

# 5. MAINTENANCE

## BASIC REQUIREMENT

The grantee must keep federally funded equipment and facilities in good operating order.

## AREAS TO BE EXAMINED

1. **Maintenance Plans and Procedures**
  - a. Written procedures for maintaining vehicles, equipment, and facilities
  - b. Maintenance goals and objectives
  - c. Provisions for current fleet and facilities
  - d. Adherence to manufacturers' minimum requirements for vehicles under warranty
2. **Maintenance Procedures for Wheelchair Lifts and Other Accessibility Equipment**
3. **Vehicle/Facility Inspection**
  - a. Review of maintenance records
  - b. Assessment of the general condition of vehicles, facilities, and equipment
4. **Warranty Tracking System**
5. **Maintenance Standards for Vehicles and Equipment Leased to Providers or Maintained Under Contract**

Organization of the Review Area – The review of the maintenance area is divided into three distinct activities:

- 1) Discussions with the grantee based on the maintenance questions,
- 2) Review of preventive maintenance records for a selected sample of vehicles, facilities and equipment, and
- 3) Physical inspection of the grantee's vehicles and facilities.

Many of the questions have two components. The reviewer should ask the questions about the grantee's maintenance plan and procedures. The reviewer also should examine the grantee's vehicles, facilities, and maintenance records to see that the grantee has implemented its plan.

Selection of Vehicle Maintenance Records for Review During the Site Visit – The reviewer should ask the grantee to prepare a list of federally funded vehicles by mode and

select a sample of these for examination during the site visit.

For grantees that use a combination of Directly Operated (DO) and Purchased Transportation (PT) for motorbus and demand response service, the DO and PT portions should be treated as separate modes. Modes are classified according to NTD definitions as follows:

<u>Non-Rail Modes</u>	<u>Rail Modes</u>
Motorbus - DO	Light Rail
Motorbus - PT	Heavy Rail
Demand Response - DO	Commuter Rail
Demand Response - PT	Cable Car
Trolleybus	Automated
Ferryboat	Guideway
Vanpool	Monorail
Jitney	Inclined Plane
Público	
Aerial Tramway	

The reviewer should select a minimum of three vehicles up to a total of one percent of the FTA funded fleet for each mode. For grantees that operate several modes, the reviewer should consult with the regional office in selecting the mode samples. To the extent practical, the reviewer should distribute the sample of vehicles selected by age and subfleet in each mode. Note: for commuter rail systems subject to Federal Railroad Administration (FRA) regulations, the reviewer may not need to draw a sample, if the grantee can produce documentation showing that FRA has issued a letter or notification of compliance with FRA maintenance standards.

The following example illustrates this process for a grantee that operates the following:

<u>Mode</u>	<u>Fleet Size</u>	<u>Sample Size</u>
Motorbus-DO	400	4 vehicles
Motorbus-PT	250	3 vehicles
Paratransit-PT	120	3 vehicles
Light Rail	55	3 vehicles

In this example, the reviewer will examine the preventive maintenance records for 13 vehicles distributed across the modes as shown above. The reviewer should keep each sample group separate by mode.

If the grantee has more than one maintenance facility, the reviewer should distribute the sample of vehicles over each facility inspected during the review. For example, if a sample

includes eight buses and two facilities are visited, the reviewer should check records for four vehicles at each location. Vehicles assigned to facilities that are not inspected as part of the triennial review need not be included in the sample.

Selection of Facility and Equipment Maintenance Records for Review During the Site Visit – The reviewer should request a copy of the latest inventory of FTA funded facilities and equipment from the grantee. If the grantee operates a railroad, the grantee should be asked to identify those FTA funded items that are not regulated by the FRA. The reviewer should select a sample of three facility and equipment items each to examine during the site visit.

## REFERENCES

1. [49 USC Chapter 53](#), Federal Transit Laws.
2. [49 CFR 37](#), “Transportation Services for Individuals With Disabilities (ADA).”
3. [FTA Circular 5010.1D](#), “Grant Management Requirements.”
4. [FTA Circular 9030.1C](#), “Urbanized Area Formula Program: Grant Application Instructions.”
5. [FTA Master Agreement](#).

## QUESTIONS FOR THE REVIEW

1. *Does the grantee have a current written vehicle maintenance plan for its federally funded rolling stock?*
2. *Does the grantee's vehicle maintenance plan include maintenance goals and objectives?*
3. *Are the grantee's written maintenance plan and preventive maintenance checklists consistent with the grantee's current operating fleet?*
4. *Are the grantee's maintenance plan and checklists consistent with manufacturers' minimum maintenance requirements for vehicles under warranty? How does the grantee track the manufacturer's recommendations and updates on requirements?*

### EXPLANATION

A transit system may have a diverse mix of vehicles, machinery/equipment and facilities. Properly maintaining all elements is essential to protect the federal investment. These questions deal with vehicle maintenance. Facility and equipment maintenance is addressed beginning with Question 10.

An effective vehicle maintenance program incorporates actions to maintain each vehicle type and model on a specific cycle. These actions should be designed to ensure the proper care and maximum vehicle longevity. The vehicle maintenance plan should include the goals and objectives of the maintenance program, such as extending vehicle life, reducing the frequency of road calls, and tracking maintenance costs compared to total operating costs. The maintenance program should define how such goals and objectives are achieved. The maintenance plan needs to be updated as often as the mix of rolling stock, equipment/machinery, and facilities change to account for new technology and/or new manufacturer's recommended maintenance intervals and programs.

For vehicles under warranty, the grantee typically must perform a series of preventive maintenance actions if the warranty is to remain valid. The reviewer should compare the interval for the change of engine oil and filters in the grantee's maintenance plan and checklists with the maximum interval specified in the engine manufacturer's maintenance manual. If the grantee

either does not perform these required maintenance routines, or performs them at greater intervals than the manufacturer's maximum intervals, the grantee runs the risk of invalidating the vehicle's warranty provisions.

FTA requires that rail operators purchasing vehicles with federal funds have a fleet management plan that has been reviewed by FTA. Recently, FTA has extended this requirement to "new start" bus operations. These plans make brief mention of maintenance procedures. Normally, rail operators rely on more extensive written maintenance policies and procedures than those included in the fleet management plan.

When performing a review of a commuter rail operation, the reviewer should determine whether the grantee is complying with the requirements of the Federal Railroad Administration (FRA) and examine the work plans for the FRA inspections.

When performing a review of a light rail or rapid transit system, the reviewer should determine whether the grantee has a written maintenance plan for the rail vehicles. Check that the plan prescribes a scheduled series of maintenance actions to be performed at predetermined intervals. Ask when the State Rail Safety Oversight Organization last inspected the vehicles for safety compliance and request a copy of that inspection report.

When performing a review of an FTA funded ferry operation, the reviewer should determine whether the grantee has a written maintenance plan for the vessels and machinery and if the plan prescribes a preventive maintenance program. Ask when the U.S. Coast Guard last inspected the vessels for seaworthiness and request a copy of that inspection report.

### REASON FOR THE QUESTION

[FTA C 5010.1D](#), Ch. II, Section 3.a and Ch. IV, Sections 3.k and m

[FTA C 9030.1C](#), Ch. V, Section 5.e

### SOURCES OF INFORMATION

Examine the grantee's vehicle maintenance plan and/or program, the maintenance checklists, and the recommended maintenance procedures and updates of the manufacturer.

### DETERMINATION

If the grantee has a written vehicle maintenance plan and the plan addresses the current mix of rolling stock, the grantee is not deficient. At a minimum, the plan must define maintenance goals and objectives and preventive maintenance inspections. If the grantee does not have a plan, the grantee is deficient. Note:

Findings related to facility maintenance plans and practices are addressed beginning with Question 10.

If the grantee's plan omits some requirements (e.g., goals and objectives) or does not include the latest additions to the fleet, the grantee is deficient.

For vehicles under warranty, if the maintenance interval for oil changes is equal to or less than the manufacturer's maximum interval defined for "urban transit service," the grantee is not deficient. If the interval is longer, then the grantee is deficient. Some operators of express service in the warmer areas of the country have relied on oil analysis to extend the interval between oil changes beyond the engine manufacturer's recommended interval. This is acceptable provided the grantee has a letter from the manufacturer of the vehicles' engines stating that this practice will not void the engine warranty.

### **SUGGESTED CORRECTIVE ACTION**

The grantee must submit either a new or revised maintenance plan.

5. *What is the grantee's schedule for vehicle preventive maintenance (PM) inspections: a) in its maintenance plan? b) in practice?*
6. *Are vehicle PM inspections completed on time?*

### **EXPLANATION**

The actual maintenance practices should be consistent with the written plan. If the grantee performs preventive maintenance (PM) inspections as planned, the grantee's entire maintenance program probably is effective. A sound preventive maintenance program will reduce the incidence of unscheduled repairs and extend the vehicles' useful life. If preventive maintenance inspections are not being scheduled according to the plan, or not being performed as scheduled, it is probable that other aspects of the maintenance program are lacking as well. If the grantee is not performing preventive maintenance inspections as scheduled, the grantee is jeopardizing the validity of its vehicle warranties and putting FTA's investment at risk.

### **REASON FOR THE QUESTION**

[FTA C 5010.1D](#), Ch. II, Section 3.a and Ch. IV, Sections 3.k and m

[FTA C 9030.1C](#), Ch. V, Section 5.e

### **SOURCES OF INFORMATION**

The maintenance plan should define the interval (miles or operated hours) between preventive maintenance inspections. The reviewer should determine what this interval is for each mode operated by the grantee. In

some cases, intervals also may vary by subfleet. Examine preventive maintenance records to determine whether the grantee is performing inspections according to its maintenance plan.

The reviewer should check preventive maintenance inspection intervals by reviewing management reports used by the grantee for monitoring preventive maintenance inspections and by reviewing a selected sample of FTA funded vehicles, which are still within their useful life cycle, for each mode operated by the grantee and/or its contractor(s).

For each vehicle chosen, examine the preventive maintenance history for the preceding 12 months. Note the date when each inspection was accomplished and record the vehicle mileage (or hours) at the time of each inspection. Inspections that are no later than 10 percent of schedule are considered on time. For example, a scheduled 6,000-mile inspection would be considered "on time" if it was performed any time before 6,600 miles. However, the grantee may use a different definition of an "on time" inspection. In such cases, the reviewer may use the grantee's definition if it is deemed appropriate.

Most grantees schedule PM inspections based on relative miles (e.g., 6,000 miles since the last inspection). Others may chose absolute scheduling, based on the total lifetime miles. Grantees may choose whichever method they prefer. The reviewer will focus on whether the inspections are conducted when due. Also, note that some grantees have separate schedules for the "A" inspections and subsequent inspections. The 6,000 mile inspections may be completed on time but a 36,000 or 48,000 mile inspection may not be concurrent with the 6,000 mile inspection and may not be completed on time. When reviewing PM records check to see what the procedures are for conducting inspections and ensure that all schedules are being met.

The reviewer should note that maintenance plans for commuter rail systems should follow Federal Railroad Administration (FRA) guidelines for locomotives and rail cars. Similarly, maintenance of ferryboats should follow U.S. Coast Guard (USCG) requirements. In lieu of selecting a sample of PM records for commuter rail locomotives and cars, the reviewer can make a determination based on compliance letters issued to the grantee by FRA, if available. Likewise, the reviewer can use quarterly/annual seaworthiness and other inspections by the USCG in making a determination.

### **DETERMINATION**

The determination of compliance is based on whether the inspections are performed on time. If 80 percent or more of the inspections for any mode sampled were performed on time (no more than 20 percent late), the grantee is not deficient. If less than 80 percent of the inspections for any mode occurred on time (more than 20 percent late), the grantee is deficient. Grantees are

not penalized for early inspections, only late ones. If inspection of the maintenance records reveals that a subfleet or particular vehicle is being neglected or no preventive maintenance is being performed, it should be noted as a finding.

### **SUGGESTED CORRECTIVE ACTION**

Fleet deterioration takes a long time to occur and an equally long time to correct after the deterioration has taken place. Both take a toll on the grantee's resources and put FTA's investment at risk. The grantee should address the occurrence of late PMs and develop a remediation plan that will satisfy itself and FTA that the capital investment is not being jeopardized. The grantee should implement this program immediately. The grantee should report on its results each month for the next three months to demonstrate it has conducted at least 80 percent of its PM inspections on time.

7. *Are maintenance procedures for wheelchair lifts and other accessibility equipment included in the grantee's maintenance plan and preventive maintenance checklists?*
8. *Do maintenance records indicate regular and periodic maintenance checks for lifts? For other accessibility features (e.g., kneelers, ramps, public address systems, voice announcement systems, station elevators, etc.)?*
9. *Do maintenance records indicate that lifts and accessibility features are repaired promptly as required by the DOT ADA regulations?*

### **EXPLANATION**

The DOT ADA regulations require all vehicle and facility accessibility features, such as the wheelchair lift, ramps, securement devices, signs, and communication equipment for persons with disabilities, as well as escalators and elevators in the grantee's facilities, be maintained and operational. The accessibility features must be repaired within the time frames specified in the regulations if they are damaged or out of order. When the equipment is not working, the grantee must take reasonable steps to accommodate persons with disabilities who would otherwise be using it. The ADA maintenance elements may be incorporated into the regular maintenance plan or addressed separately with specific checklists. At a minimum, the grantee must show that accessibility features are checked regularly for proper operation and receive periodic maintenance.

### **REASON FOR THE QUESTION**

49 CFR 37.161-163

### **SOURCES OF INFORMATION**

Review the grantee's maintenance plan and the maintenance checklists. When sampling vehicle maintenance records, ensure that accessibility features are maintained regularly and repaired promptly if out of order. If you are in the maintenance facility when operators are beginning a shift, observe if they cycle the lifts as required. The person responsible for the grantee's maintenance activities should be interviewed.

### **DETERMINATION**

The grantee is not deficient if it includes accessibility equipment as part of the regular preventive maintenance program. The grantee is not deficient if it has a regular preventive maintenance program for off-vehicle accessibility features (e.g., elevators) in its facility maintenance program. If the grantee has not established a system of regular and periodic maintenance checks of lifts and other accessibility equipment, it is deficient. If records show that the grantee either does not follow the system or does not maintain the accessibility equipment properly, then the grantee is deficient. If the grantee appears to disregard lift failures, and operates vehicles with inoperable lifts when it shouldn't, it is deficient. The reviewer should cross-reference this finding in the ADA section.

### **SUGGESTED CORRECTIVE ACTION**

If the grantee has not shown that accessibility features are maintained regularly and properly, a preventive maintenance program for those items must be developed, implemented, and submitted to FTA. A grantee failing to follow its system of lift/ramp maintenance checks must revise and/or fully implement the system. Procedures to correct a lift failure on a vehicle in-service must be implemented promptly and submitted to FTA.

10. *Does the grantee have a current written maintenance plan for its federally funded facilities and equipment?*
11. *Does the grantee's facility maintenance plan include a program of inspections and preventive maintenance activities to ensure that assets are protected from deterioration and reach their maximum useful life?*
12. *Does the facility maintenance plan prescribe a record keeping system so*

*that the maintenance history of facilities and equipment is permanently recorded?*

#### **EXPLANATION**

Public transit requires a considerable investment in buildings, equipment, and machinery. As with the vehicle maintenance, the proper maintenance of facilities, machinery, and equipment is the key to protecting the federal investment and prolonging the useful life of the asset.

The reviewer should determine if the grantee has an effective maintenance plan that ensures that FTA's investment in facilities and equipment is protected adequately. The maintenance plan should be written and include an organization and assignment of responsibility for facility and equipment maintenance, a series of inspections and routine maintenance actions designed to ensure the proper care and maximum useful service life of facilities and equipment, and a record-keeping system that maintains adequate permanent records of maintenance and inspection activity for buildings and equipment.

In the case of rail systems, FTA's investment often involves the construction of passenger stations, right-of-way, signals, and other related facilities and equipment. The Federal Railway Administration (FRA) regulates commuter rail systems and has detailed maintenance requirements for rolling stock, signals, and rights-of-way that the FRA enforces with a frequent inspection program. However, proper maintenance is needed by grantees for those components of the rail system not subject to FRA maintenance requirements, such as passenger stations, maintenance facilities, buildings, and equipment. Proper maintenance of all FTA funded facilities and equipment is necessary to protect the federal investment and ensure that maximum service longevity is achieved.

#### **REASON FOR THE QUESTION**

[FTA C 5010.1D](#), Ch. II, Section 3.a and Ch. IV, Sections 3.k and m

[FTA C 9030.1C](#), Ch. V, Section 5.e

#### **SOURCES OF INFORMATION**

Examine the grantee's facility and equipment maintenance plan and/or program, the maintenance checklists, and preventive maintenance program.

#### **DETERMINATION**

If the grantee has a written facility and equipment maintenance plan and the plan addresses the current mix of FTA funded assets, the grantee is not deficient. If the grantee does not have a plan, the grantee is deficient. At a minimum, the plan should identify the facilities and equipment that are to be maintained, define an organization and assign responsibility for on-going maintenance, and specify a series of

maintenance and inspection activities to be performed at appropriate intervals. The plan should prescribe a record-keeping system that maintains a permanent history of maintenance and inspection activity for each building, equipment and/or system. If these elements are not included in the grantee's plan, the grantee is deficient. If the plan is out-of-date, the grantee is deficient.

#### **SUGGESTED CORRECTIVE ACTION**

The grantee must develop and submit a new or revised facility/equipment maintenance plan.

**13.** *What is the grantee's schedule for facility and equipment preventive maintenance (PM) inspections: a) in its maintenance plan? b) in practice?*

**14.** *Does a spot check of the grantee's facility and equipment maintenance records indicate that the grantee is complying with its maintenance plan?*

**15.** *Are facility and equipment PM inspections completed on time?*

#### **EXPLANATION**

If preventive maintenance inspections of facilities or equipment are not being scheduled as planned, or not being carried out as scheduled, it is probable that other aspects of the facility and maintenance program are lacking as well, and the grantee is putting FTA's investment at risk.

#### **REASON FOR THE QUESTION**

[FTA C 5010.1D](#), Ch. II, Section 3.a and Ch. IV, Sections 3.k and m

[FTA C 9030.1C](#), Ch. V, Section 5.e

#### **SOURCES OF INFORMATION**

The facility/equipment maintenance plan should identify specific items, i.e., buildings, elevators, escalators, parking lots, electric distribution and control equipment, plumbing systems, overhead doors, vehicle maintenance lifts, vehicle washers and wash water recycling systems, heating and/or air conditioning units, power substations, etc. The facility/equipment maintenance plan should describe a system of periodic inspections and preventive maintenance to be performed at certain defined intervals. Maintenance intervals might be measured in terms of time (daily, monthly, annually), or in terms of usage (hours of use).

The reviewer should check preventive maintenance inspection intervals by reviewing a sample of facility and equipment maintenance records or management reports used by the grantee for monitoring preventive

maintenance inspections. For each item in the sample, examine the equipment/building maintenance history for the preceding 12 months. Note the date when each inspection was accomplished and record the interval from the previous inspection. Compare the interval with the grantee's definition of an "on-time" inspection to determine if the inspection was in accordance with the grantee's facility and equipment maintenance plan.

### **DETERMINATION**

The determination of compliance is based on whether the inspections are performed on time. If 80 percent or more of the inspections sampled were performed on time (no more than 20 percent late), the grantee is not deficient. If less than 80 percent of the inspections occurred on time (more than 20 percent late), the grantee is deficient. Grantees are not penalized for early inspections, only late ones.

### **SUGGESTED CORRECTIVE ACTION**

The grantee needs to address the occurrence of late PMs and develop a remediation plan that will satisfy itself and FTA that the capital investment is not being jeopardized. The grantee should implement a program immediately. The grantee can be asked to report on its results each month for three months to demonstrate it has conducted at least 80 percent of its preventive maintenance on time for this period.

- 16.** *Does the general condition of the revenue vehicles, support vehicles, facilities, and equipment show that the grantee is maintaining its federally funded vehicles, facilities, and equipment adequately?*

### **EXPLANATION**

Well-maintained and orderly facilities are good signs of a well-managed and efficient maintenance program. If parts are strewn around, floors are covered with grease and oil, lights are out, facilities and vehicles are dirty, and the entire area in a general state of disrepair, the reviewer has good reason to surmise that the maintenance program is not receiving sufficient attention.

### **REASON FOR THE QUESTION**

[49 USC 5307\(d\)\(1\)\(C\)](#)

[FTA C 5010.1D](#), Ch. II, Section 3.a and Ch. IV, Sections 3.k and m

[FTA C 9030.1C](#), Ch. V, Section 5.e

### **SOURCES OF INFORMATION**

During the review, perform a general walk-around inspection of the facility. Ask the grantee to provide a knowledgeable person to accompany the reviewer to answer questions about maintenance of the vehicles and facilities. The grantee's representative should

explain the purpose of each facility inspected, describe the flow of work, and explain what type of work is carried out in each location.

During the inspection, the reviewer should look for apparently inoperable or damaged vehicles and equipment. Pay particular attention to vehicles that appear to be permanently parked and are being cannibalized for parts. Question the grantee's representative about the cause of the inoperative vehicles and what plans the grantee has to return them to full operational capability. The grantee is required to notify FTA if a vehicle is removed from transit service prior to the end of its useful life. Adjustments in useful life also need to be made for vehicles returned to service after an extended period of time. This is a Satisfactory Continuing Control issue, but will be observed during the visit to the maintenance facilities.

Look for any old and obviously unused equipment such as engines and transmissions that are lying about and deteriorating. Make note of the general condition of the buildings, parking areas, fences, work areas, and pavements. Ask the grantee to explain anything that seems inconsistent with a judgment that the facility is well managed and well maintained.

### **DETERMINATION**

The inspection should give the reviewer a sense of the complete maintenance program and should focus the reviewer on the general condition of the grantee's facilities and equipment.

If the grantee's facilities, vehicles, and equipment generally are well maintained, and there is no evidence of vehicles and equipment being abandoned and allowed to deteriorate, then the grantee is not deficient. If the situation is other than this, the grantee is deficient. If the grantee has one or more vehicles that are within FTA's definition of useful life and appear to be permanently parked in an inoperable condition, then the grantee is deficient. If the grantee has retired these vehicles early, and not notified FTA, this is a deficiency in Satisfactory Continuing Control.

### **SUGGESTED CORRECTIVE ACTION**

The grantee will need to submit a report to FTA acknowledging the observations made by the review team and a providing a specific plan to bring the condition of the facilities, vehicles, and equipment back to an acceptable level of maintenance.

- 17.** *Is any equipment under warranty? If yes, what is the grantee's system for recovering warranty claims? Are claims pursued satisfactorily?*

## EXPLANATION

If the grantee has equipment under warranty, FTA requires that the grantee have a system for identifying warranty claims, recording claims, and enforcing claims against the manufacturers. An aggressive warranty recovery program ensures that the cost of defects is borne properly by the equipment manufacturer and not the grantee and FTA.

## REASON FOR THE QUESTION

[FTA C 5010.1D](#), Ch. II, Section 3.a and Ch. IV, Sections 3.k

[FTA C 9030.1C](#), Ch. V, Section 5.e

## SOURCES OF INFORMATION

Identify if there are any vehicles or equipment currently under warranty and which they are. Ask the grantee to explain how the preventive maintenance program meets or exceeds the manufacturer's recommended program.

Ask the grantee for a copy of its Warranty Recovery Program, or, if the program is not in writing, to describe the warranty recovery system. There should be clear procedures to identify warranty repairs, record the warranty claim, submit the claim to the manufacturer, and follow-up on unpaid claims. Review the records and files for the Warranty Recovery Program to learn how timely and aggressive the grantee has been in pursuing and collecting warranty claims. Compare the records of claims submitted with claims settled.

## DETERMINATION

If the grantee has no vehicles or equipment under warranty, these questions are not applicable. The grantee is not deficient if there is a warranty recovery program and the records indicate that claims are pursued satisfactorily. If the grantee does not have a warranty recovery system in place, or if the records of the program are not available, the grantee is deficient. If the grantee has a written program but is not pursuing warranty claims diligently, the grantee is deficient.

## SUGGESTED CORRECTIVE ACTION

The grantee must submit to FTA a written system for managing warranty claims and a written assurance that the system will be followed in the future.

- 18.** *Does the grantee have FTA funded vehicles that are either leased to service providers or maintained under contract by other than the grantee's employees? If yes, does the grantee have written maintenance standards for the contractor's maintenance of FTA funded vehicles? How does the grantee ensure that contractors follow the required maintenance standards?*

## EXPLANATION

Federally funded vehicles and equipment need to be maintained regardless of who operates and maintains them. If the grantee uses a third-party contractor to operate all or part of its service, and the contractor is responsible for vehicle maintenance, the contractor "stands in the shoes" of the grantee as far as FTA maintenance requirements are concerned. The reviewer must determine if the grantee has required the contractor to follow acceptable maintenance standards.

When a contractor is responsible for maintaining the grantee's vehicles, the grantee should require a maintenance plan, maintenance standards, or maintenance performance indicators in the contract. The grantee may have its own maintenance plan for the vehicles and equipment that the contractor is required to follow. These plans should be requested of the grantee and examined.

The grantee must have an effective mechanism to monitor the contractor's maintenance activities. An acceptable program would consist of periodic written reports on maintenance activities submitted by the contractor to the grantee, supplemented by periodic inspections of the contractor's facility and FTA funded vehicles by the grantee's representative. The reviewer should probe how often inspections take place and determine who is responsible for reviewing and monitoring the contractor's written reports. Determine whether the grantee has assigned an employee with a maintenance background to assess the contractor's performance and judge how the contractor deals with maintenance issues.

If there is a question regarding the effectiveness of the grantee's contract oversight program or if the contractor is responsible for maintaining several FTA funded vehicles, the reviewer should include the contractor's facilities as part of the field inspections and examine maintenance records for a sample of vehicles. The previous questions regarding the inspection of a grantee's facilities would be appropriate for a contractor maintenance operation.

## REASON FOR THE QUESTION

[FTA C 5010.1D](#), Ch. II, Section 3.a and Ch. IV, Sections 3.k and m

[FTA C 9030.1C](#), Ch. V, Section 5.e

[FTA Master Agreement](#) for FY2009, Section 19.c

## SOURCES OF INFORMATION

The grantee should identify any federally funded vehicles and/or facilities leased to providers or maintained under contract. In addition, the most recent NTD report describes contractual relationships and identifies services that are operated by purchased service. When the grantee identifies a service that is operated by a contractor, the reviewer should determine if the contractor is responsible for the maintenance of

the vehicles and if federally funded vehicles and/or facilities are involved.

Contracts for service should include maintenance-related requirements. Often the maintenance plan is found either in the Request for Proposals or in the contractor's proposal. This situation is acceptable if there is contract language making the RFP or the proposal part of the contract. Consider checking the maintenance records for several randomly selected vehicles of the contractor-maintained fleet.

#### **DETERMINATION**

If a grantee requires a maintenance plan and/or has maintenance requirements or standards in the contract, and there is evidence of proper oversight, the grantee is not deficient. If maintenance standards or a maintenance plan are not required specifically, the determination must be based on performance. For

example, a contractor might have and be following its own maintenance plan, though it is not contractually required. If a check of vehicle records shows that preventive maintenance inspections are being carried out as scheduled, then the grantee is not deficient. If neither the contract nor the contractor has a written maintenance plan and maintenance is being performed haphazardly, then the grantee is deficient. Similarly, if the grantee does not oversee the contractor's maintenance activities through periodic reports and inspections of facilities and vehicles, the grantee is deficient.

#### **SUGGESTED CORRECTIVE ACTION**

The grantee should amend the contract to include a maintenance plan and maintenance standards compatible with FTA requirements. The grantee must develop and report to FTA on how it will oversee the contractor's maintenance of FTA funded vehicles.