performance of tasks in extreme heat and confined areas.

SELECTION FACTORS

Knowledge of occupational hazards and accident prevention methods in assigned area of responsibility.

Knowledge of automotive and mechanical parts.

Skill in the routine servicing and repair of automotive and heavy equipment.

Ability to perform routine vehicle servicing.

Ability to operate work-related equipment.

Ability to keep records and prepare reports.

Ability to work effectively with co-workers and the general public.

Ability to use personal computers.

Ability to read and interpret written assignments and instruction.

Ability to communicate effectively, both orally and in writing.

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Date

** This section of the job description is not intended to be a comprehensive list of duties and responsibilities of the position. The omission of a specific job function does not absolve an employee from being required to perform additional tasks incidental to or inherent in the job.

REVISION DATE: 12/1/94; 6/2/10

FLEET MECHANIC I

NATURE OF WORK

Skilled mechanical work repairing and maintaining vehicles and equipment.

CLASSIFICATION STANDARDS

Positions allocated to this classification report to a designated supervisor and work under limited supervision. Work in this class is distinguished from higher classes by its lack of lead worker responsibility and from lower classes by its technical nature and emphasis on repair and maintenance of vehicles and equipment.

EXAMPLES OF WORK**

ESSENTIAL JOB FUNCTIONS

Performs scheduled and unscheduled maintenance on automobiles, light trucks, buses and transit equipment in accordance with manufacturers' recommendations statutory requirements and departmental policy and procedures.

Repairs diesel and gasoline powered engines.

Repairs diesel air intake and fuel systems.

Diagnoses and repairs bus transmission electronic control systems, removes and replaces transmissions.

Repairs wheel chair lift mechanical, hydraulic and electrical systems, repairs/replaces hydraulic cylinders.

Performs functional inspection and repairs wheelchair restraint systems.

Repairs or replaces pneumatic system motors, switches valves and interlock system components.

Performs repairs to internal and external vehicle and bus lighting systems.

Performs repairs to vehicle safety equipment, horn, windshield wipers, mirrors and lights.

Performs brake system performance tests and diagnostics, relines brakes, and replaces valves, switches, hardware, slack adjusters and other foundation brake parts and components.

Diagnoses and repairs automotive-type electrical systems.

Diagnoses and repairs engine starting and charging systems.

Performs on-board computer diagnostics.

Repairs engine cooling system and components. Removes and repairs or replaces radiators, cooling fan, hydraulic fan drive system components, thermostats, water pumps, belts, hoses and other related cooling system components.

Repairs hydraulic systems on automobiles, light trucks, buses, and transit equipment.

Diagnoses and repairs defects in steering and suspension systems.

Diagnoses irregular tire wear patterns and determines cause, repairs tires, including mounting new tires and the rotation of tire positions to maximize the service life of tires.

Performs minor body work replaces bumpers, panels, doors and hinges.

Repairs/replaces propeller shaft, yolks and universal joints.

Maintains fare collection equipment.

Attends work on continuous and regular basis.

NON-ESSENTIAL JOB FUNCTIONS

Prepares detailed records and reports in a timely manner.

Performs emergency road service to equipment, cleans up petroleum or coolant discharge on the roadway and completes required documentation.

May advise or assist co-workers in more complex repair work.

Performs other related duties as assigned.

MINIMUM REQUIREMENTS

Graduation from high school or possession of an acceptable equivalency diploma, supplemented by appropriate technical courses, preferably including training by vehicle manufacturers' or accredited vocational-technical institution, and three (3) years experience as an diesel mechanic, preferably in a public works or fleet environment, or an equivalent combination of training and experience which provide the required knowledge, skills and abilities..

LICENSES/CERTIFICATES

CDL class "B" license, with passenger transport endorsement, required within one month of date of employment.

Automotive Service Excellence (A.S.E.) certification in bus or heavy truck repair and maintenance highly desired.

NOTES

For employment with RTS, pre-employment medical examination required, including satisfactory drug screening.

Must supply and maintain own tools as specified.

Work requires physical strength and agility to safely perform all essential functions.

Work requires bending, kneeling, crawling, and pushing/pulling up to a maximum of 100 lbs.

Work requires climbing/working at heights with the use of ladders, scaffolding and stairs.

Work may require performing tasks in and around heavy traffic.

Work may require exposure to prolonged high noise levels.

Work may require exposure to hazardous conditions and noxious chemicals, including fiberglass materials and resins.

Work may require performance of tasks in extreme heat and confined areas.

SELECTION FACTORS

Knowledge of methods, materials, tools, and standard practices of automotive mechanic trade.

Knowledge of automotive electrical systems.

Knowledge of occupational hazards and accident prevention methods in assigned area of responsibility.

Knowledge of principles of operation and repair, of gasoline and diesel fueled internal combustion engines.

Knowledge of automotive electrical systems.

Knowledge of automotive on-board computer systems.

Skill in the use of tools, machines, and testing instruments.

Ability to work effectively with internal and external customers.

Ability to read and understand technical manuals.

Ability to use personal computers.

Ability to perform diagnostic evaluations on automotive and other transit equipment.

Ability to communicate effectively, both orally and in writing.

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Date

FLEET MECHANIC II RTS

NATURE OF WORK

Advanced skilled work repairing and maintaining various vehicles including buses.

CLASSIFICATION STANDARDS

Positions allocated to this classification report to a designated supervisor and work under general supervision. Work in this class is distinguished from higher classes by a lack of supervisory responsibility and from lower classes by its technical nature and emphasis on advanced skilled mechanical repair work.

EXAMPLES OF WORK**

ESSENTIAL JOB FUNCTIONS

Performs scheduled and unscheduled maintenance on automobiles, light trucks, buses and transit equipment in accordance with manufacturers' recommendations, statutory requirements and departmental policies and procedures.

Diagnoses and repairs diesel and gasoline powered engines including in-frame rebuilds and removal and replacement of engine assemblies.

Tunes diesel engines adjusts valve and injectors.

Diagnoses and repairs diesel air intake and fuel systems including but not limited to turbochargers, piping and couplers, charge air cooler and related parts and components.

Diagnoses and repairs bus transmission electronic control systems, removes and replaces transmissions.

Diagnoses and repairs wheel chair lift mechanical, hydraulic and electrical systems, repairs/replaces hydraulic cylinders.

Performs functional inspection and repairs wheelchair restraint systems.

Diagnoses pneumatic system defects and repairs or replaces pneumatic system motors, switches valves and interlock system components.

Performs repairs to internal and external vehicle and bus lighting systems.

Performs repairs to vehicle safety equipment, horn, windshield wipers, mirrors and lights.

Performs brake system performance tests and diagnostics, relines brakes, and replaces valves, switches, hardware, slack adjusters and other foundation brake parts and components.

Diagnoses and repairs automotive-type electrical systems including multiplex computer systems.

Diagnoses and repairs engine starting and charging systems.

Performs on-board computer diagnostics of major bus components including engines, transmissions, A/C and multiplex electrical Systems.

Diagnoses and repairs engine cooling system and components. Removes and repairs or replaces radiators, cooling fan, hydraulic fan drive system components, thermostats, water pumps, belts, hoses and other related cooling system components.

Repairs hydraulic systems on automobiles, light trucks, buses, and transit equipment.

Diagnoses and repairs defects in steering and suspension systems.

Diagnoses irregular tire wear patterns and determines cause, repairs tires, including mounting new tires and the rotation of tire positions to maximize the service life of tires.

Performs minor metal fabrication such as welding, cutting and mounting specialized equipment.

Performs minor body work replaces bumpers, panels, doors and hinges.

Diagnoses and repairs/replaces rear differentials and propeller shafts including yokes and universal joints.

Diagnoses and repairs mobile video surveillance systems and equipment.

Diagnoses and repairs Advanced Vehicle Location equipment.

Maintains and repairs fare collection equipment, farebox components and vaults.

Periodically serves as lead mechanic.

Attends work on continuous and regular basis.

NON-ESSENTIAL JOB FUNCTIONS

If no Lead Mechanic is available, may periodically serve as Transit Fleet Supervisor.

Performs emergency road service to equipment, cleans up petroleum or coolant discharge on the roadway and completes required documentation.

Prepares detailed records and reports in a timely manner.

May advise or assist co-workers in more complex repair work, such as diagnosis, failure analysis and rebuild/repair of major vehicle components.

Performs other related duties as assigned.

MINIMUM REQUIREMENTS

Graduation from high school or possession of an acceptable equivalency diploma, supplemented by appropriate technical courses preferably including training by vehicle manufacturers' and accredited vocational-technical institution, and five years experience as a diesel mechanic, preferably in a transit or coach fleet environment, or an equivalent combination of training and experience which provide the required knowledge, skills, and abilities.

LICENSES/CERTIFICATES

CDL class "B" license, with passenger transport endorsement, required within one month of date of employment.

Automotive Service Excellence (A.S.E.) certification in bus or heavy truck repair and maintenance highly desired.

NOTES

Work requires physical strength and agility sufficient to safely perform all essential functions.

Work requires bending, kneeling, crawling, and pushing/pulling up to a maximum of 100 lbs.

Work requires climbing/working at heights with the use of ladders, scaffolding and stairs.

Work may require exposure to hazardous conditions and noxious chemicals, including fiberglass materials and resins.

Work may require performing tasks in and around heavy traffic.

Work may require exposure to prolonged high noise levels.

Must supply and maintain own tools as specified.

Work may require performance of tasks in extreme heat and confined areas.

SELECTION FACTORS

Thorough knowledge of methods, materials, tools, and standard practices of the automotive mechanic trade.

Knowledge of occupational hazards and accident prevention methods in assigned area of responsibility.

Knowledge of operating and repair characteristics.

Knowledge of principles of operation, repair, and overhaul of gasoline and diesel fueled internal combustion engines.

Knowledge of automotive electrical systems.

Knowledge of automotive on-board computer systems.

Skill in the use of tools, machines, and testing instruments.

Ability to perform complex diagnostic evaluations on automotive and other transit equipment.

Ability to train and instruct personnel.

Ability to perform systems and data analysis to determine cause of failure.

Ability to read and understand technical manuals and follow logic ladders to diagnose vehicle failures.

Ability to use personal computers.

Ability to work effectively with internal and external customers.

Ability to communicate effectively, both orally and in writing.

Human Resources Department: Signed original on file in Human Resources / 10/13/10
Date

PREVENTIVE MAINTENANCE INSPECTION

MILES / INTERVALS

TYPE I & TYPE II BUSES

The preventive maintenance inspection is a program of routine checks and procedures performed on a scheduled and recurring basis to avoid breakdowns and prolong equipment life. The Maintenance Division in addition to daily service and inspections will require that all RTS vehicles have progressive preventative maintenance inspection schedules that are reoccurring throughout the useful life of the vehicle as follows:

TYPE I Bus	PMI Type	TYPE II Bus	PMI Type
3000 Mile	A	6000 Mile	A
6000 Mile	A	12000 Mile	B
9000 Mile	A	18000 Mile	A
12000 Mile	B	24000 Mile	C (annual)
15000 Mile	A	30000 Mile	A
18000 Mile	A	36000 Mile	B
21000 Mile	A	42000 Mile	A
24000 Mile	C	48000 Mile	D (annual)
27000 Mile	A	54000 Mile	A
30000 Mile	A	60000 Mile	B
33000 Mile	A	66000 Mile	A
36000 Mile	B	72000 Mile	C (annual)
39000 Mile	A	78000 Mile	A

42000 Mile A

45000 Mile A

48000 Mile D (annual)

84000 Mile B

90000 Mile A

96000 Mile E (annual)

102000 Mile A

108000 Mile B

114000 Mile A

120000 Mile C (annual)

126000 Mile A

132000 Mile B

138000 Mile A

144000 Mile D (annual)

150000 Mile A

156000 Mile B

162000 Mile A

168000 Mile C (annual)

174000 Mile A

180000 Mile B

186000 Mile A

192000 Mile F (annual)

All preventative maintenance must be completed within 10% of the prescribed mileage. The PM checklist must be consistent with the current operating fleet and in particular with the minimum requirements of the Original Equipment Manufacturer.

Bus Type I Preventative Maintenance Inspection and Service Checklist:

MV Transportation Inc.

Preventive Maintenance Inspection and Service Checklist

Circle Service Type: A B C D

Date:_____ Vehicle #:_____ Mileage in: _____ Mileage out: _____

P	F	Item Inspected
		A) Vehicle drive in inspection (5 miles)
		1) Driver carpet
		2) Driver seat condition and operation
		3) Drivers door operation and condition
		4) Drivers seat belt operation and condition
		5) Engine starting and ignition system
		6) Instrument panel gauges & warning lights
		7) Instrument panel lighting & condition
		8) Horn operation
		9) Steering wheel tight, no excessive play
		10) Windshield wipers
		11) Windshield washer
		12) Sun visor condition and operation
		13) Parking brake operation & condition
		14) Parking and service brake pedal pads
		15) Passenger door operation
		16) No vibrations, pulsations or noises
		B) Walk around inspection
		1) Body damage (list on separate sheet)
		2) Headlights, high & low beam operation
		3) Parking lights operation & condition
		4) Marker lights operation & condition
		5) Directional signals operation & condition
		6) Hazard lights operation & condition
		7) Clearance lights operation and condition
		8) Brake lights operation & condition
		9) License plate lamp operation & condition
		10) License plates and tags
		11) Backup lights and alarms
		12) Reflectors and reflective bumper tape
		13) Exterior decals and signage
		14) Bumpers secure / in good condition
		15) Exterior mirrors secure / in good condition
		16) Exterior clean
		C) Interior inspection
		1) Passenger door and steps condition
		2) Handrails and stanchions condition
		3) Interior and modesty panels condition
		4) Flooring condition
		5) Interior lighting operation and condition
		6) Windows operation and condition
		7) Emergency Exits operation & condition
		8) Accessory operation & condition(radio,GPS)
		9) Passenger seats operation & condition
		10) Passenger seat belts operation & condition
		11) First aid & body fluid kits complete
		12) Triangle reflectors complete/good condition
		13) Stop request operation & condition
		14) Valid registration, insurance & accident pack
		15) Fire extinguisher in good condition & signed
		16) Interior decals and signage (incl. electrical)
		17) DVI's reviewed, addressed and signed off
		18) Interior clean
		D) HVAC system inspection
		1) Front blower condition and operation

P	F	Item Inspected
		2) Rear blower condition and operation
		3) Defroster operation
		4) Temp gets to 20 deg. F below ambient temp.
		5) Evaporator intake air filter condition
		6) Front heater condition and operation
		7) Rear heater condition and operation
		8) A/C compressors and condenser fans
		E) Under hood inspection
		1) Batteries & charging sys. (load alt B,C,D serv)
		Batt 1 volts: load volts: load amps:
		Batt 2 volts: load volts: load amps:
		Batt 3 volts: load volts: load amps:
		(battery min. loaded volts 9.6v, 1/2 CCA for 15 sec)
		Alt. 1 min volt: max volt: max amp:
		Alt. 2 min volt: max volt: max amp:
		(reference factory service manual for alternator spec)
		2) Wire and hose routing and connections
		3) Cooling system, hoses, water pump condition
		5) Accessory drive belts condition
		6) Pulleys and tensioned operation & condition
		7) Brake master cylinder and power booster
		8) Fan and fan clutch operation and condition
		9) Engine oil fluid level and condition
		10) Transmission oil level and condition
		11) Power steering fluid level and condition
		12) Brake fluid level and condition
		F) Vehicle rack inspection
		1) Steering gear box mount, condition & leaks
		2) Steering shaft U joints
		3) Steering shaft bearings
		4) Steering linkages
		5) I beam or control arm movements and rivets
		6) Radius arm condition and bushings condition
		7) Stabilizer bar condition and bushings condition
		8) Ball joints or kingpins
		9) Front coil spring & tower condition & mounting
		10) Front shock absorber operation & condition
		11) Trans oil cooler & lines routing and leaks
		12) Engine oil cooler & lines routing and leaks
		13) Heater and A/C hose routing and leaks
		14) No engine oil leaks and fluid condition
		15) Engine mounts, brackets and bolts
		16) Transmission mounts, brackets and bolts
		17) No transmission oil leaks and fluid condition
		18) Drive shaft condition
		19) Universal joints and carrier bearings condition
		20) No rear differential leaks
		21) Rear differential condition and mounting
		22) Frame and cross members
		23) Rear shock absorbers
		24) Rear springs condition and mounting
		25) No fuel leaks
		26) Fuel tank condition and mounting
		27) No exhaust leaks
		28) Exhaust system condition and mounting

MV Transportation Inc.

Preventive Maintenance Inspection and Service Checklist

Circle Service Type: A B C D

Date:_____ Vehicle #:_____ Mileage in: _____ Mileage out: _____

P	F	Item Inspected
		30) Front brake condition and mounting
		31) Front brake lining condition & measurement
		Pads R/F: /32" L/F: /32"
		32) Rear brake condition and mounting
		33) Rear brake lining condition & measurement
		Pads R/R: /32" L/R: /32"
		Shoes R/R: /32" L/R: /32"
		34) Tire and wheel condition and measurements
		R/F: /32" L/F: /32"
		R/RI: /32" L/RI: /32"
		R/RO: /32" L/RO: /32"
		35) Lug nuts condition
		Air pressure adjustment FR. RR.
		Wheel torque specs used: ft. lbs.
		G) Lift inspection
		1) Lift operation (fully stowed to fully deployed)
		2) Lift control pendant condition and operation
		3) Lift restraint belt condition and operation
		4) Outer roll stop condition and operation
		5) Inner roll stop condition and operation
		6) Platform adjustments, condition and mounting
		7) Standee arm condition and operation
		8) Proper signage and decals
		9) Manual backup pump condition and operation
		10) Lift manual pump handle
		11) Hydraulic pump condition and operation
		12) Hydraulic lines and cylinders condition
		13) Hydraulic fluid level and condition
		14) Base plate and arms welds & pivot points
		15) Lift springs and pins condition and operation
		16) Lift safety switches and adjustments
		17) Hose and wire routing and connections
		18) Rollers and pivot point condition & operation
		19) Lift to vehicle mounting bolts and brackets
		20) Lift doors condition and operation
		21) Lift door lights condition and operation
		22) Lift interlock operation and condition
		(lift door open, e-brake down not able to shift)
		(e-brake off lift door closed no lift power)
		23) W/C tie downs condition and operation
		24) Tie down container secure and clean
		25) Tie down floor mounting brackets secure
		26) W/C shoulder belt condition and operation
		27) Lift clean and no sharp edges
		28) Lift shields secure and in good shape
		29) Lift moves steady without drifting, jerking, or unusual speeds
		30) No unusual lift noises
		Lube all lift pivot points, barriers, rollers, linkages and bearings cleaning off all excess lube
		Check, torque or adjust lift base mounting bolts
		31) Cycle meter reading_____

Yes	No	Lube Service	Techs Initials
		Change oil and filter	
		Lube chassis and suspension	
		Lube drive shafts and universal joints	
		Lube doors and hood, locks and hinges	
		Adjust service and parking brakes	
		Drain water from separator	
		Rotate tires(as necessary, caps on rear)	
		Service Performed	
B,C,D		Change air filter	
B,C,D		Change fuel filter	
B,C,D		Clean or change PCV valve	
B,C,D		Clean or change crank case filter	
B,C,D		Install new wiper blades	
C,D		Change transmission fluid and filter	
C,D		Service front wheel bearings	
C,D		Drain water from fuel tank	
D		Replace accessory drive belts	
D		Test cooling system protection level	
D		Install new spark plugs & wires	
D		Install new dist. cap & rotor	
D		Change differential fluid	
D		Check Exhaust and EGR system	
D		Check and service fuel & evap. System	
D		Evac and recharge A/C (add 1 oz. of oil)	
A,B,C,D		Post service test drive (5 miles)	
Initial or "N/A" each service performed per PM type			

All items have been inspected and the above indications are true and correct. All safety related defects have been repaired and this vehicle is safe for operational use. All non-safety related defects not repaired are diagnosed and scheduled for repair with all parts needed pulled from stock or ordered. Brake pad linings must be measured from the backing plate. Brake shoe linings must be measured from the rivets.

Technicians Signature Date

Supervisor Signature Date

Notes:

Initi

Bus Type II Preventative Maintenance Inspection and Service Checklist: Gillig Low Floor

14-90.009 BUS SAFETY ITEMS INSPECTED ARE IN "( )"WITH CORRESPONDING NUMBER. Example (3a)

0000	NOTE WHEN PROMPTED FOR A "YES" OR "NO" ANSWER ENTER Y OR N IN CHECK BOX
00aa	Pull in steam bay, put vehicle in neutral, set spring brakes. Dump air to doors and shut vehicle down
00ad	remove rear settee fasteners, but leave settee in place
00af	Remove and clean HVAC return filter (replace if needed)
00ah	Inspect evaporator compartment for cleanliness, loose and damaged parts. Any signs of leaks?
00aj	Clean A/C control panel & sensor using canned air (unit not running)
00an	Raise vehicle, completely steam clean under body.
00at	lower vehicle
00ba	Open all exterior compartment doors, pull battery trays out, all engine compartment doors (note any fluid leaks)
00ca	Steam clean all exterior door hinges, top of batteries, and engine compartment
00cd	Inspect all rims condition (cracks, rust) and security **(3O)**
00cg	remove settee and from inside bus steam clean rear of engine area
00da	Using garden hose clean radiator and hydraulic cooler till water runs clear
00ea	Check specific gravity in batteries before filling cells with water record below. Use g=good, f= fair, rc =recharge
00fa	Battery 1 - Start at positive post cell1 _____cell 2_____cell3_____cell4_____cell5_____cell6_____
00ga	Battery 2 - Start at positive post cell1 _____cell 2_____cell3_____cell4_____cell5_____cell6_____
00ha	Fill each battery cell to proper level using distilled water
00ia	Check general battery condition, terminals for corrosion (clean if necessary) apply anti-corrosion protection **(3D)**
00ja	Lube battery tray slides and secure batteries.
00ka	Inspect battery equalizer condition, corrosion, damage

00la	Check battery shut off switch for corrosion, damage and dirt build up
00ma	Fill windshield washer fluid
00na	Lubricate all exterior door hinges, locks, bike rack, windshield wiper pivot post, w/c step edge closeout and outer hinge
00ng	check electric radiator fans protective caps and retain rings
00nn	inspect radiator fan blades for cleanliness and damage
00nt	check radiator fan power cable ends for corrosion
00oa	Close all exterior compartment doors and secure
05aa	Start vehicle, supply air to doors, stow lift and raise bus to proper ride height
05ba	Mount brake test equipment and enter bus number
05ca	Perform three brake test - pull reading from machine and attach to inspection sheet, after returning to garage **(3E)**
05da	Drive test route for "talking bus" system, is it operating correct?
05dg	Check condition and security of radio and handset.
05dm	Prior to leaving for road test perform radio check. Is it operating correctly?
05ea	Drive vehicle on predetermined road test route
05fa	Speedometer, dash gauges all operating correctly? **(3V)**
05ga	Note any warning lights **(3F)**
05ha	Note any unusual operating condition, engine performance, transmission shift, vibration, steering play, noises, etc.
05ia	Operate HVAC system along with defroster working normally?
05ja	Before pulling in garage, at slow speed open entrance and exit door. Did interlock activate and throttle deactivate? **(3L)**
05ka	Bring vehicle in garage, set parking brake, activate fast idle, and operate both doors through all door control positions, ok?
10aa	Check for proper operation of exit door sensitive edge
10ba	Check driver's seat & seat belt condition and assure all functions operate correctly **(3S)**
10ca	Inspect condition of all driver's console, dash and saw tooth panels

10da	Inspect condition and operation of all driver's controls (switches)
10ea	Release parking brake, perform brake pump down. Did low air alarm activate and parking brake "pop" up @ 60 psi?**(3E)**
10fa	check condition and covers of both brake and throttle pedals
10ga	Check proper windshield wiper and washer operation. **(3B)**
10ha	Check driver's shades for condition & operation
10ja	Check steering wheel condition and blow horn **(3A)**
10ka	Check steering column for condition and operation of up/down and back /forth positions
10la	Check condition and security of fire extinguisher, safety triangles **(3T)**
10ma	Push "push to test" on AMEREX display, did audio alarm sound & all LEDs light up? Push "Relay Reset" to return to normal operation
10mb	Assure Amerex display "System Ok" led is illuminated **(3T)**
10mf	Check that all Amerex dash components are present & in their original location, and are in good working order. Check that all Amerex manual actuation switches/remote actuators are unobstructed by vehicle modifications or clutter
10mh	check that Amerex tamper indicators, lock wire seal, pull pins and "In Case Of Fire" instruction label are intact
10mj	Check that Amerex maintenance tag/certificate is in place. Record date of inspections and initial of inspector
10na	Lubricate driver's seat track, brake & throttle pedals
10nn	inspect all i/o panels (four) for chaffing wires, loose connection
15aa	Check condition and security of interior mirrors to include exit door mirror **(3C)**
15ba	With entrance door open check "stop request" signal and sign for proper operation **(3I)**
15ca	Check condition & operation of (3) w/c jump seats (release handle, locking in both the up/down positions) **(3U)**
15da	Check condition & operation of the (8) tie down straps **(3U)**
15ea	Check condition & operation passenger restraints (2) **(3S)(3U)**
15fa	Check condition & operation of the Advance Restraint Module (A.R.M.), lubricate slide lightly
15ga	Check condition and security of all passenger seats

15ha	Check condition and security of all stanchions **(3J)**
15ia	Check wall panel, roof, flooring and standee line condition **(3K)**
15im	Check egress windows for proper operation. lube release bolts and cable **(3N)**
15ja	Check condition, operation of roof hatches **(3N)**
15ka	Check interior dome lights for proper operation **(3I)**
20ca	Activate destination signs and exterior lights test modes
20da	Inspect exterior lights, destination signs for proper operations **(3G)(3H)(3I)**
20fa	Inspect all exterior panels and glass for any damage
20ga	Check windshield wiper arms and exterior mirrors for security **(3C)**
20ha	Drain air tanks, drain wet tank completely first, then the rest. Check for pressure and moisture.
20ia	Check all engine, transmission, surge tank, hydraulic system for proper fluid levels
20ja	Pull in bay, set parking brake and deploy w/c ramp **(3U)**
25aa	Dump air to entrance door, shut engine down
25ba	Open w/c rising floor asm. and vacuum drive platform
25ca	Using penetrating oil clean and then lubricate lightly (using 30w motor oil) drive chain and counter balance asm.
25da	Re-install rising floor, start engine, supply air to entrance door and stow w/c ramp. Shut engine down
25ea	Prepare lift(s) to raise bus
25fa	Release parking brake, raise vehicle. Assure that safety locks are engaged on vehicle lift(s)
25ga	Replace primary fuel filter. Pre-fill before installing.
25gg	replace air dryer cartridge
25gn	check air dryer security
25ha	Supply vehicle air system with shop air
25hn	Replace hydraulic filter
25hn	Change hydraulic fluid (refill with 15w-40 motor oil)
25ia	Change engine oil and filter, take oil sample, prefill filter. **DO NOT LEAVE ENGINE WITHOUT OIL**

25in	Change transmission fluid, take sample. **DO NOT LEAVE TRANSMISSION WITHOUT OIL**
25ja	Visually inspect entire undercarriage front to back for any damage, leaks of any kind, all hose and wire condition
25jg	Replace secondary fuel filter DO NOT PRE-FILL
25jj	Replace DEF filter
25jn	Change coolant filter
25jt	Change Skinner II kit #73642
25jw	Change main & lube filters
25ka	Check Spinner II oil filter, for leaks, damage
25la	Check engine, all fluid lines for leaks, chaffing, bad clamps
25ma	Check radiator and all coolant lines for leaks, chaffing, bad clamps
25na	Inspect condition of engine intake system
25nm	Check charge air cooler and piping, for security, damage
30aa	Check general condition of bottom half of engine compartment
30am	Check all Amerex nozzle blow-off caps are intact, nozzles outlets must be unobstructed to hazard its protecting
30ap	check all Amerex control heads, actuators, hoses, wiring and detectors secure and in good working order
30at	Check all Amerex wiring connections are sealed from weather and good condition
30ba	Check all steering components. tie rod ends, u-joints, box, and pitman arm **(3Q)**
30ca	Check general condition of front axle, fasteners, mud flaps, leveling valves
30cg	Check front shocks and bushings for wear and leaks **(3P)**
30cn	Check front axle, external bump stops and rings for wear or damage **(3P)**
30ct	Check front axle for proper ride height s/b 9" (+/- 1/4")
30cw	Check front axle for loose or damaged mounting parts
30da	Clean and grease fittings, driveshaft (3), camshaft bushings (4), slack adjusters (4), tie rod ends (2), kingpins* (4)
30ea	Clean and grease fittings continue: intermediate shaft (2) drag link (2)

30en	Grease output shaft(1) (use hand gun only) use #2 grease
30fa	Inspect all brake lining condition, wear **(3E)**
30ga	Check all inner wheel seals, outer gaskets for signs of leakage
30gm	Replace front wheel bearing oil
30ha	Check proper wheel bearing oil level
30hn	Clean rear axle breather
30ht	Change rear axle fluid
30ia	Check rear axle for signs of leaks and check for proper gear oil level & twist vent cap
30in	Check driveline fastener torque s/b 115-135 ft. lb.
30ja	Check general condition of tires (side walls/tread) **(3O)**
30ka	Check tire depth and record: lf_____/32, rf_____/32,lri_____/32, lro____/32, rri_____/32, rro_____/32 **(3O)**
30la	Check tire pressure and correct to proper air pressure 110lbs all way around
30ma	Check slack adjuster condition and operation
30na	Remove rear brake chamber end cap, inspect spring for alignment. If misaligned replace piggy back
30oa	Check slack adjuster strokes record: rf_____, lf_____, lr_____, rr_____fr (max strokes, front 2" rear 2.5")**(3E)**
35aa	While checking brake stroke listen for any air leaks
35ba	Check general condition of rear axle, fasteners, mud flaps, leveling valves
35bd	Check rear shocks and bushings for wear and leaks **(3P)**
35bg	Check rear axle for loose or damaged mounting parts **(3P)**
35bn	Check rear axle ride height s/b 11 1/2" (+/- 1/8")
35ca	Lower vehicle, set parking brake.
35da	Visually inspect engine compartment for damaged items (i.e. clamps, loose bolts chaffed line/wires)
35ea	Check condition and security of alt, a/c & air compressor, radiator fans, starter and hydraulic pump
35en	Check hydraulic pump mounting bolts
35fa	Check engine and transmission mounts

35ga	Check condition of all engine drive belts
35gg	Check belt tensioners for wear and security
35gj	inspect engine vibration damper
35hn	replace engine air filter
35ia	Check coolant DCA level and record _____ Add DCA if needed
35id	Replaced DPF filter
35ig	Check exhaust bellows for leaks and alignment **(3R)**
35in	Check exhaust system for leaks, loose fasteners and straps **(3R)**
35iq	Set overhead
35it	Replace secondary fuel filter DO NOT PRE-FILL
35it	replace crankcase breather element
35iv	inspect rear engine area for leaks, lines chaffing, any damaged parts
35iw	re-install settee and fasteners
35jd	Replace air compressor
35je	Replace air compressor discharge line
35jn	Start engine and run for a few minutes, shut down. Check engine and hydraulic fluid levels make necessary adjustments
35ka	Check a/c compressor oil for color and proper level (proper level of oil 1/4 to 1/2 of site glass)
35la	Visually inspect clutch armature for wear & overheating caused by slippage
35lg	check and adjust clutch air gap and check for warp pulley
35lm	Check jump start plug and cables for cracks, chafing, damage and security. Verify boot is in place
35ma	Check Amerex agent cylinder gauge, is it in "green pie zone"? Assure all labels are intact, clean and legible and are secure
35mm	Check all Amerex cylinder, wiring, hose, actuators are secure and good working order
35na	check a/c refrigerant charge (ball floating in receiver tank sight glass)
35oa	Check a/c dry eye in receiver tank & liquid line site glass. Record color here _____
35on	Check heat detector wires for chaffing, kinks, or cuts. Perform cable test **(3T)**

35pa	Inspect a/c condenser for damage and cleanliness
35pn	check wheel stud torque s/b 450 to 500 ft. lbs. **(3O)**
40aa	Park bus clean area
	6000 mile A inspection items - no fill
	12000 mile B inspection items - yellow fill
	24000 mile C inspection items - green fill (annual)
	48000 mile D inspection - blue fill
	96000 mile E inspection - orange fill
e	192000 mile F inspection - purple fill

Maintenance Guidelines

Six (6) thousand mile A-inspection (typical) to include:

00aa	Pull in steam bay, put vehicle in neutral, set spring brakes. Dump air to doors and shut vehicle down
00af	Remove and clean HVAC return filter (replace if needed)
00ah	Inspect evaporator compartment for cleanliness, loose and damaged parts. Any signs of leaks?
00ba	Open all exterior compartment doors, pull battery trays out, all engine compartment doors (note any fluid leaks)
00ca	Steam clean all exterior door hinges, top of batteries, and engine compartment
00cd	Inspect all rims condition (cracks, rust) and security
00da	Using garden hose clean radiator and hydraulic cooler till water runs clear
00ea	Check specific gravity in batteries before filling cells with water record below. Use g=good, f= fair, rc =recharge
00fa	Battery 1 - Start at positive post cell1 _____cell 2_____cell3_____cell4_____cell5_____cell6_____
00ga	Battery 2 - Start at positive post cell1 _____cell 2_____cell3_____cell4_____cell5_____cell6_____

00ha	Fill each battery cell to proper level using distilled water
00ia	Check general battery condition, battery terminals for corrosion (clean if necessary) apply anti-corrosion protection
00ja	Lube battery tray slides and secure batteries.
00ka	Inspect battery equalizer condition, corrosion, damage
00la	Check battery shut off switch for corrosion, damage and dirt build up
00ma	Fill windshield washer fluid
00na	Lubricate all exterior door hinges, locks, bike rack, windshield wiper pivot post, w/c step edge closeout and outer hinge
00oa	Close all exterior compartment doors and secure
05aa	Start vehicle, supply air to doors, stow lift and raise bus to proper ride height
05ba	Mount brake test equipment and enter bus number
05ca	Perform three brake test - pull reading from machine and attach to inspection sheet, after returning to garage
05da	Drive test route for "talking bus" system, is it operating correct?
05dg	Check condition and security of radio and handset.
05dm	Prior to leaving for road test perform radio check. Is it operating correctly?
05ea	Drive vehicle on predetermined road test route
05fa	Speedometer, dash gauges all operating correctly?
05ga	Note any warning lights
05ha	Note any unusual operating condition, engine performance, transmission shift, vibration, steering play, noises, etc.
05ia	Operate HVAC system along with defroster working normally?
05ja	Before pulling in garage bay, at slow speed open entrance and exit door. Did interlock activate and throttle deactivate?
05ka	Bring vehicle in garage, set parking brake, activate fast idle, and operate both doors through all door control positions, ok?
10aa	Check for proper operation of exit door sensitive edge

10ba	Check driver's seat & seat belt condition and assure all functions operate correctly
10ca	Inspect condition of all driver's console, dash and saw tooth panels
10da	Inspect condition and operation of all driver's controls (switches)
10ea	Release parking brake, perform brake pump down. Did low air alarm activate and parking brake "pop" up @ 60 psi?
10fa	check condition and covers of both brake and throttle pedals
10ga	Check proper windshield wiper and washer operation.
10ha	Check driver's shades for condition & operation
10ja	Check steering wheel condition and blow horn
10ka	Check steering column for condition and operation of up/down and back /forth positions
10la	Check condition and security of fire extinguisher, safety triangles
10ma	Push "push to test" on AMEREX display, did audio alarm sound & all LEDs light up? Push "Relay Reset" to return to normal operation
10mb	Assure Amerex display "System Ok" led is illuminated
10md	check that all Amerex dash components are present & in their original location, and are in good working order
10mf	Check that all Amerex manual actuation switches/remote actuators are unobstructed by vehicle modifications or clutter
10mh	check that Amerex tamper indicators, lock wire seal, pull pins and "In Case Of Fire" instruction label are intact
10mj	Check that Amerex maintenance tag/certificate is in place. Record date of inspections and initial of inspector
10na	Lubricate driver's seat track, brake & throttle pedals
15aa	Check condition and security of interior mirrors to include exit door mirror
15ba	With entrance door open check "stop request" signal and sign for proper operation
15ca	Check condition & operation of (3) w/c jump seats (release handle, locking in both the up/down positions)
15da	Check condition & operation of the (8) tie down straps
15ea	Check condition & operation passenger restraints (2)

15fa	Check condition & operation of the Advance Restraint Module (A.R.M.), lubricate slide lightly
15ga	Check condition and security of all passenger seats
15ha	Check condition and security of all stanchions
15ia	Check wall panel, roof, flooring and standee line condition
15ja	Check condition, operation of roof hatches
15ka	Check interior dome lights for proper operation
20ca	Activate destination signs and exterior lights test modes
20da	Inspect exterior lights, destination signs for proper operations
20fa	Inspect all exterior panels and glass for any damage
20ga	Check windshield wiper arms and exterior mirrors for security
20ha	Drain air tanks, drain wet tank completely first, then the rest. Check for pressure and moisture.
20ia	Check all engine, transmission, surge tank, hydraulic system for proper fluid levels
20ja	Pull in bay, set parking brake and deploy w/c ramp
25aa	Dump air to entrance door, shut engine down
25ba	Open w/c rising floor asm. and vacuum drive platform
25ca	Using penetrating oil clean and then lubricate lightly (using 30w motor oil) drive chain and counter balance asm.
25da	Re-install rising floor, start engine, supply air to entrance door and stow w/c ramp. Shut engine down
25ea	Prepare lift(s) to raise bus
25fa	Release parking brake, raise vehicle. Assure that safety locks are engaged on vehicle lift(s)
25ga	Replace primary fuel filter. Pre-fill before installing.
25ha	Supply vehicle air system with shop air
25hn	Replace hydraulic filter
25ja	Visually inspect entire undercarriage front to back for any damage, leaks of any kind, all hose and wire condition
25ka	Check Spinner II oil filter, for leaks, damage
25la	Check engine, all fluid lines for leaks, chaffing, bad clamps

25ma	Check radiator and all coolant lines for leaks, chaffing, bad clamps
25na	Inspect condition of engine intake system
30aa	Check general condition of bottom half of engine compartment
30am	Check all Amerex nozzle blow-off caps are intact, nozzles outlets must be unobstructed to hazard its protecting
30ap	check all Amerex control heads, actuators, hoses, wiring and detectors secure and in good working order
30at	Check all Amerex wiring connections are sealed from weather and good condition
30ba	Check all steering components. tie rod ends, u-joints, box, and pitman arm
30ca	Check general condition of front axle, fasteners, mud flaps, leveling valves
30da	Clean and grease fittings, driveshaft (3), camshaft bushings (4), slack adjusters (4), tie rod ends (2), kingpins* (4)
30ea	Clean and grease fittings continue: intermediate shaft (2) drag link (2)
30fa	Inspect all brake lining condition, wear
30ga	Check all inner wheel seals, outer gaskets for signs of leakage
35ia	Check coolant DCA level and record _____ Add DCA if needed
35jn	Start engine and run for a few minutes, shut down. Check engine and hydraulic fluid levels make necessary adjustments
35ka	Check a/c compressor oil for color and proper level (proper level of oil 1/4 to 1/2 of site glass)
35la	Visually inspect clutch armature for wear & overheating caused by slippage
35ma	Check Amerex agent cylinder gauge, is it in "green pie zone"? Assure all labels are intact, clean and legible and are secure
35mm	Check all Amerex cylinder, wiring, hose, actuators are secure and good working order
35na	check a/c refrigerant charge (ball floating in receiver tank sight glass)
35oa	Check a/c dry eye in receiver tank & liquid line site glass. Record color here _____
35pa	Inspect a/c condenser for damage and cleanliness
40aa	Park bus clean area

Twelve (12) thousand mile B-inspection

This inspection will incorporate a complete A-inspection plus the following:

25hn	Change hydraulic fluid (refill with 15w-40 motor oil)
25jg	Replace secondary fuel filter DO NOT PRE-FILL
25jn	Change coolant filter
25nm	Check charge air cooler and piping, for security, damage
30hn	Clean rear axle breather
35bn	Check rear axle ride height s/b 11 1/2" (+/- 1/8")
35ig	Check exhaust bellows for leaks and alignment
35in	Check exhaust system for leaks, loose fasteners and straps
35it	Replace secondary fuel filter DO NOT PRE-FILL
35lm	Check jump start plug and cables for cracks, chafing, damage and security. Verify boot is in place
35on	Check heat detector wires for chaffing, kinks, or cuts. Perform cable test
35qm	replace trim unit in fare box

Twenty-four (24) thousand mile annual C-inspection

This inspection will incorporate a complete A & B inspection plus the following:

00ai	Clean A/C control panel & sensor using canned air (unit not running)
00ng	check electric radiator fans protective caps and retain rings
00nn	inspect radiator fan blades for cleanliness and damage
00nt	check radiator fan power cable ends for corrosion
10nn	inspect all i/o panels (four) for chaffing wires, loose connection
15im	Check egress windows for proper operation. lube release bolts and cable
25gn	check air dryer security
30cg	Check front shocks and bushings for wear and leaks
30cn	Check front axle, external bump stops and rings for wear or damage
30ct	Check front axle for proper ride height s/b 9" (+/- 1/4")

30cw	Check front axle for loose or damaged mounting parts
30en	Grease output shaft(1) (use hand gun only) use #2 grease
30in	Check driveline fastener torque s/b 115-135 ft. lb.
35bd	Check rear shocks and bushings for wear and leaks
35bg	Check rear axle for loose or damaged mounting parts
35en	Check hydraulic pump mounting bolts
35gg	Check belt tensioners for wear and security
35lg	check and adjust clutch air gap and check for warp pulley
35pn	check wheel stud torque s/b 450 to 500 ft. lbs.

Forty-Eight (48) thousand mile D-inspection

This inspection will incorporate a complete A, B & C inspection plus the following:

00ad	remove rear settee fasteners, but leave settee in place
00an	raise vehicle, completely steam clean under body.
00at	lower vehicle
00cg	remove settee and from inside bus steam clean rear of engine area
25gg	replace air dryer cartridge
25jt	Change Skinner II kit #73642
25jw	Change transmission main & lube filters
35gj	inspect engine vibration damper
35hn	replace engine air filter
35it	replace crankcase breather element
35iv	inspect rear engine area for leaks, lines chaffing, any damaged parts
35iw	re-install settee and fasteners

Ninety-Six (96) thousand mile E-inspection

This inspection will incorporate a complete A, B, C & D inspection plus the following:

25je	Change transmission fluid, take sample. **DO NOT LEAVE TRANSMISSION WITHOUT OIL**
25jj	Replace DEF filter
30gm	Replace front wheel bearing oil
30ht	Change rear axle fluid
35id	Replaced DPF filter
35iq	Set overhead

One Hundred and Ninety-Two (192) thousand mile F-inspection

This inspection will incorporate a complete A, B, C, D & E inspection plus the following:

35jd	Replace air compressor
35je	Replace air compressor discharge line

A/C Maintenance

The A/C preventive maintenance inspection is a program of routine checks and procedures performed on a scheduled and recurring basis to avoid breakdowns and prolong equipment life. The Maintenance Division performs required OEM A/C preventative maintenance inspection schedules that are reoccurring throughout the useful life of the vehicle as follows:

TYPE I A/C PMI Type

OEM's Visual inspection requirements are performed on the vehicle's "A" PM inspection every 6000 miles.

Yearly Inspection

The scheduling of the A/C inspection is done through the daily generation of a forecast report from the fleet management system. The selected vehicles are removed from service and A/C Preventative Maintenance workorder's are generated and assigned to appropriate personnel.

During the inspection RTS personnel uses the PM checklist and notes any defects discovered during the inspection. Once the PM checklist is complete the assigned personnel signs and dates the checklist. If required a work order is then generated and assigned to the appropriate personnel to correct any defects noted on the checklist. The work orders are closed and a copy is printed for the vehicle file and the electronic version remains a part of the permanent vehicle records in the fleet management software.

All RTS personnel performing A/C maintenance, repair and inspections are experienced in servicing and repair of HVAC systems, and possesses 608 certification. The following are the PM inspection forms currently in use:

THERMO KING

ANNUAL

BUS AIR CONDITIONING

IANCE

BUS NO.:	_____	DATE:	_____
BUS MFG. & MODEL:	_____	AC UNIT MFG & MODEL:	_____
HUB MILEAGE:	_____	AC UNIT SERIAL NO.:	_____
GARAGE LOCATION:	_____	COMPRESSOR SERIAL NO.	_____
TECHNICIAN:	_____	MAINT. SUPERVISOR:	_____

Note: The maintainer is to fill in the blank at the left upon completion of each PM Inspection Item using one of the "symbols" listed below. Record information or readings where requested for future reference.

Symbols: a. "PM": PM Performed b. "RN": Repair Needed c: "RC": Repair Completed

(Refer to Bus Manufacturer and/or A/C Manufacturer's Service Manual for all specifications)

I. Before Running Inspection

1. _____ Inspect and wash condenser, evaporator and heater coils with warm, soapy water. Steam clean compressor area. Clean evaporator and/or condenser drain lines and insure that drain outlet check valves are in place.
2. _____ Clean electrical control panel of lint, dirt and corrosion. Inspect all wire connections to be tight & clean. Clean with nylon brush & spray with contact cleaner as needed. Replace return air filters.
3. _____ Inspect evaporator motor and condenser motor brushes. Replace brushes if worn down to 1/2 inch in length (if top of brush is at top of brush holder). Check condition of commutator and bearings. Lubricate evaporator motor fan shaft bearings (if equipped). Check motor mounting hardware & fans to be tight & in good condition.
4. _____ Inspect driver's booster blower motor brushes. Replace if worn down
   Record voltage and amp readings of the motor.
   _____volts _____amps

TK 40812-1 (6/95)

5. _____ Install service gauge manifold set at the compressor service valves and record static pressures to verify that there is refrigerant in the A/C system.
   Suction:_____PSIG Discharge:_____PSIG
6. _____ Check for proper engine coolant level and record anti-freeze protection to ____°F. It should be 50/50 mixture of ethylene glycol/water = -34°F).
   Visually inspect the entire A/C unit heater coil compartment and connecting lines for evidence of engine coolant leaks. Replace hoses or clamps as needed.
7. _____ Visually inspect entire A/C unit for evidence of leaks of refrigerant and oil. If leaks are detected, leak check A/C system with electronic leak detector. Repair as needed. Pay special attention to service valve packing glands, service access ports and schrader valves. Insure protective caps are installed.
8. _____ Check moisture indicator in liquid line or receiver tank sightglass for moisture content. (If equipped)
   Green (Dry)_____ Yellow (wet)_____
9. _____ Inspect circulating pump brushes for wear and seal for evidence of leaks. Replace brushes if worn down.
10. _____ Check condenser air inlet and air outlet seals to be in good condition and in place. Check rear mud flaps to be in good condition.
11. _____ Visually inspect compressor clutch for evidence of wear or overheating. Inspect viscous dampener if equipped.
    Inspect compressor drive belt for wear or deterioration. (Refer to bus manufacturer's service manual for specification).
12. _____ a. Condition: OK_____ Replaced_____
    b. Tension: New Belt_____lbs. Existing Belt_____lbs.
    c. Alignment: OK_____ Adjusted_____
13. _____ Check compressor sightglass for presence of oil and record oil color:
    Clear/Amber_____ Brown_____ Gray_____ Black_____
    Take sample of compressor oil and check for acidity using acid test kit.
    Safe_____ Marginal_____ Acidic_____
    Note: Replace oil if acidic or color is black or gray. Perform A/C system cleanup if required.

II. Running Inspection

14. _____ Start the bus engine and turn the A/C system ON. Check and record the engine idle speed to be correct:

15. _____ Operate A/C system for 15 minutes at engine fast idle and record pressures and temperatures:

	Engine Idle	***Engine Fast Idle***	***Engine Full Throttle***
Suction:	_____PSIG	_____PSIG	_____PSIG
Discharge:	_____PSIG	_____PSIG	_____PSIG
Ambient:	_____°F	_____°F	_____°F
Return Air:	_____°F	_____°F	_____°F

16. _____ Check refrigerant charge level at fast idle. Make sure discharge pressure is 250 PSIG (min.) for R22 or discharge pressure is 150 PSIG (min.) for R134a systems. (Cover condenser air inlet to build head pressure if needed).
    Charge Level OK_____ Added Refrigerant_____lbs.

17. _____ Record compressor oil level (1/4 to 1/2 sightglass)._____Level _____Added ____Removed
18. _____ Record compressor oil pressure at engine idle. _____PSIG
19. _____ Visually and audibly inspect operation of condenser and evaporator motors, compressor and clutch for abnormal noise or vibration.
20. _____ Check compressor unloader settings of #1 & #4 cylinders. (4GB Compressor)
    Cylinder #4 (54 PSIG)_____ Cylinder #1 (52 PSIG)_____
21. _____ Perform compressor operating efficiency tests. (Record pressures in Step 21a while performing Step 21).
    a. Compressor high pressure to _____PSIG.
    b. Compressor pump down to _____ inches of vacuum.
    c. Lowside pump down to _____ inches of vacuum.
21a _____ Check operation of low pressure (LPCO) and high pressure (HPCO) cutout switches and condenser pressure switch (CPS). (Record pressures while doing Step 21).

	LPCO	***CPS***	***HPCO***
Opens:	_____PSIG	_____PSIG	_____PSIG
Closes:	_____PSIG	_____PSIG	_____PSIG

22. _____ Replace dehydrator annually. (Write date on dehydrator with felt pen).
    OK_____ Replaced_____
23. _____ Check evaporator pressure regulator (EPR) valve setting (If equipped)
    R22 (50 - 52 PSIG) _____PSIG. Adjust if needed. R134a (30 - 32 PSI) _____PSIG
24. _____ Check main heater unit coolant valve and sidewall coolant valve to be opening and closing when interior thermostat cycles on/off. If so equipped, check coolant circulating pump to be operating.
25. _____ Inspect under seat heater blower motors to be operating properly. Clean blower inlet screens of lint and dirt. (If so equipped).
26. _____ Check return air thermostat function by raising and lowering bus interior temperature to cycle unit in all modes of operation. (Heat, cool and reheat).
27. _____ Record voltage and amperage readings of motors in high and low speed operation using voltmeter and amp clamp.

	Evap. Motors		**Cond. Motors**	
	Roadside	*Curbside*	*Roadside*	*Curbside*
High speed:	_____Amps	_____Amps	_____Amps	_____Amps
Low speed:	_____Amps	_____Amps	_____Amps	_____Amps
Voltage:	_____Volts	_____Volts	_____Volts	_____Volts

28. _____ Lubricate clutch bearing and check air gap to be .045 inch (TK X426 compressor)
    _____Air Gap _____Adjusted? _____Lubricated?
29. _____ Inspect driver's heater/defroster unit:
    a. _____ Replace return air filter.
    b. _____ Inspect and wash heater coil with warm soapy water.
    c. _____ Inspect motor brushes and replace if worn down.
    d. _____ Lubricate control cable for defroster coolant valve.
    e. _____ Clean and inspect drain outlet check valve.
    f. _____ Check motor to operate on high and low speed.

Return bus to service

A. **Remarks:** Note any observations, suggestions and/or explain repairs made during the PM of the A/C system on this bus.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

B. **Parts Used:** List all parts, fluids or refrigerant used during the PM and/or repair of the A/C system on this bus.

	Qty	***Part No.***	***Description***
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

DAILY VEHICLE INSPECTION

Daily vehicle inspections are crucial to the success of the Preventive Maintenance Program. Investing a short time on a daily basis to inspect each vehicle will help detect problems early, thereby improving safety and decreasing vehicle repair cost.

Each driver is required inspect his or her vehicle before departure by completing the Daily Vehicle Inspection Checklist. The completed checklist is submitted to the transportation manager at the end of the drivers shift so that necessary maintenance can be noted and scheduled accordingly.

Bus Type I Daily Inspection Checklist:

DAILY VEHICLE INSPECTION Report

Vehicle No.	Date	Drivers Name	Start Miles	Start Time	End Miles	End Time
		1				
		2				
		3				

= Satisfactory = Unsatisfactory

1	2	3	Inspection Item
			Tires and Wheels
			TIRE CONDITION, TREAD DEPTH AND AIR PRESSURE
	■		Wheels and rims for cracks, rips, welds or protruding objects.
			LUG NUTS TIGHT, NO EXCESSIVE RUST OR DAMAGE
			Engine Compartment
	■	■	ENGINE OIL
	■	■	AUTOMATIC TRANSMISSION FLUID
	■	■	COOLING SYSTEM LEVEL
	■	■	Windshield washer solution
	■	■	BRAKE FLUID LEVEL
	■	■	Power steering fluid level
	■	■	Battery terminals clean, no corrosion
			Under vehicle leaks
			Vehicle Glass
			Windshield has no chips or cracks
			MIRRORS ARE COMPLETE AND IN GOOD CONDITION
			Windows complete
			Emergency windows complete and operable
			Vehicle Lighting
			HEADLIGHTS OPERATIONAL – HIGH AND LOW BEAM
			All Clearance lights operational & reflectors present
	■		BRAKE LIGHTS COMPLETE AND OPERATIONAL
	■		TURN SIGNALS COMPLETE AND OPERATIONAL
	■		Backup lights complete and operational
	■		Backup alarm complete and audible
			EMERGENCY 4 WAY FLASHERS OPERATIONAL
			Vehicle Interior Environment
	■		Front & rear air conditioner complete and operational
	■		Front & Rear heater complete and operational
	■		DEFROSTER COMPLETE AND OPERATIONAL
			Interior
			Clean

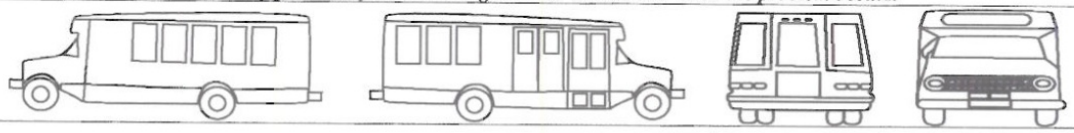
1	2	3	Inspection item
	■		Seats and cushions are secure
	■		Seat belts are complete, operational and secure
			2 way radio is complete and operational –RADIO CHECK
	■		WINDSHIELD WIPERS OPERATIONAL
			Windshield washer operational
			HORN OPERATIONAL
	■		PASSENGER DOOR COMPLETE AND OPERATIONAL
	■	■	Valid Registration present and visible
	■	■	Valid proof of insurance
			OTHER:
			Brakes
			BRAKE PEDAL FEELS GOOD AND STOPPING PROPERLY
	■		PARKING BRAKE COMPLETE AND OPERATING PROPERLY
			Steering and Suspension System
			STEERING WHEEL SECURE, NO EXCESSIVE PLAY
			Gearshift mechanism tight and working properly
			Safety Items
	■		First aid kit, fully stocked and present
	■		Triangle reflectors present and complete
	■		FIRE EXTINGUISHER PRESENT, FULLY CHARGED
	■		Vehicle accident packet present and accessible
	■		Body fluid kit present and accessible
	■		Seat Belt web cutter present
			Wheelchair Lift
	■		Lift free from leakage
	■		Lift operating properly electronically
	■		Lift operating properly manually
	■		LIFT INTERLOCK OPERATING PROPERLY
			# of Lap Belts: _____ # of Tie Downs: _____

Next PMS due is

Quarts of oil added:

Gallons of fuel added:

Please explain in detail below any problems you are having with the vehicle and when the problem occurs.



Any items in **bold** marked unsatisfactory must be brought to the attention of the Supervisor immediately. The **bold** typeface indicates items that place a vehicle out of service.
I declare that I have properly performed a vehicle inspection on the vehicle indicated above and have inspected and marked the inspection items, listed above, accordingly.

Driver's signature Pre Trip inspection : _____
There have been no incidents or accidents with this vehicle since the above signed inspection.

Driver's signature mid trip inspection : _____

Driver's post trip inspection : _____

Reviewed
Noted for repair
Could not duplicate problem
Repaired

Technicians Signature: _____

Shop Managers Signature: _____

Driver number 2, mid trip, only has to perform a walk around inspection. Only inspect items where a mark can be placed

Paratransit DVI 3part

Bus Type II Daily Inspection Checklist:

CITY OF GAINESVILLE
every path starts with passion
FLORIDA

CITY OF GAINESVILLE REGIONAL TRANSIT SYSTEM Vehicle Condition Report

RTS REGIONAL TRANSIT SYSTEM

PRETRIP AND IN-SERVICE BUS INSPECTION

Start Hub Reading: _____ End Hub Reading: _____

Date: _____ #1 Driver's Name: _____ Driver #: _____ ❑ Bus Okay Route: _____ Run: _____

#2 Driver's Name: _____ Driver #: _____ ❑ Bus Okay Route: _____ Run: _____

Bus #: _____ #3 Driver's Name: _____ Driver #: _____ ❑ Bus Okay Route: _____ Run: _____

NOTE: Law requires legible signature (no initials).

PRETRIP INSPECTION: Before departing garage, review previous drivers' maintenance copy found on bus. Cycle wheelchair lift/kneeler. Contact radio dispatch if any noted defects from previous driver have not been repaired. Upon relieving another driver, contact radio dispatch to resolve any outstanding or newly found DOT or "shaded block" defects.

BUS RETURN INSPECTION: Upon returning to garage, park bus in fuel lane and turn in defect report to dispatch.

Driver #1	Driver #2	Driver #3	Check Defect — DOT DEFECTS
			Air Brake Operation
			Air System Leaks
			Driver Seat/Belt
			Exhaust System
			Fluid Leaks
			Fire Extinguisher
			Horn
			Lights-Exterior
			Mirrors-In/Outside
			Rims/Lugs-Wheel Crack
			Suspension System
			Tires
			Triangles
			Windsh./Wipers/Washers
			WHEEL CHAIR
			Lift Operable? Yes No
			No Power
			Lower/Raise/Stow
			Barriers
			Securement Device (straps)
			BRAKES
			Slack
			Pulls Left and/or Right
			Grabs/Squeals/Spongy
			Unequal Front/Rear
			Won't Release
			Warning Signal
			LIGHTS
			Ceiling
			Steps - Front/Rear
			Tell/Tale Dash
			Stop Request
			Destin. Sign - Front/Rear

Driver #1	Driver #2	Driver #3	Check Defect — TIRES
			Low Air
			Cut/Damaged
			Cap Loose
			Worn
			SUSPENSION
			Bellows
			Shock
			Leans/Sways
			MISCELLANEOUS
			Registration Card
			License Card
			Safety Pouch
			Bio Kit
			First Aid Kit
			ENGINE
			Lacks Power
			Hot
			No Start/No Stop
			Races/Stalls
			Oil/Water Leak
			Exhaust Smoke
			Noisy
			No Fast Idle
			TRANSMISSION
			Slips/Jumps Out of Gear
			Rough Shift
			No Shift/Reverse
			Fluid Leak

Driver #1	Driver #2	Driver #3	Check Defect — STEERING
			Hard/Loose/Pulls
			Shimmies
			Tilt Wheel
			A/C AND HEATING
			No A/C or Heat
			Too Warm/Cool
			No Defroster
			A/C On and Off
			Noisy
			BODY
			Damage (circle below)
			Steps
			Windows
			Bumpers
			Compartment Doors
			Roof Hatch - Front/Rear
			Passenger Seats
			Bike Rack
			Advertising - In/Outside
			DOORS
			Fast/Slow - Front/Rear
			Damaged - Front/Rear
			Sensitive Edge
			ELECTRONIC
			Radio Receiver/Transmit
			Farebox Power/Jam/Date
			Destin. Sign-Front/Side
			Passenger Chime

Further Define Problem/Comments:

_____

_____

_____

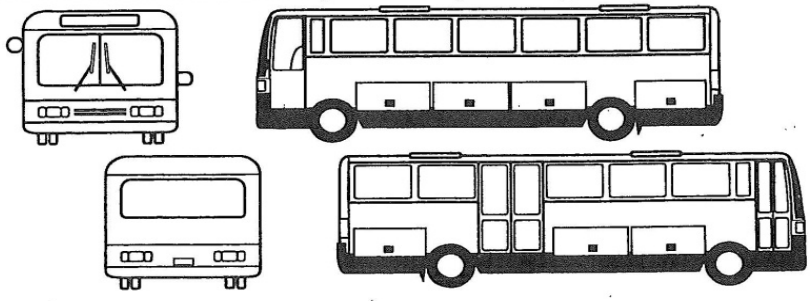
_____

_____

_____

_____

BODY DAMAGE COMMENTS (mark damage to body):



GENERAL NOTES ABOUT THE DAILY VEHICLE INSPECTION CHECKLIST

An important part of preventive maintenance is the establishment of strong communication ties between drivers, mechanics / repair garages, and management. An easy way to ensure and document this communication link is by way of the drivers Vehicle Condition Report Inspection (VCR) Checklist.

The Vehicle Service Attendant (VSA) shall take possession of bus and remove the VCR, found on driver's seat and drop it in the "black box" designated for completed reports in Service Lanes one (1), two (2) and three (3) located on the south side of the RIH. The 2nd and 3rd shift supervisors are responsible for collecting all VCRs. When a VCR indicates a defect maintenance supervisor on duty shall create a work order and assign the proper maintenance personnel to make necessary repair(s) of any driver noted defects.

RTS maintenance staff routinely complete daily inspection check list on approximately 5% of buses in service any defect discovered are corrected and are reported to Operations Management so they can follow up the appropriate bus driver

The sample checklist provided on page 35 meets or exceeds the minimum requirements in Rule 14.90.006 (7) (a) Florida Administrative Code. All collected VCR must be kept on file for a period of fourteen (14) days. When a VCR has a reported defect a copy of the work order created to make the repairs shall be attached and filed along with the other VCRs for a period of 14 days.

COMPREHENSIVE MAINTENANCE RECORDS

RTS utilizes fleet management software (FleetNet) for electronic Maintenance Records as well as a keeping a hard copy on file for each vehicle. A work order is generated each time any maintenance is performed on any vehicle. All records are maintained in storage for a period of four (4) years.

The supervisory and management staff of RTS are trained in and utilize the reporting tools within FleetNet to constantly review data and trending to adjust our methods to ensure the efficiency and effectiveness of our maintenance programs.

Warranty Recovery System

Failed Components

Parts and components that may have failed prematurely are checked to determine if the part or component is covered under warranty. If the part or component is covered by a warranty, it is returned to the vendor.

Return to manufacturer/vendor

Authorization for warranty return and labor claims, if applicable, are obtained from the manufacturer or vendor. Information is supplied to the vendor on the circumstances of the failure, if known. The item is then returned to the vendor warranty department for repair or replacement. Transit Agency retains copy of the warranty claim form for tracking purposes.

Receipt from manufacturer/vendor

When a unit is received, it is entered into the inventory system coded as a warranty replacement. This is forwarded to the Accounting Department to make the necessary accounting adjustments. Labor credit if received is applied to the appropriate cost center via a credit entry applied to the work order used when the defective part was removed.

APPENDIX D

Gainesville. Mobility RTS — Gainesville. Citizen centered People empowered	**Administrative – State of Good Repair Policy** Number ADM-2019-02 New/Revised Date 12/07/18 Effective Date New Approved by: Malisa McCreedy, Mobility Director

POLICY STATEMENT:

RTS' State of Good Repair (SGR) policy is such that a capital asset is in SGR when the following objective standards are met:

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

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

The goal of these policies is to allow RTS to determine and predict the cost to improve asset condition(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 ULB and condition.

SGR PERFORMANCE MEASURES AND TARGETS

SGR performance measures combine the measures of ULB and physical condition to create performance measures from which asset performance targets can be derived on an annual basis. These performance measures are directly related to asset lifecycle (ULB and 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. FTA-defined SGR performance measures include:

- Rolling Stock (Age) – The percentage of revenue vehicles (fixed-route and paratransit) within a particular asset class that have either met or exceeded their ULB.

- Equipment (Non-Revenue Service Vehicles) (Age) – Applies only to non-revenue service vehicles and does not include "other" equipment assets. The SGR performance measure for non-revenue, support-service, and maintenance vehicle equipment is the percentage of those vehicles that have either met or exceeded their ULB.
- Facilities (Condition) – The percentage of facilities within an asset class rated below condition 3 on the FTA TERM Scale

APPENDIX E

lease clean diesel vehicles are not required to report information beyond FTA grant reporting requirements for capital projects.

[67 FR 40104, June 11, 2002, as amended at 72 FR 15053, Mar. 30, 2007]

PART 625—TRANSIT ASSET MANAGEMENT

Subpart A—General Provisions

Subpart B—National Transit Asset Management System

Subpart C—Transit Asset Management Plans

Subpart D—Performance Management

Subpart E—Recordkeeping and Reporting Requirements for Transit Asset Management

AUTHORITY: Sec. 20019 of Pub. L. 112–141, 126 Stat. 707, 49 U.S.C. 5326; Sec. 20025(a) of Pub. L. 112–141, 126 Stat, 718, 49 CFR 1.91.

SOURCE: 81 FR 48962, July 26, 2016, unless otherwise noted.

Subpart A—General Provisions

§ 625.1 Purpose.

This part carries out the mandate of 49 U.S.C. 5326 for transit asset management. This part establishes a National Transit Asset Management (TAM) System to monitor and manage public transportation capital assets to enhance safety, reduce maintenance costs, increase reliability, and improve performance.

§ 625.3 Applicability.

This part applies to all recipients and subrecipients of Federal financial assistance under 49 U.S.C. Chapter 53 that own, operate, or manage capital assets used for providing public transportation.

§ 625.5 Definitions.

All terms defined in 49 U.S.C. Chapter 53 are incorporated into this part by reference. The following terms also apply to this part:

Accountable Executive means a single, identifiable person who has ultimate responsibility for carrying out the safety management system of a public transportation agency; responsibility for carrying out transit asset management practices; and control or direction over the human and capital resources needed to develop and maintain both the agency's public transportation agency safety plan, in accordance with 49 U.S.C. 5329(d), and the agency's transit asset management plan in accordance with 49 U.S.C. 5326.

Asset category means a grouping of asset classes, including a grouping of equipment, a grouping of rolling stock, a grouping of infrastructure, and a grouping of facilities. See Appendix A to this part.

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. See Appendix A to this part.

Asset inventory means a register of capital assets, and information about those assets.

Capital asset means a unit of rolling stock, a facility, a unit of equipment, or an element of infrastructure used for providing public transportation.

Decision support tool means an analytic process or methodology:

(1) To help prioritize projects to improve and maintain the state of good repair of capital assets within a public transportation system, based on available condition data and objective criteria; or

(2) To assess financial needs for asset investments over time.

Direct recipient means an entity that receives Federal financial assistance directly from the Federal Transit Administration.

Equipment means an article of nonexpendable, tangible property having a useful life of at least one year.

Exclusive-use maintenance facility means a maintenance facility that is not commercial and either owned by a transit provider or used for servicing their vehicles.

Facility means a building or structure that is used in providing public transportation.

Full level of performance means the objective standard established by FTA for determining whether a capital asset is in a state of good repair.

Group TAM plan means a single TAM plan that is developed by a sponsor on behalf of at least one tier II provider.

Horizon period means the fixed period of time within which a transit provider will evaluate the performance of its TAM plan.

Implementation strategy means a transit provider's approach to carrying out TAM practices, including establishing a schedule, accountabilities, tasks, dependencies, and roles and responsibilities.

Infrastructure means the underlying framework or structures that support a public transportation system.

Investment prioritization means a transit provider's ranking of capital projects or programs to achieve or maintain a state of good repair. An investment prioritization is based on financial resources from all sources that a transit provider reasonably anticipates will be available over the TAM plan horizon period.

Key asset management activities means a list of activities that a transit provider determines are critical to achieving its TAM goals.

Life-cycle cost means the cost of managing an asset over its whole life.

Participant means a tier II provider that participates in a group TAM plan.

Performance Measure means an expression based on a quantifiable indicator of performance or condition that is used to establish targets and to assess progress toward meeting the established targets (*e.g.*, a measure for on-time performance is the percent of trains that arrive on time, and a corresponding quantifiable indicator of performance or condition is an arithmetic difference between scheduled and actual arrival time for each train).

Performance target means a quantifiable level of performance or condition, expressed as a value for the measure, to be achieved within a time period required by the Federal Transit Administration (FTA).

Public transportation system means the entirety of a transit provider's operations, including the services provided through contractors.

Public transportation agency safety plan means a transit provider's documented comprehensive agency safety plan that is required by 49 U.S.C. 5329.

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

Rolling stock means a revenue vehicle used in providing public transportation, including vehicles used for carrying passengers on fare-free services.

Service vehicle means a unit of equipment that is used primarily either to support maintenance and repair work for a public transportation system or for delivery of materials, equipment, or tools.

Sponsor means a State, a designated recipient, or a direct recipient that develops a group TAM for at least one tier II provider.

State of good repair (SGR) means the condition in which a capital asset is able to operate at a full level of performance.

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

TERM scale means the five (5) category rating system used in the Federal Transit Administration's Transit Economic Requirements Model (TERM) to describe the condition of an asset: 5.0—Excellent, 4.0—Good; 3.0—Adequate, 2.0—Marginal, and 1.0—Poor.

Tier I provider means a recipient that owns, operates, or manages either (1) one hundred and one (101) or more vehicles in revenue service during peak regular service across all fixed route modes or in any one non-fixed route mode, or (2) rail transit.

Tier II provider means a recipient that owns, operates, or manages (1) one hundred (100) or fewer vehicles in revenue service during peak regular service across all non-rail fixed route modes or in any one non-fixed route mode, (2) a subrecipient under the 5311 Rural Area Formula Program, (3) or any American Indian tribe.

Transit asset management (TAM) means the strategic and systematic practice of procuring, operating, inspecting, maintaining, rehabilitating, and replacing transit capital assets to manage their performance, risks, and costs over their life cycles, for the purpose of providing safe, cost-effective, and reliable public transportation.

Transit asset management (TAM) plan means a plan that includes an inventory of capital assets, a condition assessment of inventoried assets, a decision support tool, and a prioritization of investments.

Transit asset management (TAM) policy means a transit provider's documented commitment to achieving and maintaining a state of good repair for all of its capital assets. The TAM policy defines the transit provider's TAM objectives and defines and assigns roles and responsibilities for meeting those objectives.

Transit asset management (TAM) strategy means the approach a transit provider takes to carry out its policy for TAM, including its objectives and performance targets.

Transit asset management system means a strategic and systematic process of operating, maintaining, and improving public transportation capital assets effectively, throughout the life cycles of those assets.

Transit provider (provider) means a recipient or subrecipient of Federal financial assistance under 49 U.S.C. chapter 53 that owns, operates, or manages capital assets used in providing public transportation.

Useful life means either the expected life cycle of a capital asset or the acceptable period of use in service determined by FTA.

Useful life benchmark (ULB) means the expected life cycle or the acceptable period of use in service for a capital asset, as determined by a transit provider, or the default benchmark provided by FTA.

Subpart B—National Transit Asset Management System

§ 625.15 Elements of the National Transit Asset Management System.

The National TAM System includes the following elements:

(a) The definition of *state of good repair*, which includes objective standards for measuring the condition of capital assets, in accordance with subpart D of this part;

(b) Performance measures for capital assets and a requirement that a provider and a group TAM plan sponsor establish performance targets for improving the condition of capital assets, in accordance with subpart D of this part;

(c) A requirement that a provider develop and carry out a TAM plan, in accordance with subpart C of this part,

(d) Reporting requirements in accordance with subpart E of this part; and

(e) Analytical processes and decision support tools developed or recommended by FTA.

§ 625.17 State of good repair principles.

(a) A capital asset is in a state of good repair if it is in a condition sufficient for the asset to operate at a full level of performance. In determining whether a capital asset is in a state of good repair, a provider must consider the state of good repair standards under subpart D of this part.

(b) An individual capital asset may operate at a full level of performance regardless of whether or not other capital assets within a public transportation system are in a state of good repair.

(c) A provider's Accountable Executive must balance transit asset management, safety, day-to-day operations, and expansion needs in approving and carrying out a TAM plan and a public transportation agency safety plan.

Subpart C—Transit Asset Management Plans

§ 625.25 Transit Asset Management Plan requirements.

(a) *General.* (1) Each tier I provider must develop and carry out a TAM plan that includes each element under paragraph (b) of this section.

(2) Each tier II provider must develop its own TAM plan or participate in a group TAM plan. A tier II provider's TAM plan and a group TAM plan only must include elements under paragraphs (b)(1) through (4) of this section.

(3) A provider's Accountable Executive is ultimately responsible for ensuring that a TAM plan is developed and carried out in accordance with this part.

(b) *Transit asset management plan elements.* Except as provided in paragraph (a)(3) of this section, a TAM plan must include the following elements:

(1) An inventory of the number and type of capital assets. The inventory must include all capital assets that a provider owns, except equipment with an acquisition value under $50,000 that is not a service vehicle. An inventory also must include third-party owned or jointly procured exclusive-use maintenance facilities, passenger station facilities, administrative facilities, rolling stock, and guideway infrastructure used by a provider in the provision of public transportation. The asset inventory must be organized at a level of detail commensurate with the level of detail in the provider's program of capital projects;

(2) A condition assessment of those inventoried assets for which a provider has direct capital responsibility. A condition assessment must generate information in a level of detail sufficient to monitor and predict the performance of the assets and to inform the investment prioritization;

(3) A description of analytical processes or decision-support tools that a provider uses to estimate capital investment needs over time and develop its investment prioritization;

(4) A provider's project-based prioritization of investments, developed in accordance with § 625.33 of this part;

(5) A provider's TAM and SGR policy;

(6) A provider's TAM plan implementation strategy;

(7) A description of key TAM activities that a provider intends to engage in over the TAM plan horizon period;

(8) A summary or list of the resources, including personnel, that a provider needs to develop and carry out the TAM plan; and

(9) An outline of how a provider will monitor, update, and evaluate, as needed, its TAM plan and related business practices, to ensure the continuous improvement of its TAM practices.

§ 625.27 Group plans for transit asset management.

(a) *Responsibilities of a group TAM plan sponsor.* (1) A sponsor must develop a group TAM plan for its tier II provider subrecipients, except those subrecipients that are also direct recipients under the 49 U.S.C. 5307 Urbanized Area Formula Grant Program. The group TAM plan must include a list of those subrecipients that are participating in the plan.

(2) A sponsor must comply with the requirements of this part for a TAM plan when developing a group TAM plan.

(3) A sponsor must coordinate the development of a group TAM plan with each participant's Accountable Executive.

(4) A sponsor must make the completed group TAM plan available to all participants in a format that is easily accessible.

(b) *Responsibilities of a group TAM plan participant.* (1) A tier II provider may participate in only one group TAM plan.

(2) A tier II provider must provide written notification to a sponsor if it

chooses to opt-out of a group TAM plan. A provider that opts-out of a group TAM plan must either develop its own TAM plan or participate in another sponsor's group TAM plan.

(3) A participant must provide a sponsor with any information that is necessary and relevant to the development of a group TAM plan.

§ 625.29 Transit asset management plan: horizon period, amendments, and updates.

(a) *Horizon period.* A TAM plan must cover a horizon period of at least four (4) years.

(b) *Amendments.* A provider may update its TAM plan at any time during the TAM plan horizon period. A provider should amend its TAM plan whenever there is a significant change to the asset inventory, condition assessments, or investment prioritization that the provider did not reasonably anticipate during the development of the TAM plan.

(c) *Updates.* A provider must update its entire TAM plan at least once every four (4) years. A provider's TAM plan update should coincide with the planning cycle for the relevant Transportation Improvement Program or Statewide Transportation Improvement Program.

§ 625.31 Implementation deadline.

(a) A provider's initial TAM plan must be completed no later than two years after October 1, 2016.

(b) A provider may submit in writing to FTA a request to extend the implementation deadline. FTA must receive an extension request before the implementation deadline and will consider all requests on a case-by-case basis.

§ 625.33 Investment prioritization.

(a) A TAM plan must include an investment prioritization that identifies a provider's programs and projects to improve or manage over the TAM plan horizon period the state of good repair of capital assets for which the provider has direct capital responsibility.

(b) A provider must rank projects to improve or manage the state of good repair of capital assets in order of priority and anticipated project year.

(c) A provider's project rankings must be consistent with its TAM policy and strategies.

(d) When developing an investment prioritization, a provider must give due consideration to those state of good repair projects to improve that pose an identified unacceptable safety risk when developing its investment prioritization.

(e) When developing an investment prioritization, a provider must take into consideration its estimation of funding levels from all available sources that it reasonably expects will be available in each fiscal year during the TAM plan horizon period.

(f) When developing its investment prioritization, a provider must take into consideration requirements under 49 CFR 37.161 and 37.163 concerning maintenance of accessible features and the requirements under 49 CFR 37.43 concerning alteration of transportation facilities.

Subpart D—Performance Management

§ 625.41 Standards for measuring the condition of capital assets.

A capital asset is in a state of good repair if it meets the following objective standards—

(a) The capital asset is able to perform its designed function;

(b) The use of the asset in its current condition does not pose an identified unacceptable safety risk; and

(c) The life-cycle investment needs of the asset have been met or recovered, including all scheduled maintenance, rehabilitation, and replacements.

§ 625.43 SGR performance measures for capital assets.

(a) *Equipment: (non-revenue) service vehicles.* The performance measure for non-revenue, support-service and maintenance vehicles equipment is the percentage of those vehicles that have either met or exceeded their ULB.

(b) *Rolling stock.* The performance measure for rolling stock is the percentage of revenue vehicles within a particular asset class that have either met or exceeded their ULB.

(c) *Infrastructure: rail fixed-guideway, track, signals, and systems.* The performance measure for rail fixed-guideway, track, signals, and systems is the percentage of track segments with performance restrictions.

(d) *Facilities.* The performance measure for facilities is the percentage of facilities within an asset class, rated below condition 3 on the TERM scale.

§ 625.45 Setting performance targets for capital assets.

(a) *General.* (1) A provider must set one or more performance targets for each applicable performance measure.

(2) A provider must set a performance target based on realistic expectations, and both the most recent data available and the financial resources from all sources that the provider reasonably expects will be available during the TAM plan horizon period.

(b) *Timeline for target setting.* (1) Within three months after the effective date of this part, a provider must set performance targets for the following fiscal year for each asset class included in its TAM plan.

(2) At least once every fiscal year after initial targets are set, a provider must set performance targets for the following fiscal year.

(c) *Role of the accountable executive.* A provider's Accountable Executive must approve each annual performance target.

(d) *Setting performance targets for group plan participants.* (1) A Sponsor must set one or more unified performance targets for each asset class reflected in the group TAM plan in accordance with paragraphs (a)(2) and (b) of this section.

(2) To the extent practicable, a Sponsor must coordinate its unified performance targets with each participant's Accountable Executive.

(e) *Coordination with metropolitan, statewide and non-metropolitan planning processes.* To the maximum extent practicable, a provider and Sponsor must coordinate with States and Metropolitan Planning Organizations in the selection of State and Metropolitan Planning Organization performance targets.

Subpart E—Recordkeeping and Reporting Requirements for Transit Asset Management

§ 625.53 Recordkeeping for transit asset management.

(a) At all times, each provider must maintain records and documents that support, and set forth in full, its TAM plan.

(b) A provider must make its TAM plan, any supporting records or documents performance targets, investment strategies, and the annual condition assessment report available to a State and Metropolitan Planning Organization that provides funding to the provider to aid in the planning process.

§ 625.55 Annual reporting for transit asset management.

(a) Each provider must submit the following reports:

(1) An annual data report to FTA's National Transit Database that reflects the SGR performance targets for the following year and condition information for the provider's public transportation system.

(2) An annual narrative report to the National Transit Database that provides a description of any change in the condition of the provider's transit system from the previous year and describes the progress made during the year to meet the performance targets set in the previous reporting year.

(b) A Sponsor must submit one consolidated annual data report and one consolidated annual narrative report, as described in paragraph (a)(1) and (2) of this section, to the National Transit Database on behalf of its participants.

Appendix A to Part 625—Asset Categories, Asset Classes, and Individual Assets

EXAMPLE of asset categories, asset classes, and individual assets:

ASSET CATEGORY		ASSET CLASS	INDIVIDUAL ASSET
	Equipment	Construction	Crane Prime Mover
		Maintenance	Vehicle Lift Track Geometry Car
		Non-revenue Service Vehicles	Tow Truck Emergency Response Vehicle Supervisor Car Track Maintenance Vehicle
	Rolling Stock	Buses	40 Foot Bus 60 Foot Articulated Bus
		Other Passenger Vehicles	Cutaway Van Minivan
		Railcars	Light Rail Vehicle Commuter Rail Locomotive
		Ferries	Ferry Boat
	Infrastructure	Systems	Signal Substation
		Fixed Guideway	Track Segment Ballast Segment Exclusive Bus Right-of-Way Segment
		Power	Catenary Segment Third Rail Segment
		Structures	Bridge Tunnel Elevated Structure
	Facilities	Support Facilities	Maintenance Facilities Administrative Facilities
		Passenger Facilities	Rail Terminals Bus Transfer Stations
		Parking Facilities	Parking Garages Park-and-Ride Lots

APPENDIX B TO PART 625—RELATIONSHIP AMONGST SGR PERFORMANCE MEASURES, SGR DEFINITION, AND SGR PRINCIPLES

EXAMPLE Relationship amongst SGR performance measures, SGR definition, and SGR principles:

(a) A tier I provider has a TAM asset inventory containing, in total across all modes, over 150 revenue vehicles in peak revenue service, no rail fixed guideway, multiple passenger and exclusive use maintenance facilities, and various pieces of equipment over $50,000. Their asset inventory is itemized at the level of detail they use in their capital program of projects; it also includes capital assets they do not own but use. The provider conducts condition assessments on those assets in its inventory for which it has direct financial responsibility. The results of the condition assessment indicate that there is an identified unacceptable safety risk in the deteriorated condition of one of their non-revenue service vehicles, but that the non-revenue service vehicles are

being used as designed. The condition assessment results show the provider that one non-revenue service vehicle is not in SGR.

(b) The condition assessment results also inform the investment prioritization process, which for this provider is a regression analysis in a spreadsheet software program. The provider's criteria, as well as their weightings, are locally determined to produce the ranked list of programs and projects in their investment prioritization. The provider batches its projects by low, medium or high priority, identifying in which funding year each project will proceed. The provider has elected to use the ULB defaults, provided by FTA, for each of their modes until such time as they have resources and expertise to develop customized ULBs.

(c) The provider separates assets within each asset category by class to determine their current performance measure metric. For example, the equipment listed in its TAM asset inventory includes HVAC equipment and service vehicles; however, the SGR performance metric for the equipment category only requires the non-revenue vehicle metrics. Thus, the provider measures only non-revenue vehicles that exceed the default ULB for the modes they own, operate, or manage. This metric is the baseline the provider uses to determine its target for the forthcoming year.

(d) The provider's equipment baseline, its investment priorities that show minimal funding for non-revenue vehicles over the next 4 years, and its TAM policies, strategies and key asset management activities are used to project its target for the equipment category. Since one of its non-revenue service vehicles indicated an unacceptable safety risk, it is elevated in the investment prioritization for maintenance or replacement. The provider's target may indicate a decline in the condition of their equipment overall, but it addresses the unacceptable safety risk as an immediate priority.

(e) The cyclic nature of investment prioritization and SGR performance target setting requires the provider to go through the process more than once to settle on the balance of priorities and targets that best reflects its local needs and funding availability from all sources. The provider's accountable executive has ultimate responsibility for accepting and approving the TAM plan and SGR targets. The targets are then submit to the NTD and shared with the provider's planning organization. The narrative report, which describes the SGR performance measure metrics, is also submitted to the NTD.

Appendix C to Part 625—Assets Included in National TAM System Provisions

Table 1—Assets Included in National TAM System Provisions

MAP-21 Asset Category	TAM Plan Element		SGR Performance Measure 625.43 (a) – (d)
	Asset inventory 625.15 (c)(1)	Condition assessment 625.15 (c)(2)	
Equipment	All non-revenue service vehicles and equipment over $50,000 used in the provision of public transit, except third-party equipment assets.	Only inventoried equipment with direct capital responsibility, no third party assets	Only non-revenue service vehicles with direct capital responsibility.
Rolling Stock	All revenue vehicles used in the provision of public transit	Only revenue vehicles with direct capital responsibility	Only revenue vehicles with direct capital responsibility, by mode
Infrastructure	All guideway infrastructure used in the provision of public transit	Only guideway infrastructure with direct capital responsibility	Only fixed rail guideway with direct capital responsibility
Facilities	All passenger stations and all exclusive-use maintenance facilities used in the provision of public transit, excluding bus shelters	Only passenger stations and exclusive-use maintenance facilities with direct capital responsibility, excluding bus shelters	1- Maintenance and Administrative facilities with direct capital responsibility, 2- Passenger stations (buildings) and Parking facilities with direct capital responsibility

Table 2—*EXAMPLE* of Multiple SGR Performance Targets for a Sample Fleet

MAP-21 Asset Category	Asset Class	Performance Targets
Equipment	one non-revenue service vehicle type (automobile)	**Total 1- Equipment Performance Target:** 1- supervisor car
Rolling Stock	3 vehicle types (cutaway, van, 30 ft. bus)	**Total 3- Rolling Stock Performance Targets:** 1- cutaway, 2- van, 3- 30 ft. bus
Infrastructure	no track	**Total 0 - Infrastructure Performance Targets:**
Facilities	2 exclusive-use maintenance garages, 1 administrative office, and 3 passenger stations	**Total - 2 Facilities Performance Target:** 1- maintenance and administrative facilities 2- passenger and parking facilities

APPENDIX F

Regional Transit System Administrative Policy and Procedure

Gainesville. Mobility RTS — Gainesville. Citizen centered People empowered	**Administrative – Transit Asset Management Policy**
	Number ADM-2019-01
	New/Revised Date 11/13/18
	Effective Date New
	Approved by: Malisa McCreedy, Mobility Director 11.13.18

POLICY STATEMENT:

The City of Gainesville Regional Transit System (RTS) adopts and is in compliance with the policies set forth by the City of Gainesville, the Department of Transportation's (DOT) Title 49 Code of Federal Regulations (C.F.R.) Transportation (current as of November 14, 2016), the Federal Transit Administration (FTA), and the Florida Department of Transportation (FDOT). RTS currently receives funding from federal, state and local sources and is required to maintain accurate records.

RTS is committed to effectively manage its capital assets and maintain its system in a State of Good Repair (SGR) to support safe, efficient, and reliable transit. This directive outlines RTS's overall asset management approach in a manner consistent with current federal regulations (49 U.S. Code § 5326) and sets the direction for establishing and following through with transit asset management strategies and plans that are achievable with available funds. This directive complies with the Federal Transit Administration (FTA) Transit Asset Management (TAM) Final Ruling on July 26, 2016.

The purpose of the TAM policy is to communicate to management, staff, and external stakeholders RTS's commitment to maintain its system in a State of Good Repair; and foster a culture of continuous improvement in asset management planning and performance.

This policy is specific to the management of RTS Transit Assets, as defined by the FTA, which have a value of $50,000 or more and are included in RTSs Transit Asset Inventory maintained in the Enterprise Asset Management System (EAMS).

In accordance with this policy, implementation of the TAM Policy will be a shared responsibility for all staff within RTS regarding expectations and mandatory requirements.

❖ **DEFINITIONS**

- "Transit Asset Management Plan (TAM Plan)" means the Plan through which RTS will document its' asset base, asset conditions, backlog and State of Good Repair, asset management policy, TAM goals and objectives, governance structure for asset management, strategy for capital asset funding and prioritization, and key priorities for asset management.
- "Transit Asset" as defined by the FTA, means both fixed long-life infrastructure assets (including, for example, structures, tunnels, facilities, and maintenance of way) and equipment (bus, rail, and paratransit rolling stock).
- "State of Good Repair (SGR)" means a condition in which assets are fit for the purpose for which they were intended.
- "TAM Final Ruling" means a set of federal regulations that sets out minimum asset management practices for transit providers to bring all of the nation's transit assets into a state of good repair.

- "Capital Improvement Plan (CIP)" means a short-range plan, usually four to ten years, which identifies capital projects and equipment purchases, provides a planning schedule, and identifies options for funding the plan.
- "Tier I Agency" as defined by the FTA, means agencies that operate rail, or with 101 vehicles or more across all fixed-route modes, or with 101 vehicles or more in one non-fixed route mode. Tier I agencies must develop their own TAM Plan.

❖ **POLICY**

- Commitment to Maintaining Assets in a State of Good Repair
  - RTS is committed to maintaining assets in a State of Good Repair through financial stewardship and reinvestment, transparency, and collaboration with its funding partners; promoting a culture that supports asset management across the organization; and by focusing on high quality data-driven asset condition and performance information to provide with safe, reliable, sustainable service for the communities served by AC Transit.
  - RTS's asset management program supports the timely implementation of projects and programs which maintain District assets in a State of Good Repair.
- District TAM Vision
  - RTS's TAM Vision is an extension of its mission statement. It sets the direction for establishing and continually improving asset management strategies and plans, including setting goals, objectives, and measures to monitor and continually improve performance.
- Lifecycle Management
  - A data-driven set of activities will be used to evaluate the cost, condition, and performance of each class of assets over their entire lifecycle.
- Optimizing Use of District Funds across asset lifecycle
  - The Capital Improvement Plan (CIP) will be aligned with TAM investment priorities:
    - Public and employee safety
    - Optimized useful life and maintain existing assets
    - Replace assets in accordance to TAM targets
    - Questions concerning interpretation of this Policy are to be referred to the General Counsel.
    - Leverage available funds and optimize District costs
    - Improve system-wide reliability
    - Environmental sustainability goals
- TAM Plan Elements

  The FTA regulation defines RTS as a Tier I agency and, as such, requires RTS to implement a TAM Plan that includes the nine TAM Elements listed below.
    - Inventory of assets – A register of capital assets and information about those assets.
    - Condition assessment – A rating of the assets' physical state.
    - Decision support tool – Analytic process or tool to assist in capital asset investment prioritization needs.
    - Prioritized list of investments – A prioritized list of projects or programs to manage or improve the SGR of capital assets.
    - TAM and SGR policy – Executive-level direction regarding expectations for transit asset management.
    - Implementation strategy – Operational actions to achieve District TAM goals and policies.
    - Key annual activities – Describe the key TAM activity four-year plan.
    - Identification of resources – List resources needed to carry out the TAM Plan.
    - Evaluation plan – Monitor and update to support continuous TAM improvement.

DISCIPLINARY ACTION:

Failure to comply with the procedure set forth within this policy shall result in progressive disciplinary action in accordance with City Personnel Policy E-3 Code of Conduct.

APPENDIX G

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						2018			2019			2020			2021			2022			2023			2024			2025			2026			2027			2028			2029		
Veh #	Fleet #	Year	Size	LTD Mileage	Type	Miles	Age	Elig	Miles	Age	Elig	Miles	Age	Elig	Miles	Age	Elig	Miles	Age	Elig	Miles	Age	Elig	Miles	Age	Elig	Miles	Age	Elig	Miles	Age	Elig	Miles	Age	Elig	Miles	Age	Elig	Miles	Age	Elig
19	57	2000	35	663653	D	696653	18	✔																																
107	56	2001	35	650934	D	683934	17	✔																																
110	56	2001	35	706867	D	739867	17	✔																																
111	56	2001	35	717215	D	750215	17	✔																																
540	59	2001	40	684960	D	717960	17	✔																																
541	59	2001	40	669078	D	702078	17	✔																																
542	59	2001	40	642609	D	675609	17	✔																																
543	59	2001	40	590420	D	623420	17	✔																																
544	59	2001	40	582687	D	615687	17	✔																																
545	59	2001	40	588081	D	621081	17	✔																																
546	59	2001	40	615848	D	648848	17	✔																																
547	59	2001	40	633968	D	666968	17	✔																																
548	59	2001	40	593420	D	626420	17	✔																																
549	59	2001	40	582126	D	615126	17	✔																																
550	59	2001	40	574224	D	607224	17	✔																																
551	60	2001	40	539799	D	572799	17	✔																																
552	60	2001	40	578221	D	611221	17	✔																																
553	60	2001	40	612703	D	645703	17	✔																																
554	60	2001	40	499646	D	532646	17	✔																																
555	60	2001	40	567516	D	600516	17	✔																																
556	60	2001	40	588067	D	621067	17	✔																																
557	60	2001	40	560762	D	593762	17	✔																																
558	60	2001	40	574094	D	607094	17	✔																																
2502	49	2002	40	731460	D	764460	16	✔																																
2504	49	2002	40	704352	D	737352	16	✔																																
2507	49	2002	40	752412	D	785412	16	✔																																
2509	49	2002	40	748978	D	781978	16	✔																																
2512	49	2002	40	796834	D	829834	16	✔																																
2517	49	2002	40	762886	D	795886	16	✔																																
2520	54	2004	40	602226	D	635226	14	✔																																
2533	54	2004	40	604479	D	637479	14	✔																																
2538	54	2004	40	631966	D	664966	14	✔																																
559	61	2004	40	465823	D	498823	14	✔																																
560	61	2004	40	498950	D	531950	14	✔																																
561	61	2004	40	511536	D	544536	14	✔																																
562	61	2005	40	514624	D	547624	13	✔																																
563	61	2005	40	499036	D	532036	13	✔																																
564	61	2005	40	504272	D	537272	13	✔																																
565	61	2005	40	505162	D	538162	13	✔																																
566	61	2005	40	521312	D	554312	13	✔																																
567	61	2005	40	510540	D	543540	13	✔																																
568	61	2005	40	474303	D	2021	13																																		
2571	47	2006	40	708334	D	741334	12	✔																																
2572	47	2006	40	700249	D	733249	12	✔																																
2574	47	2006	40	683377	D	716377	12	✔																																
2575	47	2006	40	639311	D	672311	12	✔																																
2577	47	2006	40	633888	D	666888	12	✔																																
2578	47	2006	40	618071	D	651071	12	✔																																
2580	47	2006	40	664680	D	697680	12	✔																																
2581	47	2006	40	677815	D	710815	12	✔																																
2582	47	2006	40	598020	D	631020	12	✔																																
2583	47	2006	40	612685	D	645685	12	✔																																
569	62	2006	40	463622	D	496622	12		529622	13	✔																														
570	62	2006	40	488805	D	521805	12	✔																																
571	62	2006	40	472747	D	505747	12	✔																																
572	62	2006	40	457691	D	490691	12																																		
573	63	2007	40	439469	D	472469	11		505469	12	✔																														
574	63	2007	40	449080	D	482080	11		515080	12	✔																														
575	63	2007	40	440806	D	473806	11		506806	12	✔																														
576	63	2007	40	451849	D	484849	11		517849	12	✔																														
577	63	2007	40	458295	D	491295	11		524295	12	✔																														
701	64	2007	40	392057	D	425057	11		458057	12																																
702	64	2007	40	399885	D	432885	11		465885	12																																
703	64	2007	40	439377	D	472377	11		505377	12	✔																														
704	64	2007	40	380787	D	413787	11		446787	12																																
705	64	2007	40	426211	D	459211	11		492211	12																																
706	64	2007	40	408905	D	441905	11		474905	12																																
707	64	2007	40	408914	D	441914	11		474914	12																																
708	64	2007	40	405112	D	438112	11		471112	12																																
709	64	2007	40	435226	D	468226	11		501226	12	✔																														
710	64	2007	40	425947	D	458947	11		491947	12																																
711	64	2007	40	460440	D	493440	11		526440	12	✔																														
712	64	2007	40	431788	D	464788	11		497788	12																																
2601	48	2007	40	579789	D	612789	11	✔																																

1006	66	2010	40	368260	D	401260	8		434260	9		467260	10		500260	11	✓																								
1005	66	2010	40	356805	D	389805	8		422805	9		455805	10		488805	11		521805	12	✓																					
1004	66	2010	40	352616	D	385616	8		418616	9		451616	10		484616	11		517616	12	✓																					
1003	66	2010	40	361510	D	394510	8		427510	9		460510	10		493510	11		526510	12	✓																					
1002	66	2010	40	326074	D	359074	8		392074	9		425074	10		458074	11		491074	12		524074	13	✓																		
1001	66	2010	40	321606	D	354606	8		387606	9		420606	10		453606	11		486606	12		519606	13	✓																		
904	65	2009	40	387520	D	420520	9		453520	10		486520	11		519520	12	✓																								
903	65	2009	40	409150	D	442150	9		475150	10		508150	11	✓																											
902	65	2009	40	393250	D	426250	9		459250	10		492250	11		525250	12	✓																								
901	65	2009	40	362888	D	395888	9		428888	10		461888	11		494888	12		527888	13	✓																					
1007	66	2010	40	371644	D	404644	8		437644	9		470644	10		503644	11	✓																								
1008	66	2010	40	328212	D	361212	8		394212	9		427212	10		460212	11		493212	12		526212	13	✓																		
1009	66	2010	40	368399	D	401399	8		434399	9		467399	10		500399	11	✓																								
1010	66	2010	40	351280	D	384280	8		417280	9		450280	10		483280	11		516280	12	✓																					
1011	66	2010	40	375303	D	408303	8		441303	9		474303	10		507303	11	✓																								
1012	66	2010	40	340883	D	373883	8		406883	9		439883	10		472883	11		505883	12	✓																					
1013	66	2010	40	343325	D	376325	8		409325	9		442325	10		475325	11		508325	12	✓																					
1014	66	2010	40	347391	D	380391	8		413391	9		446391	10		479391	11		512391	12	✓																					
1015	66	2010	40	335121	D	368121	8		401121	9		434121	10		467121	11		500121	12	✓																					
1016	66	2010	40	348378	D	381378	8		414378	9		447378	10		480378	11		513378	12	✓																					
1017	66	2010	40	349068	D	382068	8		415068	9		448068	10		481068	11		514068	12	✓																					
1101	67	2011	40	266431	D	299431	7		332431	8		365431	9		398431	10		431431	11		464431	12		497431	13		530431	14	✓												
1102	67	2011	40	278080	D	311080	7		344080	8		377080	9		410080	10		443080	11		476080	12		509080	13	✓															
1103	67	2011	40	285723	D	318723	7		351723	8		384723	9		417723	10		450723	11		483723	12		516723	13	✓															
1104	67	2011	40	226582	D	259582	7		292582	8		325582	9		358582	10		391582	11		424582	12		457582	13		490582	14	✓												
1105	67	2011	40	242385	D	275385	7		308385	8		341385	9		374385	10		407385	11		440385	12		473385	13		506385	14	✓												
1106	67	2011	40	252719	D	285719	7		318719	8		351719	9		384719	10		417719	11		450719	12		483719	13		516719	14	✓												
1200	69	2012	40	124177	H	157177	6		190177	7		223177	8		256177	9		289177	10		322177	11		355177	12		388177	13		421177	14	✓									
1201	69	2012	40	125116	H	158116	6		191116	7		224116	8		257116	9		290116	10		323116	11		356116	12		389116	13		422116	14	✓									
1202	68	2012	40	184799	D	217799	6		250799	7		283799	8		316799	9		349799	10		382799	11		415799	12		448799	13		481799	14	✓									
1203	68	2012	40	203926	D	236926	6		269926	7		302926	8		335926	9		368926	10		401926	11		434926	12		467926	13		500926	14	✓									
1204	68	2012	40	217124	D	250124	6		283124	7		316124	8		349124	9		382124	10		415124	11		448124	12		481124	13		514124	14	✓									
1205	68	2012	40	224641	D	257641	6		290641	7		323641	8		356641	9		389641	10		422641	11		455641	12		488641	13		521641	14	✓									
1206	68	2012	40	233741	D	266741	6		299741	7		332741	8		365741	9		398741	10		431741	11		464741	12		497741	13		530741	14	✓									
1207	68	2012	40	202483	D	235483	6		268483	7		301483	8		334483	9		367483	10		400483	11		433483	12		466483	13		499483	14	✓									
1300	72	2013	40	132032	H	165032	5		198032	6		231032	7		264032	8		297032	9		330032	10		363032	11		396032	12		429032	13		462032	14	✓						
1301	72	2013	40	131072	H	164072	5		197072	6		230072	7		263072	8		296072	9		329072	10		362072	11		395072	12		428072	13		461072	14	✓						
1302	72	2013	40	124396	H	157396	5		190396	6		223396	7		256396	8		289396	9		322396	10		355396	11		388396	12		421396	13		454396	14	✓						
1401	73	2014	40	112260	D	145260	4		178260	5		211260	6		244260	7		277260	8		310260	9		343260	10		376260	11		409260	12		442260	13		475260	14	✓			
1402	73	2014	40	125671	D	158671	4		191671	5		224671	6		257671	7		290671	8		323671	9		356671	10		389671	11		422671	12		455671	13		488671	14	✓			
1403	73	2014	40	116433	D	149433	4		182433	5		215433	6		248433	7		281433	8		314433	9		347433	10		380433	11		413433	12		446433	13		479433	14	✓			
1501	74	2015	40	123590	D	156590	3		189590	4		222590	5		255590	6		288590	7		321590	8		354590	9		387590	10		420590	11		453590	12		486590	13		519590	14	✓
1502	74	2015	40	109741	D	142741	3		175741	4		208741	5		241741	6		274741	7		307741	8		340741	9		373741	10		406741	11		439741	12		472741	13		505741	14	✓
1601	75	2016	40	59957	D	92957	2		125957	3		158957	4		191957	5		224957	6		257957	7		290957	8		323957	9		356957	10		389957	11		422957	12		455957	13	
1602	75	2016	40	63309	D	96309	2		129309	3		162309	4		195309	5		228309	6		261309	7		294309	8		327309	9		360309	10		393309	11		426309	12		459309	13	
1603	75	2016	40	50792	D	83792	2		116792	3		149792	4		182792	5		215792	6		248792	7		281792	8		314792	9		347792	10		380792	11		413792	12		446792	13	
1604	75	2016	40	61323	D	94323	2		127323	3		160323	4		193323	5		226323	6		259323	7		292323	8		325323	9		358323	10		391323	11		424323	12		457323	13	
1605	75	2016	40	51353	D	84353	2		117353	3		150353	4		183353	5		216353	6		249353	7		282353	8		315353	9		348353	10		381353	11		414353	12		447353	13	
1606	75	2016	40	54050	D	87050	2		120050	3		153050	4		186050	5		219050	6		252050	7		285050	8		318050	9		351050	10		384050	11		417050	12		450050	13	
1607	75	2016	40	43922	D	76922	2		109922	3		142922	4		175922	5		208922	6		241922	7		274922	8		307922	9		340922	10		373922	11		406922	12		439922	13	
1801	98	2018	40	17725	D	50725	0		83725	1		116725	2		149725	3		182725	4		215725	5		248725	6		281725	7		314725	8		347725	9		380725	10		413725	11	
1802	98	2018	40	15570	D	48570	0		81570	1		114570	2		147570	3		180570	4		213570	5		246570	6		279570	7		312570	8		345570	9		378570	10		411570	11	
1803	98	2018	40	17911	D	50911	0		83911	1		116911	2		149911	3		182911	4		215911	5		248911	6		281911	7		314911	8		347911	9		380911	10		413911	11	
1804	98	2018	40	15247	D	48247	0		81247	1		114247	2		147247	3		180247	4		213247	5		246247	6		279247	7		312247	8		345247	9		378247	10		411247	11	
1805	98	2018	40	13215	D	46215	0		79215	1		112215	2		145215	3		178215	4		211215	5		244215	6		277215	7		310215	8		343215	9		376215	10		409215	11	
1806	98	2018	40	12545	D	45545	0		78545	1		111545	2		144545	3		177545	4		210545	5		243545	6		276545	7		309545	8		342545	9		375545	10		408545	11	
1807	98	2018	40	8628	D	41628	0		74628	1		107628	2		140628	3		173628	4		206628	5		239628	6		272628	7		305628	8		338628	9		371628	10		404628	11	
1808	98	2018	40	16704	D	49704	0		82704	1		115704	2		148704	3		181704	4		214704	5		247704	6		280704	7		313704	8		346704	9		379704	10		412704	11	
1809	98	2018	40	13389	D	46389	0		79389	1		112389	2		145389	3		178389	4		211389	5		244389	6		277389	7		310389	8		343389	9		376389	10		409389	11	
1810	98	2018	40	13673	D	46673	0		79673	1		112673	2		145673	3		178673	4		211673	5		244673	6		277673	7		310673	8		343673	9		376673	10		409673	11	
1811	98	2018	40		D	33000	0		66000	1		99000	2		132000	3		165000	4		198000	5		231000	6		264000	7		297000	8		330000	9		363000	10		396000	11	

FORECASTED 10 YR FLEET REPLACEMENT PLAN

YEAR	Elig Amt D	Elig Amt H	Cost Per Veh $500,000.00 / $700,000.00 D	Cost Per Veh $500,000.00 / $700,000.00 H		PLUS 5% ANNUAL ESCALATOR	PER VEH D	PER VEH H	TOTAL REPLACEMENT COST PER YR
2018	54	0	$27,000,000.00	$0.00			$0.00	$0.00	**$27,000,000.00**
2019	9	0	$4,500,000.00	$0.00	@	5.0%	$525,000.00	$735,000.00	**$4,725,000.00**
2020	1	0	$500,000.00	$0.00	@	5.0%	$551,250.00	$771,750.00	**$551,250.00**
2021	6	0	$3,000,000.00	$0.00	@	5.0%	$578,812.50	$810,337.50	**$3,472,875.00**
2022	11	0	$5,500,000.00	$0.00	@	5.0%	$607,753.13	$850,854.38	**$6,685,284.38**
2023	3	0	$1,500,000.00	$0.00	@	5.0%	$638,140.78	$893,397.09	**$1,914,422.34**
2024	2	2	$1,000,000.00	$1,400,000.00	@	5.0%	$670,047.82	$938,066.95	**$3,216,229.54**
2025	4	3	$2,000,000.00	$2,100,000.00	@	5.0%	$703,550.21	$984,970.30	**$5,769,111.73**
2026	8	0	$4,000,000.00	$0.00	@	5.0%	$738,727.72	$1,034,218.81	**$5,909,821.78**
2027	3	0	$1,500,000.00	$0.00	@	5.0%	$775,664.11	$1,085,929.75	**$2,326,992.32**
2028	3	0	$1,500,000.00	$0.00	@	5.0%	$814,447.31	$1,140,226.24	**$2,443,341.94**
2029	2	0	$1,000,000.00	$0.00	@	5.0%	$855,169.68	$1,197,237.55	**$1,710,339.36**

APPENDIX G

G2.

VEH #	YEAR	MAKE	MODEL	LTD MILEAGE	2018			2019			2020			2021			2022			2023		
					200K	Age	Elig	200K	Age	Elig	200K	Age	Elig	200K	Age	Elig	200K	Age	Elig	200K	Age	Elig
3716	2012	Ford	E450 Goshen Coach	255,709	303,709	6	✓															
3894	2014	CHEVY	21' Crusader Bus	230544	278,544	4		326,544	5	✓												
3948	2014	CHEVY	21' Crusader Bus	152,600	200,600	4		248,600	5	✓												
3962	2015	CHEVY	21' Crusader Bus	185,301	233,301	3		281301	4		329301	5	✓									
3990	2015	CHEVY	Champion	118,352	166,352	3		214352	4		262352	5	✓									
3991	2015	CHEVY	Champion	151062	199,062	3		247062	4		295062	5	✓									
3992	2015	CHEVY	Champion	183,389	231,389	3		279389	4		327389	5	✓									
3993	2015	CHEVY	Champion	139,639	187,639	3		235639	4		283639	5	✓									
4039	2016	FORD	GLAVEL	141,167	189,167	2		237167	3		285167	4		333167	5	✓						
4040	2016	FORD	GLAVEL	135,200	183,200	2		231200	3		279200	4		327200	5	✓						
4041	2016	FORD	GLAVEL	140,012	188,012	2		236012	3		284012	4		332012	5	✓						
4042	2016	FORD	GLAVEL	151,016	199,016	2		247016	3		295016	4		343016	5	✓						
4062	2016	FORD	GLAVEL	93,438	141,438	2		189438	3		237438	4		285438	5	✓						
4063	2016	FORD	GLAVEL	88,087	136,087	2		184087	3		232087	4		280087	5	✓						
4064	2016	FORD	GLAVEL	99,634	147,634	2		195634	3		243634	4		291634	5	✓						
4065	2016	FORD	GLAVEL	92,563	140,563	2		188563	3		236563	4		284,563	5	✓						
4066	2016	FORD	GLAVEL	90,305	138,305	2		186305	3		234305	4		282,305	5	✓						
4067	2016	FORD	GLAVEL	109,488	157,488	2		205488	3		253488	4		301,488	5	✓						
4069	2016	FORD	GLAVEL	108,602	156,602	2		204602	3		252602	4		300,602	5	✓						
4207	2016	MOVT	MV-1	9,445	57,445	2		105445	3		153445	4		201,445	5	✓						
4159	2017	FORD	GLAVEL	79,606	127,606	1		175606	2		223,606	3		271,606	4		319606	5	✓			
4269	2017	CHEVY	Champion	1,634	49,634	1		97634	2		145,634	3		193,634	4		241634	5	✓			
4270	2017	CHEVY	Champion	1,434	49,434	1		97434	2		145,434	3		193,434	4		241434	5	✓			
4271	2017	CHEVY	Champion	1,824	49,824	1		97824	2		145,824	3		193,824	4		241824	5	✓			
4272	2017	CHEVY	Champion	1,612	49,612	1		97612	2		145,612	3		193,612	4		241612	5	✓			
4273	2017	CHEVY	Champion	18,599	66,599	1		114599	2		162,599	3		210,599	4		258,599	5	✓			
4378	2019	CHEVY	Champion			-1																
4379	2019	CHEVY	Champion			-1																
4380	2019	CHEVY	Champion			-1																

Forecasted 5 Year Support Fleet Replacement Plan

Year	Elig Amt	Cost Per Veh $71,019.00		Plus 5% Annual Escalator	Per Vehicle	Total Replacement Cost Per Year
2018	1	$71,019	=	0%	$71,019	**$71,019**
2019	2	$142,038	=	5%	$74,570	**$149,140**
2020	5	$355,095	=	5%	$78,298	**$391,492**
2021	12	$852,228	=	5%	$82,213	**$986,560**
2022	6	$426,114	=	5%	$86,324	**$517,944**
2023	0	$0	=	5%	$90,640	**$0**

APPENDIX G

#180536A

G3.

VEH #	CLASS	YEAR	MAKE	MODEL	DESC	LTD MILEAGE	2018 Miles	2018 Age	2018 Elig	2019 Miles	2019 Age	2019 Elig	2020 Miles	2020 Age	2020 Elig	2021 Miles	2021 Age	2021 Elig	2022 Miles	2022 Age	2022 Elig	2023 Miles	2023 Age	2023 Elig	2024 Miles	2024 Age	2024 Elig	2025 Miles	2025 Age	2025 Elig	2026 Miles	2026 Age	2026 Elig
2691	3	2003	FORD	S/TRUCK	PICKUP	29,449	39,449	15		49,449	16		59,449	17		69,449	18	✓															
3132	1	2006	FORD	TAURUS	4DR SEDAN	55,684	65,684	12	✓																							
3240	1	2007	FORD	FOCUS	4DR SEDAN	64,010	74,010	11	✓																							
3241	1	2007	FORD	FOCUS	4DR SEDAN	67,462	77,462	11	✓																							
3242	1	2007	FORD	FOCUS	4DR SEDAN	70,863	80,863	11	✓																							
3337	3	2008	FORD	S/TRUCK	PICKUP	24,491	34,491	10		44,491	11		54,491	12		64,491	13	✓														
3351	6	2008	FORD	VAN	COMP VAN	76,661	86,661	10	✓																							
3595	2	2010	FORD	ESCAPE	HYBRID	22,245	32,245	8		42,245	9		52,245	10		62,245	11	✓														
3478	6	2008	Chev	VAN	VAN	91,921	101,921	10	✓																							
3479	6	2008	Chev	VAN	VAN	66,628	76,628	10	✓																							
3480	6	2008	Chev	VAN	VAN	87,294	97,294	10	✓																							
3481	6	2008	Chev	VAN	VAN	72,260	82,260	10	✓																							
3596	1	2010	FORD	FOCUS	4DR SEDAN	14,416	24,416	8		34,416	9		44,416	10		54,416	11		64,416	12	✓											
3597	1	2010	FORD	FOCUS	4DR SEDAN	50,866	60,866	8	✓																							
3627	6	2010	DODGE	GR.CARAVAN	COMP VAN	63,587	73,587	8	✓																							
3637	4	2011	FORD	F150	PICKUP	35,792	45,792	7		55,792	8		65,792	9	✓																	
3638	5	2011	FORD	F250	PICKUP	40,882	50,882	7		60,882	8	✓																				
3639	2	2011	FORD	ESCAPE	HYBRID	36,686	46,686	9		56,686	8		66,686	9	✓																	
3640	2	2011	FORD	ESCAPE	HYBRID	22,291	32,291	7		42,291	8		52,291	9		62,291	10	✓														
3646	2	2011	FORD	ESCAPE	HYBRID	25,745	35,745	9		45,745	8		55,745	9		65,745	10	✓														
3647	3	2011	FORD	F450	UTILITY BED	17,676	27,676	7		37,676	8		47,676	9		57,676	10		67,676	11	✓											
3648	1	2012	FORD	FOCUS	4DR SEDAN	25,948	35,948	8		45,948	7		55,948	8		65,948	9	✓														
3649	1	2012	FORD	FOCUS	4DR SEDAN	61,532	71,532	6		81,532	7		91,532	8	✓																	
3650	1	2012	FORD	FOCUS	4DR SEDAN	59,600	69,600	6		79,600	7		89,600	8	✓																	
3651	1	2012	FORD	FOCUS	4DR SEDAN	59,288	69,288	6		79,288	7		89,288	8	✓																	
3652	1	2012	FORD	FOCUS	4DR SEDAN	60,315	70,315	6		80,315	7		90,315	8	✓																	
3712	2	2012	FORD	ESCAPE	HYBRID	29,415	39,415	6		49,415	7		59,415	8		69,415	9	✓														
3885	1	2013	FORD	FOCUS	4DR SEDAN	34,462	44,462	5		54,462	6		64,462	7		74,462	8	✓														
3886	1	2013	FORD	FOCUS	4DR SEDAN	40,771	50,771	5		60,771	6		70,771	7		80,771	8	✓														
3887	1	2013	FORD	FOCUS	4DR SEDAN	22,175	32,175	5		42,175	6		52,175	7		62,175	8	✓														
4049	1	2015	FORD	FOCUS	4DR SEDAN	34,343	44,343	3		54,343	4		64,343	5		74,343	6		84,343	7		94,343	8	✓								
4050	1	2015	FORD	FOCUS	4DR SEDAN	37,189	47,189	3		57,189	4		67,189	5		77,189	6		87,189	7		97,189	8	✓								
4051	1	2015	FORD	FOCUS	4DR SEDAN	34,629	44,629	3		54,629	4		64,629	5		74,629	6		84,629	7		94,629	8	✓								
4052	6	2014	MOB	VENT	MV-1	31,766	41,766	4		51,766	5		61,766	6		71,766	7		81,766	8	✓										
4053	6	2014	MOB	VENT	MV-1	25,806	35,806	4		45,806	5		55,806	6		65,806	7		75,806	8	✓										
4190	1	2017	FORD	FOCUS	4DR SEDAN	21,799	31,799	1		41,799	2		51,799	3		61,799	4		71,799	5		81,799	6		91,799	7		101,799	8	✓			
4207	6	2016	MOB	VENT	MV-1	9,856	19,856	2		29,856	3		39,856	4		49,856	5		59,856	6		69,856	7		79,856	8	✓						
4208	1	2017	FORD	FOCUS	4DR SEDAN	8,661	18,661	1		28,661	2		38,661	3		48,661	4		58,661	5		68,661	6		78,661	7		88,661	8	✓			
4209	1	2017	FORD	FOCUS	4DR SEDAN	16,024	26,024	1		36,024	2		46,024	3		56,024	4		66,024	5		76,024	6		86,024	7		96,024	8	✓			
4210	1	2017	FORD	FOCUS	4DR SEDAN	2,758	12,758	1		22,758	2		32,758	3		42,758	4		52,758	5		62,758	6		72,758	7		82,758	8	✓			
4211	1	2017	FORD	FOCUS	4DR SEDAN	10,306	20,306	1		30,306	2		40,306	3		50,306	4		60,306	5		70,306	6		80,306	7		90,306	8	✓			

Classes:		Cost	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Sedans	1	$16,500	$17,325	$18,191	$19,101	$20,056	$21,059	$22,112	$23,217	$24,378	$25,597	$26,877	$28,221
Hybrid SUVs	2	$32,900	$34,545	$36,272	$38,086	$39,990	$41,990	$44,089	$46,294	$48,608	$51,039	$53,591	$56,270
Service Trucks	3	$58,535	$61,462	$64,535	$67,762	$71,150	$74,707	$78,442	$82,365	$86,483	$90,807	$95,347	$100,115
1/2 Ton Pickups	4	$19,755	$20,743	$21,780	$22,869	$24,012	$25,213	$26,474	$27,797	$29,187	$30,646	$32,179	$33,788
3/4 Ton Pickups	5	$23,367	$24,535	$25,762	$27,050	$28,403	$29,823	$31,314	$32,880	$34,524	$36,250	$38,062	$39,965
Min Vans ADA	6	$46,267	$48,580	$51,009	$53,560	$56,238	$59,050	$62,002	$65,102	$68,357	$71,775	$75,364	$79,132

FORECASTED 8 YR SUPPORT FLEET REPLACEMENT PLAN

Year	Elig Amt	Cost	Plus 5% Annual Escalator	Total Replacement Cost Per Year
2018	11	$360,102	5%	**$360,102**
2019	1	$23,367	5%	**$24,535**
2020	6	$118,655	5%	**$130,817**
2021	10	$364,270	5%	**$382,483**
2022	4	$167,569	5%	**$203,681**
2023	3	$49,500	5%	**$63,176**
2024	1	$46,267	5%	**$62,002**
2025	5	$82,500	5%	**$116,086**
2026	0	$0	5%	**$0**