

VEHICLE PREVENTIVE MAINTENANCE PROGRAM

The Federal Transit Administration, NHDOT - Bureau of Rail & Transit and Granite State Independent Living require a written Vehicle Maintenance Plan that will be followed to ensure vehicles are maintained to a high quality standard in order to function efficiently throughout the vehicles useful life without major failure, excessive road calls or lengthy down-time. A well maintained fleet is essential to providing a safe ride to consumers.

Adherence to a preventive maintenance plan keeps vehicle is a state of good repair, reduces breakdowns that may place passengers safety in jeopardy and keeps all equipment including ADA features functioning appropriately.

A well maintained fleet reduces energy use and reduces the cost of fleet maintenance overall by avoiding major breakdowns, towing and catastrophic failure to major vehicle components. Vehicle down-time is reduced which has a direct effect on the agency's budget and its' ability to perform needed services.

VEHICLE MAINTENANCE PROGRAM PURPOSE

The purpose of a grant recipient vehicle maintenance program is to:

- 1. Ensure that the fleet is in a state of good repair
- Ensure that a sufficient number of agency vehicles are available to meet daily service demands
- 3. Ensure that agency vehicles are safe, serviced regularly, and clean
- 4. Ensure that good vehicle maintenance is provided at a reasonable cost

Significant components of an effective vehicle maintenance program include:

- 1. A comprehensive Vehicle Maintenance Plan
- 2. An established vehicle service preventive maintenance schedule, based on manufacturer's recommendations and warranty requirements
- A thorough and documented inspection program including daily driver pre-trip vehicle inspections. Documentation includes reporting all problems and any corrective actions taken
- 4. Mileage or time-period based periodic mechanical vehicle service and inspections and corrective actions as required
- 5. Required annual vehicle safety inspection schedule for each vehicle, to be performed by a certified mechanic
- 6. A regular vehicle exterior and interior cleaning program
- 7. A cost-effective vehicle repair function for unplanned break-downs

- 8. A policy and facility for safe and secure off-hour vehicle storage
- 9. A data system to manage documentation of the vehicle maintenance program.
- 10. Maintenance records of all service and repairs (invoices for perform services or parts) for each vehicle. These records are kept throughout the life of the vehicle being used in transportation service, and for three years following the end of the useful life of the vehicle.

VEHICLE MAINTENANCE PLAN

Transportation vehicle assets represent a significant investment of public and private funds. It is the goal of the FTA, NHDOT and GSIL to ensure that all transit assets, including vehicles, are preserved and maintained cost-effectively, in a state of good repair, and that they remain in safe condition.

The Vehicle Maintenance Plan is an agency policy document that includes:

- 1. Goals and objectives of the agency's maintenance program, and how these were established;
- 2. An inventory of the agency's vehicle assets, and a schedule and process for periodically updating the inventory;
- 3. A description of maintenance responsibilities within the agency, encompassing management, supervision, drivers, and maintenance;
- 4. A preventive maintenance plan with the following components: :
 - A preventive maintenance servicing schedule for each vehicle in the agency fleet, based on manufacturers' recommendations for the size, type and components or equipment contained on that specific vehicle;
 - A process for managing and monitoring vehicle warranties and, if applicable, service agreements, to ensure all service requirements are met;
 - A vehicle inspection procedure which should include the driver's daily pre-trip inspection reports;
 - A procedure for follow-up for repairs arising from pre-trip inspections, and documentation regarding any vehicle being pulled from service until required repairs are made;
 - A schedule for periodic exterior vehicle cleaning and more thorough interior cleaning, that takes into account seasonal and environmental conditions;
 - An bi-annual vehicle safety inspection by a certified mechanic. This inspection must include all safety components and it includes inspection of ADA-related equipment such as lifts, tie-downs, handrails, etc.
 - New driver vehicle orientations, to ensure proper and safe use of the vehicle and any installed equipment;
- 5. A consumables re-stocking procedure assigning responsibility for restocking oil, parts, and supplies;

- 6. A vehicle repair policy for unplanned mechanical breakdowns, whether repairs are performed in-house or are contracted out;
- 7. A vehicle storage procedure for safe and secure vehicle storage off-hours;
- 8. GSIL's vehicle maintenance data system to document vehicle inspections, maintenance and repair activities.

VEHICLE PREVENTIVE MAINTENANCE SCHEDULE

A preventive maintenance schedule has been developed for each vehicle, based on the manufacturer's recommendations to the specific vehicle size, type and model, and meets the manufacturers' maintenance recommendations for that vehicle.

Forms and Checklists: GSIL uses pre-trip inspection forms from J.J.Keller for bus inspections. A sample form is attached as Appendix One to this plan.

Records Retention Requirement: Individual vehicle records, including procurement, maintenance and repair records must be retained as long as the vehicle remains in transportation service, plus three years beyond disposition of the vehicle.

Scheduled Service Intervals: The preventive maintenance schedule documents services performed. These may be either time periods or miles driven. Time-based service interval are for bi-annual state inspections performed by a licensed State of New Hampshire Motor Vehicle Inspection Station for vehicles over 10,000 pounds GVWR and annually for vehicles less than 10,000 pounds GVWR. The scheduled service address every component included in the manufacturer's warranty requirements schedule, including all safety equipment and ADA-accessibility equipment such as wheelchair lifts.

Wheelchair Lift Maintenance:

The wheelchair lift preventive maintenance is addressed by the following:

- 1. A preventive maintenance inspection is completed by the mechanic at each state inspection, bi-annually.
- 2. Daily pre-trip inspection and deployment of the lift by drivers, and by mechanics when the vehicles are in for vehicle servicing.
- 3. New staff orientation and training on inspection and operation of the lift for drivers.

Vehicle Maintenance Schedule Chart:

A chart is used to track maintenance service schedules and the next service due for each vehicle.

Each vehicle maintenance chart includes:

- 1. Vehicle manufacturer, year, make, model, size, and type;
- 2. Vehicle chassis VIN number, license plate number, and internal agency inventory tag or vehicle number;
- 3. A checklist of major vehicle components requiring scheduled maintenance or service—component list must includes ADA equipment;
- 4. Annual safety inspections—a separate line item or identified in a line item with an interval that meets the requirement of annual inspection (the safety components inspected should be identified in the checklist);
- Scheduled maintenance activities to be performed, identified by either date (time period), or odometer reading;
- 6. Dates the scheduled maintenance or service was actually completed, including any repairs made:
- 7. Vehicle odometer mileage at time of each maintenance or service;
- 8. Warranty maintenance service performed, whether noted as part of the regular scheduled maintenance, or performed separately;
- 9. Name of the vendor who performed the maintenance;
- 10. For contracted work, vendor invoices and associated documents in the vehicle file confirming that work was done on date noted in chart.

VEHICLE CLEANING

GSIL does not have a maintenance facility to regularly clean vehicles. Exterior cleaning is scheduled as needed by the Director of Transportation based on visual inspection of the vehicle. Driver's will be authorized to utilize commercial spray booth washing as necessary to maintain the exterior of the vehicle and promote a clean presentation for the agency. During the warm weather month drivers may wash vehicles at the GSIL main office by hand or use a commercial spray booth.

Each driver is required to maintain the interior of the vehicle these are assigned to during each trip and at the conclusion of the trip. Drivers are responsible for keeping windows, stations, seats and floor (including the wheelchair securement track) clean at all times.

VEHICLE STORAGE AND SAFETY

GSIL requires all vehicles be stored at the corporate headquarters at the end of each day. The facility is equipped with proper lighting and is regularly patrolled by the local police.

Proper storage also incorporates safety procedures such as no-exception brake setting and transmission-in-park requirements of drivers; and they are required to park in designated spaces.

Vehicle keys are provided to each driver for vehicle they normally operate. Master keys are kept in a locked box with the dispatcher.

DATA COLLECTION and RECORDS

All GSIL transportation data including NHDOT monthly performance reporting, maintenance and vehicle information shall be entered and stored electronically in the Transportation Folder of the GSIL data system.

SPARE VEHICLE / BACK-UP CAPACITY

In order to maintain scheduled services without disruption when regularly assigned vehicles are down for maintenance servicing or repair, GSIL maintains one vehicle as a spare. It is the oldest vehicle in the fleet (2003 Ford E350 Starcraft Cutaway Bus).

TRAINING

All drivers are trained given a complete familiarization of the vehicle, including engine compartment, driver controls and passenger safety devices. Drivers should be trained to recognize unusual noises and to communicate basic mechanical problems to the maintenance department.