

8. MAINTENANCE

PURPOSE OF THIS REVIEW AREA

Recipients must keep federally funded vehicles, equipment, and facilities in good operating condition. Recipients must keep Americans with Disabilities Act (ADA) accessibility features on all vehicles, equipment, and facilities in good operating order.

QUESTIONS TO BE EXAMINED

1. Does the recipient have a written maintenance plan(s) for Federal Transit Administration (FTA)-funded assets (including vehicles/vessels, facilities, and equipment)?
2. Is the recipient following its program for preventive maintenance inspections for FTA-funded assets?
3. Does the recipient's vehicle maintenance program address maintenance procedures for wheelchair lifts and other accessibility features?
4. Does the recipient have a system for tracking warranty issues and does the recipient actively pursue warranty claims?
5. Do recipients have an effective mechanism for monitoring subrecipients', contractors', and lessees' maintenance activities?

INFORMATION NEEDED FROM RECIPIENT

Recipient Information Request

- Written vehicle (including vessels) and equipment maintenance plans
- Written facility maintenance plan

Recipient Follow-up

- Management reports used for monitoring preventive maintenance inspections
- Maintenance records for vehicles, equipment and facilities

M1. Does the recipient have a written maintenance plan(s) for FTA-funded assets (including vehicles/vessels, facilities, and equipment)?

BASIC REQUIREMENT

Recipients that control FTA-funded assets must have maintenance plans for those assets.

APPLICABILITY

Recipients with direct control over FTA-funded assets

DETAILED EXPLANATION FOR REVIEWER

Public transit requires a considerable investment in buildings, equipment, and machinery. Proper maintenance of assets is key to protecting the FTA investment and prolonging the useful life of the asset. All recipients must have a written maintenance plan(s) for FTA-funded assets. These plans must describe a system of periodic inspections and preventive maintenance to be performed at certain defined intervals. For Section 5307-funded assets, the written maintenance plans should identify the goals and objectives of a maintenance program, which may include, for example, vehicle life, frequency of road calls, and maintenance costs compared to total operating costs and establish how the recipient will meet such goals and objectives. Plans should be updated with the purchase of new rolling stock to account for new technology and/or new manufacturer's recommended maintenance intervals and programs, and

incorporate actions to maintain each vehicle type and model on a specific cycle. These actions will help ensure proper care and maximize vehicle longevity.

For vehicles under warranty, the recipient typically must perform a series of preventive maintenance actions if the warranty is to remain valid. If the recipient either does not perform these required maintenance routines, or performs them at greater intervals than the manufacturer's maximum intervals, the recipient runs the risk of invalidating vehicle warranty provisions. Some operators have relied on oil analysis to extend the interval between oil changes beyond the engine manufacturer's recommended interval. This is acceptable provided the recipient has a letter from the manufacturer of the vehicles' engines stating that this practice will not void the engine warranty.

FTA requires that rail operators purchasing vehicles with FTA funds have a rail fleet management plan that has been reviewed by FTA. 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.

A model program for FTA-funded facilities and equipment would include:

- An organization and assignment of responsibility for facility and equipment maintenance
- A system of periodic inspections and preventive maintenance to be performed at certain defined intervals (required in regulation). Such a system may be part of a recipient's maintenance management information system. Maintenance intervals might be measured in terms of time (daily, monthly, or annually) or in terms of use (hours).
- A record-keeping system that maintains adequate permanent records of maintenance and inspection activity for buildings and equipment.
- For Section 5307-funded facilities and equipment, goals and objectives of the maintenance program and how they will be met (required in regulation).

The maintenance programs should address specific mission critical and safety items, which include, but are not limited to:

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| • Buildings | • Plumbing systems |
| • Elevators | • Overhead doors |
| • Escalators | • Vehicle maintenance lifts |
| • Passenger stations/shelters | • Vehicle washers and wash water recycling systems |
| • Parking lots | • Heating and/or air conditioning units |
| • Right-of-way (guideway, track, ballast, etc.) | • Power substations, etc. |
| • Electric distribution and control equipment | • Security equipment |

In the case of rail systems, FTA's investment often involves the construction of passenger stations, rights-of-way, signals, and other related facilities and equipment. While Federal Railroad Administration (FRA) regulates commuter rail systems and has detailed maintenance requirements for rolling stock, signals, and right-of-way that it enforces with a frequent inspection program, proper maintenance is needed by recipients for those components of the rail system not subject to FRA maintenance requirements, such as passenger stations, maintenance facilities, buildings, and equipment.

INDICATORS OF COMPLIANCE

a. Does the recipient have a written maintenance plan(s) for FTA-funded:

i. Vehicles?

ii. Facilities and facility-related equipment?

- iii. *Equipment?*
- b. *Does the written maintenance plan(s) identify a system of periodic inspections and preventive maintenance for:*
 - i. *Vehicles?*
 - ii. *Facilities and facility-related equipment?*
 - iii. *Equipment?*

INSTRUCTIONS FOR REVIEWER

For recipients with subrecipients, first verify which entity has responsibility for (this is different from oversight of) maintaining the FTA-funded assets, the recipient or its subrecipient(s). Where the subrecipient has responsibility for maintaining the FTA-funded assets, move to Question 5.

Obtain and review the recipient’s maintenance plans for FTA-funded vehicles, facilities, and equipment to ascertain how the recipient’s procedures provide for maintenance of current FTA-funded assets. If the recipient is a rail operator with FTA-funded vehicles, the recipient must have a rail fleet management plan that addresses maintenance as reviewed in the Satisfactory Continuing Control area. Compare maintenance plans with the asset listing obtained in the Satisfactory Continuing Control area to verify that the plan addresses maintenance of the recipient’s current fleet. If any assets are under warranty, obtain the manufacturers’ minimum maintenance requirements to confirm that the recipient’s maintenance plan follows the manufacturers’ minimum recommendations. Review the maintenance plans to ensure they describe a system of periodic inspections and preventive maintenance to be performed at certain defined intervals.

POTENTIAL DEFICIENCY DETERMINATIONS

The recipient is deficient if it does not have a written maintenance plan(s) for FTA-funded vehicles/vessels.

DEFICIENCY CODE M1-1: No written vehicle/vessel maintenance plan

SUGGESTED CORRECTIVE ACTION: The recipient must submit to the FTA regional office a written maintenance plan for FTA-funded vehicles.

For rail operations, this deficiency should be recorded in the Satisfactory Continuing Control area under deficiency code SCC11-1: Lacking rail fleet management plan/plan out of date.

The recipient is deficient if it does not have a written maintenance plan(s) for FTA-funded facilities or equipment.

DEFICIENCY CODE M1-2: No written facility/equipment maintenance plan

SUGGESTED CORRECTIVE ACTION: The recipient must submit to the FTA regional office a written maintenance plan for FTA-funded facilities and/or equipment.

The recipient is deficient if the vehicle/vessel maintenance plan does not describe a system of periodic inspections and preventive maintenance to be performed at certain defined intervals.

DEFICIENCY CODE M1-3: No system of periodic inspections and preventive maintenance identified in vehicle/vessel maintenance plan

SUGGESTED CORRECTIVE ACTION: The recipient must submit to the FTA regional office a new or revised vehicle/vessel maintenance plan that identifies a system of periodic inspections and preventive maintenance performed at certain defined intervals.

The recipient is deficient if the facility or equipment maintenance plan(s) does not describe a system of periodic inspections and preventive maintenance to be performed at certain defined intervals.

DEFICIENCY CODE M1-4: No system of periodic inspections and preventive maintenance identified in facility or equipment maintenance plan

SUGGESTED CORRECTIVE ACTION: The recipient must submit to the FTA regional office a new or revised facility and/or equipment maintenance plan that identifies a system of periodic inspections and preventive maintenance performed at certain defined intervals.

GOVERNING DIRECTIVE
2 CFR 200.313 Equipment

A state must use, manage and dispose of equipment acquired under a Federal award by the state in accordance with state laws and procedures. Other non-Federal entities must follow paragraphs (c) through (e) of this section... (d) *Management requirements*. Procedures for managing equipment (including replacement equipment), whether acquired in whole or in part under a Federal award, until disposition takes place will, as a minimum, meet the following requirements...(4) Adequate maintenance procedures must be developed to keep the property in good condition.

FTA C. 5010.1E, Ch. IV Management of the Award, Section 4n(4). Equipment and Supplies (Including Rolling Stock)

n. Management of Federally Assisted Property.

(4) Maintenance and Warranty.

a. Maintenance. Adequate maintenance procedures must be developed and implemented to keep the federally assisted property in good condition. Recipients must maintain federally assisted property in good operating order and in compliance with any applicable federal regulations that may be issued and follow applicable guidance that may be issued, except to the extent that FTA determines otherwise in writing. Recipients must have a written vehicle maintenance plan and a facility/equipment maintenance plan. These plans should describe a system of periodic inspections and preventive maintenance to be performed at certain defined intervals.

FTA C. 9030.1E, Ch. VI Program Management and Administrative Requirements, Section 1 Certifications Required by 49 U.S.C. 5307

1.(5) Maintenance. According to 49 U.S.C. 5307(d)(1)(C), a recipient must certify that it will maintain its federally assisted facilities and equipment.

The recipient must keep equipment and facilities acquired with federal assistance in good operating order. This includes maintenance of rolling stock (revenue and nonrevenue), machinery and equipment, and facilities. Every recipient of Section 5307 program funds must have in its files a maintenance plan. The maintenance plan should identify the goals and objectives of a maintenance program, which may include, for example, vehicle life, frequency of road calls, and maintenance costs compared to total operating costs. The maintenance plan should establish the means by which the grantee will meet such goals and objectives.

M2. Is the recipient following its program for preventive maintenance inspections for FTA-funded assets?

BASIC REQUIREMENT

Recipients that use FTA assistance to purchase assets must keep those assets in good condition and good operating order.

APPLICABILITY

Recipients with direct control over FTA-funded assets

DETAILED EXPLANATION FOR REVIEWER

The recipient must follow its maintenance program for FTA-funded assets. If preventive maintenance inspections are not scheduled or performed as planned, it is probable that other aspects of the vehicle, facility and equipment maintenance programs are lacking as well and the recipient is putting FTA's investments and its warranties at risk. Actual maintenance practices should be consistent with the recipient's maintenance program.

Fleet deterioration takes a long time to occur and even longer time to correct (or may even be irreversible) once deterioration has begun. Both the deterioration and the correction take a toll on the recipient's resources and put FTA's investments at risk.

A sound preventive maintenance program will reduce the incidence of unscheduled repairs and extend vehicles' useful life.

INDICATORS OF COMPLIANCE

- a. *For vehicles/vessels, are the recipient's actual maintenance practices consistent with the plan/program?*

Mode Operated	Fleet Size	# of Vehicle/Vessel Sampled	Plan Identified Maintenance Interval	% on Time

- b. *For facilities and equipment, are the recipient's actual maintenance practices consistent with the written plan?*

Facility/Equipment	Maintenance Interval	Date of PM	Actual Interval between PM inspections	PM conducted on time? Y/N

INSTRUCTIONS FOR REVIEWER

For vehicles/vessels: Review the vehicle/vessel maintenance plan(s)/program(s) for the interval (miles or operated hours) between preventive maintenance inspections. Check preventive maintenance inspection intervals by reviewing management reports used by the recipient for monitoring preventive maintenance inspections and by reviewing records for a selected sample of FTA-funded vehicles in accordance with the sampling procedures below. Determine the maintenance interval for each mode operated. In some cases, intervals also may vary by sub-fleet. Examine preventive maintenance records (manual or electronic) while on-site to determine whether the recipient is performing inspections according to its maintenance plan.

Most recipients schedule preventive maintenance inspections based on relative miles (e.g., 6,000 miles since the last inspection) or hours of service. Others schedule based on absolute miles or hours. Recipients may choose either method.

FTA allows recipients discretion in determining the appropriate intervals for preventative maintenance inspections to accommodate such things as specific manufacturer recommendations, vehicle/vessel age, unique site and operating conditions, etc. FTA expects recipients to follow their program for preventative maintenance but understands that circumstances may prevent inspections being completed exactly at the interval specified. To account for this, FTA allows a 10 percent deviation from the scheduled interval as being considered on time. Review the sample preventive maintenance history to determine if fewer than 80 percent of the inspections for any mode or operation occurred on time.

For each vehicle/vessel chosen, examine the preventive maintenance history for the preceding 12 months. Using the table above, note the date when each inspection was accomplished and record the vehicle mileage (or hours) at the time of each inspection.

For commuter rail locomotives and cars, in lieu of selecting a sample of preventive maintenance records, examine Federal Railroad Administration (FRA) inspection records to determine if FRA compliance letters indicate that the recipient does not meet the FRA scheduled maintenance intervals. If the recipient is unable to provide a compliance letter from FRA, sample the commuter rail fleet.

For facilities and equipment: Review the recipient’s preventive maintenance inspection intervals by reviewing management reports used by the recipient for monitoring preventive maintenance inspections and by reviewing a sample of facility and equipment maintenance records in accordance with the sampling procedures below. For each item in the sample, examine the facility/equipment maintenance history for the preceding 12 months. Using the table above, note the date when each inspection was accomplished and record the interval from the previous inspection. Compare the interval with the recipient’s definition of an “on-time” inspection to determine if the inspection was in accordance with the recipient’s facility and equipment maintenance plan.

Maintenance record selection procedures for vehicles

For modes that do not include federally funded vehicles, limit the examination to preventive maintenance of ADA accessibility features.

For all modes with FTA-funded vehicles, select a minimum of three vehicles up to a total of one percent of the FTA funded fleet for each mode (whichever is greater). Modes are classified per National Transit Database definitions as follows:

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

For directly operated service (DO), obtain a sample across all garages/yards. For recipients that use a combination of directly operated (DO) and purchased transportation (PT), treat the DO and PT portions as separate modes. For larger recipients that use multiple contractors, treat each contractor visited as a mode. For recipients with subrecipients, treat the subrecipients visited as a mode. Consult with the regional office in selecting the garages, contractors, and subrecipients to visit. To the extent practical, distribute the sample of vehicles selected by age and subfleet in each mode.

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

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

Maintenance record selection procedures for facilities and equipment

If the recipient operates a commuter railroad, ask the recipient to identify those FTA funded items that are not regulated by the FRA. Select a sample of three facility and three equipment items to examine for each mode. Sample critical items, such as fire suppression systems, hoists, lifts, emergency generators, power substations, rail right of way, and catenary, and ADA accessibility features, such as elevators, escalators, and lifts.

POTENTIAL DEFICIENCY DETERMINATIONS

The recipient is deficient if examination and analysis of vehicle/vessel preventive maintenance records show that the recipient is not performing on time preventive maintenance in accordance with its program at least 80 percent of the time.

DEFICIENCY CODE M2-1: Late vehicle/vessel preventive maintenance

SUGGESTED CORRECTIVE ACTION 1: The recipient must submit to the FTA regional office:

- procedures for completing preventive maintenance inspections on time.
- a monthly report signed by the chief executive officer or other senior management designee on preventive maintenance results until the data demonstrate the recipient has conducted 80 percent of its preventive maintenance on time for three consecutive months. For each vehicle/vessel that received a preventive maintenance inspection during the month, the recipient must include with the submittal to the FTA regional office:
 - a report that lists the vehicle/vessel number, date of the inspection, mileage of the current inspection, mileage of the previous inspection, and the mileage interval between the two inspections for each vehicle/vessel that received a preventive maintenance inspection during the month. List the percentage of the inspections performed on time.
 - back-up documentation for each vehicle/vessel (e.g., copy of work order, printout from the maintenance management system) documenting the date and mileage of the inspection.

NOTE: If a repeat deficiency from the prior review, the recipient must submit to the FTA regional office, the above information monthly until the data demonstrates the recipient has conducted 80 percent of its preventive maintenance on time for 12 consecutive months.

The recipient is deficient if examination and analysis of facility and/or equipment preventive maintenance records show that the recipient is not performing on time preventive maintenance in accordance with its program at least 80 percent of the time.

DEFICIENCY CODE M2-2: Late facility/equipment preventive maintenance

SUGGESTED CORRECTIVE ACTION: The recipient must submit to the FTA regional office:

- procedures for completing preventive maintenance inspections on time
- a monthly report signed by the chief executive officer or other senior management designee on the preventive maintenance results of the item(s) examined during the review until the data demonstrates the recipient has conducted 80 percent of its preventive maintenance on time for three consecutive months. For each asset that received a preventive maintenance inspection during the month, the recipient must include with the submittal to the FTA regional office:
 - a report listing the items, the dates the inspections are due, and the dates of the actual inspections. List the percentage of the inspections performed on time
 - back-up documentation for each item (e.g., copy of work order, printout from the maintenance management system) documenting the date of the inspection

NOTE: If a repeat deficiency from the prior review, the recipient must submit to the FTA regional office, the above information monthly until the data demonstrates the recipient has conducted 80 percent of its preventive maintenance on time for 12 consecutive months.

GOVERNING DIRECTIVE

2 CFR 200.313, Equipment

A state must use, manage and dispose of equipment acquired under a Federal award by the state in accordance with state laws and procedures.

FTA C. 5010.1E, Ch. IV Management of the Award, Section 4. Equipment and Supplies (Including Rolling Stock)

n. Management of Federally Assisted Property

(4) Maintenance and Warranty

- (a) Recipients must maintain federally assisted property in good operating order and in compliance with any applicable federal regulations that may be issued and follow applicable guidance that may be issued, except to the extent that FTA determines otherwise in writing...
- (b) Recipients must keep satisfactory records pertaining to the use of federally assisted property, and submit to FTA upon request such information as may be required to assure compliance with federal requirement.

FTA C. 5010.1E Ch. IV 4(n)(4), Maintenance and Warranty

- (a) Recipients must maintain federally assisted property in good operating order and in compliance with any applicable federal regulations that may be issued and follow applicable guidance that may be issued, except to the extent that FTA determines otherwise in writing.
- (b) Recipients must keep satisfactory records pertaining to the use of federally assisted property, and submit to FTA upon request such information as may be required to assure compliance with federal requirement.

M3. Does the recipient's vehicle maintenance program address maintenance of wheelchair lifts and other accessibility features?

BASIC REQUIREMENT

The U.S. Department of Transportation (US DOT) ADA regulations require all vehicle accessibility features be maintained and operational.

APPLICABILITY

Recipients with direct control over FTA-funded assets

DETAILED EXPLANATION FOR REVIEWER

The US DOT ADA regulations require all vehicle and facility accessibility features, such as wheelchair lifts and elevators in the recipient's facilities, be maintained and operational. The accessibility features must be promptly repaired if they are damaged or out of order. When the equipment is not working, the recipient must take reasonable steps to accommodate persons with disabilities who would otherwise use it. The ADA maintenance elements may be incorporated into the regular maintenance program or addressed separately with specific checklists. At a minimum, the recipient must show that accessibility features are checked regularly for proper operation and receive periodic maintenance. These requirements apply to both FTA and non-FTA-funded facilities.

INDICATORS OF COMPLIANCE

- a. *Do the recipient's vehicle maintenance records indicate regular and periodic maintenance checks for wheelchair lifts and ramps?*
- b. *Do the recipient's vehicle maintenance records indicate that other accessibility features (e.g., kneelers, public address systems, voice annunciation systems, etc.) are maintained in operational condition?*
- c. *Does the recipient have a program to maintain accessibility features for its facilities and facility-related equipment?*

INSTRUCTIONS FOR REVIEWER

For vehicles: Review the recipient's vehicle preventive maintenance procedures and checklists for the entire fleet to determine if maintenance elements for wheelchair lifts, ramps, and other ADA equipment are incorporated or addressed separately with specific checklists.

As part of the record sample selected for preventive maintenance review, review sample maintenance records for the entire fleet to determine if regular and periodic maintenance checks are being performed for wheelchair lifts and ramps, and accessibility features are checked regularly for proper operation and maintained in operational condition.

Note whether the recipient has and is following maintenance procedures for wheelchair lifts, ramps, and other accessibility equipment. Assess the recipient's ability to promptly repair accessibility features if they are damaged or out of order. Differentiate between unrepaired maintenance features and isolated or temporary interruptions in service or access due to maintenance or repairs.

For facilities: Review the recipient's maintenance program and the maintenance checklists to determine if maintenance elements for accessibility features for its facilities and facility-related equipment are addressed. As part of the record sample selected for preventive maintenance review, sample facility maintenance records, ensuring that accessibility features are maintained regularly and repaired promptly if out of order.

Note whether the recipient has and is following maintenance procedures for facility-related accessibility features. Review reports on elevator and escalator availability, if available, for evidence of repairs made and the recipient's ability to promptly repair accessibility features if they are damaged or out of order. Differentiate between unrepaired maintenance features and isolated or temporary interruptions in service or access due to maintenance or repairs.

POTENTIAL DEFICIENCY DETERMINATIONS

The recipient is deficient if its preventive maintenance program does not address accessibility features.

DEFICIENCY CODE M3-1: Accessible features not addressed in preventive maintenance program

SUGGESTED CORRECTIVE ACTION: The recipient must submit to the FTA regional civil rights officer (RCRO) a preventive maintenance program for ADA accessibility equipment.

The recipient is deficient if it does not follow its program for the preventive maintenance of accessibility features.

DEFICIENCY CODE M3-2: Preventive maintenance program for accessible features not followed

SUGGESTED CORRECTIVE ACTION: The recipient must submit to the FTA RCRO evidence that its preventive maintenance program for ADA accessibility features is being implemented.

The recipient is deficient if it does not maintain accessibility features in operational condition.

DEFICIENCY CODE M3-3: Accessibility features not maintained

SUGGESTED CORRECTIVE ACTION: The recipient must submit to the RCRO procedures for maintaining accessible features promptly and evidence of implementation.

GOVERNING DIRECTIVE

49 CFR 37.161, Maintenance of Accessible Features – General

(a) Public and private entities providing transportation services shall maintain in operative condition those features of facilities and vehicles that are required to make the vehicles and facilities readily accessible to and usable by individuals with disabilities. These features include, but are not limited to, lifts and other means of access to vehicles, securement devices, elevators, signage and systems to facilitate communications with persons with impaired vision or hearing.

(b) Accessibility features shall be repaired promptly if they are damaged or out of order. When an accessibility feature is out of order, the entity shall take reasonable steps to accommodate individuals with disabilities who would otherwise use the feature.

(c) This section does not prohibit isolated or temporary interruptions in service or access due to maintenance or repairs.

49 CFR 37.163 - Keeping vehicle lifts in operative condition: Public entities

(a) This section applies only to public entities with respect to lifts in non-rail vehicles, (b) The entity shall establish a system of regular and frequent maintenance checks of lifts sufficient to determine if they are operative.

FTA C. 5010.1E Ch. IV (4)(n)(4)(b), Maintenance and Warranty

Recipients must keep satisfactory records pertaining to the use of federally assisted property, and submit to FTA upon request such information as may be required to assure compliance with federal requirements...

M4. Does the recipient have a system for tracking warranty issues and does the recipient actively pursue warranty claims?

BASIC REQUIREMENT

Recipients must establish procedures for adequately recording, tracking and pursuing warranty claims.

APPLICABILITY

Non-state recipients with direct control over FTA-funded assets

DETAILED EXPLANATION FOR REVIEWER

If the recipient has equipment under warranty, FTA requires that the recipient 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 recipient and FTA. 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.

INDICATORS OF COMPLIANCE

- a. *Does the recipient have any FTA-funded assets under warranty? If no, move to Question 5.*
- b. *What is the recipient's system for identifying and tracking warranty issues and recovering warranty claims for FTA-funded assets?*
- c. *Are warranty claims for FTA-funded assets pursued?*

INSTRUCTIONS FOR REVIEWER

Review the recipient's inventory records of FTA-funded equipment under warranty. Obtain the recipient's procedures for identifying, recording, and enforcing warranty claims against manufacturers.

Review and/or discuss on site the recipient's warranty recovery procedures to ensure they are clear on identifying warranty repairs, recording the warranty claim, submitting the warranty claim to the manufacturer, and following-up on unpaid warranty claims. Review the recipient's warranty claim records and files to learn how timely and aggressively the recipient has been in pursuing and collecting warranty claims. Compare the records of claims submitted with claims settled.

POTENTIAL DEFICIENCY DETERMINATIONS

The recipient is deficient if it does not have a warranty recovery system.

DEFICIENCY CODE M4-1: No warranty recovery system

SUGGESTED CORRECTIVE ACTION: The recipient must submit to the FTA regional office a written system for identifying and recording warranty claims with a plan for implementation.

The recipient is deficient if it does not document that warranty claims are pursued or is not pursuing warranty claims diligently.

DEFICIENCY CODE M4-2: Warranty claims not pursued

SUGGESTED CORRECTIVE ACTION: The recipient must submit to the FTA regional office a plan for documenting resolution of warranty claims. The recipient must report monthly to the FTA regional office on the pursuit of warranty claims for three months to demonstrate it is diligently pursuing claims.

GOVERNING DIRECTIVE

FTA C. 5010.1E Ch. IV 4(n)(4)(c), Warranties

Recipients are responsible for:

- 1 Establishing and maintaining a system for recording warranty claims; this system should provide information needed by the recipient on the extent and provisions of coverage and on claims processing procedures; and
- 2 Identifying and diligently enforcing the system for recording warranty claims.

M5. Do recipients have an effective mechanism for monitoring subrecipients', contractors', and lessees' maintenance activities?

BASIC REQUIREMENT

States must develop maintenance requirements for subrecipients, contractors, and lessees for FTA-funded vehicles/vessels. Other recipients must require that subrecipients, contractors, and lessees meet FTA maintenance requirements.

APPLICABILITY

Recipients with subrecipients, contractors, and lessees with FTA-funded assets

DETAILED EXPLANATION FOR REVIEWER

State recipients must develop maintenance requirements for subrecipients, contractors, and lessees for FTA-funded vehicles/vessels and equipment that are adequate to protect the Federal interest and to ensure that the equipment is maintained in good operating order. States must require subrecipients, contractors, and lessees to meet FTA requirements and follow acceptable maintenance standards and have written maintenance plans for FTA-funded facilities. For the Sections 5310, 5311, and 5339 programs, these requirements are normally included in the State Management Plan and/or referenced in the subrecipient agreements.

Other recipients must require that subrecipients, contractors, and lessees meet FTA requirements and follow acceptable maintenance standards for FTA-funded assets and require or have a written maintenance plan. For the Sections 5310 and 5339, these requirements are normally included in the recipient's program management plan and/or referenced in the subrecipient agreements, contracts, or lease.

Additionally, if assets are under warranty, FTA requires that there be 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 subrecipient, recipient, and FTA. 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. It is the FTA recipient's responsibility to ensure subrecipients, contractors, and lessees comply with this requirement.

All recipients must have an effective mechanism for monitoring subrecipients', contractors', and lessees' maintenance of FTA-funded assets. An acceptable program would consist of periodic written reports on maintenance activities submitted to the recipient, review of maintenance records, or periodic inspections of the FTA-funded assets.

INDICATORS OF COMPLIANCE

- a. *For recipients that are states, what are the requirements for subrecipients, contractors, or lessees for the maintenance of FTA-funded vehicles and equipment?*
- b. *For non-states, does the recipient have or require that its subrecipients, contractors or lessees have a written maintenance plan that meets FTA requirements for FTA-funded vehicles and equipment?*
- c. *Do all recipients have or require that its subrecipients, contractors or lessees have a written maintenance plan that meets the FTA requirements for FTA-funded facilities?*
- d. *How do all recipients ensure that subrecipients, contractors, and lessees maintain FTA-funded vehicles, facilities, and equipment?*
- e. *For non-states, how does the recipient ensure that subrecipients, contractors, and lessees pursue warranty claims for FTA-funded vehicles?*
- f. *How do all recipients ensure that subrecipients, contractors, and lessees pursue warranty claims for FTA-funded facilities?*

INSTRUCTIONS FOR REVIEWER

Review all of the following as applicable for the maintenance and warranty recovery requirements the recipient places on subrecipients, contractors, or lessees for FTA-funded assets:

- State/program management plans
- Technical assistance manuals
- Recipient oversight procedures
- Subrecipient application packages and agreements
- Third-party contracts/leases. Obtain and review the maintenance plans for the subrecipient/contractor/lessee to be visited to ensure they address FTA requirements.

For each subrecipient, contractor, and lessee selected for a site visit, review the recipient's oversight records and reports to determine how the recipient is actively monitoring the activities of subrecipients, contractors and lessees. If the recipient's files cannot document maintenance oversight activities, during the site visit review maintenance plans and maintenance files.

POTENTIAL DEFICIENCY DETERMINATION

The state recipient is deficient if it:

- Has not established maintenance requirements for FTA-funded vehicles for subrecipients, contractors, or lessees;
- Does not have or has not ensured that subrecipients, contractors or lessees have written maintenance plans for FTA-funded facilities; or
- Does not ensure that subrecipients, contractors, or lessees maintain FTA-funded vehicles, facilities, or equipment.

The non-state recipient is deficient if it:

- Does not have or require a written maintenance plan for its subrecipients, contractors or lessees for FTA-funded vehicles, facilities and equipment;
- Does not ensure vehicles, facilities or equipment are maintained in good operating order; or
- Does not ensure that subrecipients, contractors, or lessee establish and maintain a warranty program.

DEFICIENCY CODE M5-1: Inadequate oversight of subrecipient, contractor or lessee maintenance activities

SUGGESTED CORRECTIVE ACTION 1: The recipient must submit to the FTA regional office an updated state/program management plan(s) or subrecipient/contractor/lessee agreements with maintenance requirements for third parties, along with evidence of its overseeing the implementation.

SUGGESTED CORRECTIVE ACTION 2: The recipient must submit to the FTA regional office oversight procedures, along with evidence of its implementation such as, an amended subrecipient agreement, contract, or lease incorporating the requirement for a written maintenance plan that includes maintenance standards compatible with FTA requirements, performance measures for timely maintenance and/or procedures for pursuing warranty claims.

GOVERNING DIRECTIVE

2 CFR 200.313, Equipment

A state must use, manage and dispose of equipment acquired under a Federal award by the state in accordance with state laws and procedures. Other non-Federal entities must follow paragraphs (c) through (e) of this section. (d) *Management requirements*. Procedures for managing equipment (including replacement equipment), whether acquired in whole or in part under a Federal award, until disposition takes place will, as a minimum, meet the following requirements...(4) Adequate maintenance procedures must be developed to keep the property in good condition.

2 CFR 200.318(b)

Non-Federal entities must maintain oversight to ensure that contractors perform in accordance with the terms, conditions, and specifications of their contracts or purchase orders.

2 CFR 200.331 Subpart D, Requirements for Pass-Through Entities

All pass-through entities must monitor the activities of the subrecipient as necessary to ensure that the subaward is used for authorized purposes, in compliance with Federal statutes, regulations, and the terms and conditions of the subaward; and that subaward performance goals are achieved...

FTA C. 5010.1E Ch. IV (4)(n)(4), Maintenance and Warranty

- (a) Recipients must maintain federally assisted property in good operating order and in compliance with any applicable federal regulations that may be issued and follow applicable guidance that may be issued, except to the extent that FTA determines otherwise in writing
- (b) Recipients must keep satisfactory records pertaining to the use of federally assisted property, and submit to FTA upon request such information as may be required to assure compliance with federal requirements

ISSUES/AREAS OF CONCERN FOR FTA AWARENESS

1. Have any oversight reviews, audits, or investigations of the recipient conducted since the last triennial review (including Financial Management Oversight Reviews (FMOs) and the most recent Comprehensive Review) identified significant deficiencies, material weaknesses and/or repeat deficiencies in the area of maintenance? Are any such reviews scheduled during this Federal fiscal year?
2. Did the recipient experience difficulty resolving or closing any oversight review, investigation, or audit deficiencies or findings related to maintenance? Are any deficiencies or findings currently open?
3. Are any issues related to maintenance indicated in the recipient Oversight Assessment Tool (OAT)? Does background research and/or site investigation support these concerns?
4. For Section 5307-funded assets, does the maintenance plan(s) address goals and objectives?
5. Are there indications that preventive maintenance is being deferred?
6. Are there patterns of service interruptions due to inadequate maintenance?
7. Have there been safety incidents related to maintenance?
8. Have there been early retirements and/or mid-life overhauls of FTA funded assets due to maintenance?
9. Are there indications that the recipient may not have adequate maintenance procedures, reporting systems, and/or technical expertise to adequately maintain and operate FTA-funded assets?
10. Did site/visual inspections of any FTA-funded assets reveal any evidence of insufficient maintenance?
11. If maintenance is conducted by a third-party contractor, does the recipient adequately monitor adherence with contract terms?
12. Does the recipient appear to have adequate resources (organizational structure, staffing levels, training, experience, etc.) assigned to maintenance of FTA- funded assets?
13. Do employees assigned to assess subrecipient, contractor, or lessee maintenance performance have a maintenance background?
14. Do Preventive Maintenance records appear to be accurate?
15. Do facility and equipment maintenance plans address mission critical items and security equipment?
16. Does the recipient have maintenance management reporting system in place to track vehicle, equipment, and facility preventive maintenance? Does the system include evaluative performance criteria?
17. What performance reports inform senior management about maintenance activities?
18. How long are the records for FTA-funded facilities and equipment kept?
19. Did background research or site visit observations reveal any potential issues or concerns about the recipient's maintenance program or its implementation not covered previously in this section?

REFERENCES

1. 49 U.S.C. Chapter 53, Federal Transit Laws
2. 2 CFR Parts 200 and 1201, "Uniform Administrative Requirements", Cost Principles, and Audit Requirements for Federal Awards"

3. 49 CFR Part 37, "Transportation Services for Individuals with Disabilities (ADA)"
4. FTA Master Agreement
5. FTA Circular 5010.1E, "Award Management Requirements"

USEFUL WEBLINKS

1. FTA State of Good Repair and Asset Management Website