

XII. Maintenance of Transportation Facilities

A. Overview: Maintenance is any action required to preserve and maintain a current transportation facility within its right-of-way, so that the facility may be used safely and effectively for its designated purpose. The main categories of maintenance are listed here:

- **Preventive Maintenance** includes regularly scheduled inspections, and minor repairs.
- **Scheduled Maintenance** is planned, and results from preventive maintenance inspections.
- **Unscheduled Maintenance** is immediate action needed to correct unexpected occurrences which impact safety and efficiency of operations.
- **Normal Maintenance** is the planned, recurring day-to-day care of the facility.

The intent of maintenance is to bring a current facility as close as possible to its original condition, when it was first constructed or improved. Available maintenance funding can be used most effectively by accurately identifying the Tribe's maintenance needs, and then prioritizing those maintenance needs to fit the available funding. Maintenance is one of the key building blocks of an effective Asset Management program defined in 23 USC 101 § (a)(2) and 25 CFR § 170.5.

Transportation facilities and assets include travelways with approaches, parking facilities, drainage structures, roadside slopes, sidewalks, pathways, rest areas and visitor centers, traffic control devices, transit vehicles and road maintenance equipment.

Public safety and the safety of maintenance employees must also be a high priority when carrying out maintenance, whether it is routine scheduled maintenance or unscheduled emergency response maintenance. It is essential to plan, budget and carry out safety measures in the maintenance work zone for the safety of the public and employees.

B. Types of Tribal Maintenance Funding. There are two types of federal funds available to Tribes for Tribal transportation facility maintenance:

1. **TTP funding.** This is funding from a Tribe's annual TTP funds (received as tribal shares) that the Tribe uses for transportation facility maintenance. TTP funds can be used for maintenance only on facilities identified in the National Tribal Transportation Facility Inventory (NTTFI).
2. **BIA Transportation Facility Maintenance Program.** This is funding in addition to the Tribes' TTP funds. Congress provides this separate funding for the BIA Transportation Facility Maintenance Program in the annual Department of the Interior appropriations acts. Tribes may use these funds for maintaining BIA Road System and BIA transportation facilities, and also other facilities identified in the National Tribal Transportation Facility Inventory (NTTFI) if permitted by the BIA on a case-by-case basis. The [BIA Transportation Facilities Maintenance Handbook For BIA Road Maintenance Program](#) is located at [http://www.nijc.org/pdfs/TTAP/BIA/82_IAM_Handbook - BIA Road Maintenance Program minimized \(1\).pdf](http://www.nijc.org/pdfs/TTAP/BIA/82_IAM_Handbook_-_BIA_Road_Maintenance_Program_minimized_(1).pdf)

C. Relationship of Maintenance activities to ERFO repairs. Serious damage by a natural disaster over a wide area, or by a catastrophic failure, can possibly be reimbursed from the Emergency Relief for Federally Owned (ERFO) program. A Tribe's road maintenance program may perform repairs to restore essential traffic, protect remaining facilities and prevent additional damages. See Emergency Relief for Federally Owned (ERFO) in [Chapter XV - Other Federal Transportation Grants and Programs](#).

D. Statutory / Regulatory Requirements.

- TTP funds may be used for maintenance in accordance with 23 U.S.C. § 202(a), 25 CFR §§ 170.111-112 and 170.805, and 25 CFR Part 170 Appendix to Subpart G.
- TTP road maintenance requirements are in 25 CFR §§ 170.800 - 170.805.
- TTP funds can be used for the maintenance of TTP facilities identified in the National Tribal Transportation Facility Inventory (NTTFI) (25 CFR § 170.800(b)).
- TTP road maintenance standards according to 25 CFR § 170.803.
- According to 23 U.S.C. § 202(a)(8) and 25 CFR § 170.800(a), not more than 25 percent of the TTP funds allocated to a Tribe or \$500,000, whichever is greater, may be expended for the purpose of maintenance, including purchase of maintenance equipment. Road sealing is not subject to this limitation.
- BIA Transportation Facility Maintenance Program in 25 FR 170.800(d).
- 25 CFR § 170.802 authorizes a Tribe to perform tribal transportation facility maintenance.

E. Guidelines / Procedures

1. **TTIP.** Maintenance must be included on the FHWA-approved TTIP, before TTP funds can be expended on maintenance (25 CFR 170. § 170.421).
2. **Maintenance activities eligible for TTP funding** (25 CFR Part 170 Appendix to Subpart G). TTP funding can be used for the following list of activities, on facilities identified in the NTTFI. The list is not all-inclusive:
 - Cleaning and repairing ditches and culverts.
 - Stabilizing, removing, and controlling slides, drift sand, mud, ice, snow, and other impediments.
 - Adding additional culverts to prevent roadway and adjoining property damage.
 - Repairing, replacing or installing traffic control devices, guardrails and other features necessary to control traffic and protect the road and the traveling public.
 - Removing roadway hazards.
 - Repairing or developing stable road embankments.
 - Repairing parking facilities and appurtenances such as striping, lights, curbs, etc.
 - Repairing transit facilities and appurtenances such as bus shelters, striping, sidewalks, etc.
 - Training maintenance personnel.
 - Administering the BIA transportation facility maintenance program.
 - Performing environmental/archeological mitigation associated with transportation facility maintenance.
 - Leasing, renting, or purchasing of maintenance equipment.
 - Paying utilities cost for roadway lighting and traffic signals.
 - Purchasing maintenance materials.
 - Developing, implementing, and maintaining a BIA Transportation Facility Maintenance Management System (TFMMS).
 - Performing pavement maintenance such as pot hole patching, crack sealing, chip sealing, surface rejuvenation, and thin overlays (less than 1 inch).
 - Performing erosion control.
 - Controlling roadway dust.

- Re-graveling roads.
 - Controlling vegetation through mowing, noxious weed control, trimming, etc.
 - Making bridge repairs.
 - Paying the cost of closing of transportation facilities due to safety or other concerns.
 - Maintaining airport runways, heliport pads, and their public access roads.
 - Maintaining and operating BIA public ferry boats.
 - Making highway alignment changes for safety reasons. These changes require prior notice to the Secretary.
 - Making temporary highway alignment or relocation changes for emergency reasons.
 - Maintaining other TTP intermodal transportation facilities provided that there is a properly executed agreement with the owning public authority within available funding.
- 3. Maintenance Standards** (see 25 CFR § 170.803). Subject to availability of funding, TTP transportation facilities must be maintained in accordance with an applicable standard that meets or exceeds the following:
- a. The Manual on Uniform Traffic Control Devices (MUTCD).** All temporary and permanent signs and other traffic control devices must comply with the current edition of the MUTCD. The MUTCD 2009 Edition is located at <http://mutcd.fhwa.dot.gov/>. More information on the MUTCD requirements is in this Program Delivery Guide at [Chapter VIII Preliminary Engineering – Project Package, section C.2](#);
 - b.** Also, one or more of the following:
 - Appropriate National Association of County Engineers maintenance standards;
 - The *AASHTO Maintenance Manual for Roadways and Bridges, 4th Edition*, available at https://bookstore.transportation.org/item_details.aspx?id=1170; or
 - Another tribal, Federal, State, or local government maintenance standard negotiated in an ISDEAA road maintenance self-determination contract or self-governance agreement.
- 4. Maintenance Equipment.** Maintenance equipment may be leased, purchased, or acquired by a Tribe, according to the following paragraphs a. through d.
- a. Purchase process.** Tribes may purchase maintenance equipment with TTP funds, to perform TTP funded maintenance on transportation facilities on the NTTFI (see 25 CFR Part 170 Appendix A to Subpart B (b)(49)(ii)). Before the maintenance equipment is purchased, its cost must be identified on the Tribe's FHWA approved TTIP in accordance with 23 U.S.C. 202(b)(4)(B). This may require the Tribe to update or amend its TTIP, and submit the updated/amended TTIP to FHWA for approval according to [Chapter VI - Transportation Planning](#). The maintenance equipment cost shown on the TTIP must include the cost of shipping the equipment from the vendor's location to the equipment work location.

The maintenance equipment purchase price plus shipping cost must be less than the Tribe's TTP maintenance spending limit, which is 25 percent of the Tribe's annual TTP funds, or \$500,000, whichever is greater (see 23 U.S.C. § 202(a)(8) and 25 CFR § 170.800(a)).
 - b. Program income** (25 CFR §§ 125.111-112, 23 U.S.C. 202(a)(1), and 49 CFR Subtitle A § 18.25). Tribes may also use the maintenance equipment (purchased with TTP funds) for non-TTP related activities as long as appropriate rates are charged the user for the purpose of recovering costs to maintain, replace and operate the maintenance equipment. Payments or reimbursements collected for the use of this maintenance equipment are considered restricted

program income, and must be used only to maintain, replace and operate the maintenance equipment.

This principle would also apply to maintenance equipment purchased with TTP funds that the Tribe later sells. The income from such sales is considered restricted program income. This does not apply to government equipment donated to the Tribe outside of the TTP Program.

- c. Equipment inventory.** Tribes should keep an up-to-date and complete inventory of all their maintenance equipment and construction equipment, and provide a courtesy copy to the TC upon request.
- d. Excess or surplus Government property.** FHWA can assist Tribes to transfer surplus and excess Federal Government property to the Tribe, for use on Tribal Transportation Program (TTP) projects and activities. Information on how Tribes having TTP Program Agreements with FHWA can use this service is at <https://flh.fhwa.dot.gov/programs/ttp/property/>.

F. Resources:

- American Association of State Highway and Transportation Officials (AASHTO) road and bridge maintenance manuals and maintenance management system manuals.
- National Association of County Engineers (NACE) action guides, and other Federal, State, Tribal, or local government maintenance standards and operations manuals.
- Maintenance related publications of the Transportation Research Board (TRB) and other international Transportation Organization located on the internet.