#### DEPARTMENT OF TRANSPORTATION

ASSISTANCE LISTING 20.205 HIGHWAY PLANNING AND CONSTRUCTION (Federal-Aid Highway Program)

ASSISTANCE LISTING 20.219 RECREATIONAL TRAILS PROGRAM

ASSISTANCE LISTING 20.224 FEDERAL LANDS ACCESS PROGRAM

# ASSISTANCE LISTING 23.003 APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM

#### I. PROGRAM OBJECTIVES

The objectives of the Highway Planning and Construction Cluster are to (1) assist states, tribal governments, and state land management agencies in the planning and development of an integrated, interconnected transportation system important to interstate commerce and travel by constructing, rehabilitating, and preserving the National Highway System (NHS), including interstate highways, and other state-aid highways; (2) provide aid for the repair of state-aid highways following disasters; (3) foster safe highway design and improve bridge conditions; (4) to support community-level transportation infrastructure; and (5) to provide for other special purposes. This cluster also provides for the improvement of roads in the District of Columbia, Puerto Rico, Guam, the United States Virgin Islands, American Samoa, and the Commonwealth of the Northern Mariana Islands, and on the Appalachian Development Highway System (ADHS). The objective of the ADHS program is to provide a highway system which, in conjunction with other federally aided highways, will open up areas with development potential within the Appalachian region where commerce and communication have been inhibited by lack of adequate access.

#### II. PROGRAM PROCEDURES

Federal-aid highway funds are generally apportioned by statutory formulas to the states and generally restricted to use on state-aid highways (i.e., roads open to the public and not functionally classified as local or rural minor collector roads). Exceptions to the use on state-aid highways include (1) planning and research activities; (2) bridge and safety improvements, which may be on any public road; (3) highway safety improvement projects, bicycle and pedestrian projects, transportation alternatives, and recreational trails projects, which may be located along any road or off road; and (4) projects funded under the Federal Lands and Tribal Transportation Program (FLTTP). Some limited categories of funds may be granted directly to other state agencies, tribal governments, or Local Public Agencies (LPAs), such as cities, counties, Metropolitan Planning Organizations (MPOs), and other political subdivisions. Funds may also be passed through such agencies, but the direct recipient retains overall stewardship responsibility.

While each category of funds has individual eligibility requirements, in general federal funds may be used for (1) surveying; (2) engineering studies and design; (3) environmental studies; (4) right-of-way acquisition and relocation assistance; (5) capital improvements classified as new

construction or reconstruction; (6) improvements for functional, geometric, or safety reasons; (7) 4R projects (restoration, rehabilitation, resurfacing, and reconstruction); (8) preservation; (9) planning; research, development, and technology transfer; (10) intelligent transportation systems projects; (11) roadside beautification; (12) vegetation management; (13) wetland and natural habitat mitigation; (14) traffic management and control improvements; (15) improvements necessary to accommodate other transportation modes; (16) development and establishment of transportation management systems; (17) billboard removal; (18) fringe and corridor parking; (19) car pool and van pool projects; (20) historic preservation and rehabilitation of historic transportation facilities; (21) scenic and historic highway improvements; (22) inspection and evaluation of bridges, tunnels, and other highway assets; (23) asset management; (24) construction of ferry boats, ferry terminal facilities, and approaches to such facilities; (25) highway safety improvement projects; (26) bicycle and pedestrian projects; (27) transportation alternatives; (28) recreational trails; and (29) workforce development, training, and education. These funds generally cannot be used for routine highway operational activities, such as police patrols, mowing, snow plowing, or maintenance, unless it is preventative maintenance.

Also, certain authorizations (e.g., FLTTP, National Highway Performance Program (NHPP), Surface Transportation Block Grant (STBG) program, or Congestion Mitigation and Air Quality (CMAQ) Improvement program) may be used for improvements to transit. CMAQ funds are for transportation projects and programs in air quality, nonattainment and maintenance areas for ozone, carbon monoxide, and particulate matter, which reduce transportation related emissions, though provision is made for states without air quality issues. ADHS projects are subject to the same standards, specifications, policies, and procedures as other state-aid highway projects. Eligibility criteria for the programs differ, so program guidance should be consulted.

Projects in urban areas of 50,000 or more population must be based on a transportation planning process, carried out by the MPOs in cooperation with the state and transit operators, and be included in the metropolitan long-range plan and the Transportation Improvement Program for the area. Projects in nonmetropolitan areas of a state must be consistent with the state's transportation plan. All federal-aid projects must also be included in the approved Statewide Transportation Improvement Program (STIP) developed as part of the required statewide transportation planning process. The Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) must approve the STIP jointly.

Prior to fiscal year (FY) 2013, the ADHS was a cost-to-complete program (i.e., funding was provided over time to complete the approved initial construction/upgrading of the system) authorized by Section 201 of the Appalachian Regional Development Act of 1965. The Moving Ahead for Progress in the 21st Century Act (MAP-21) (Pub. L. No. 112-141) did not provide dedicated funding for the ADHS but did make ADHS activities eligible under the NHPP and STBG programs. The Fixing America's Surface Transportation (FAST) Act (Pub. L. No. 114-94) provided states through FY 2050 the authority to select a state share of up to 100 percent for the cost of constructing highways and access roads on the ADHS. The Appalachian Regional Commission (ARC) has programmatic oversight responsibilities, which include approval of the location of the corridors and of state-generated estimates of the cost to complete the ADHS. The FHWA has project-level oversight responsibilities for the ADHS program. If the location, scope, and character of proposed ADHS projects are in agreement with the latest approved cost-to-

complete estimate and all state requirements have been satisfied, FHWA authorizes the work with the ADHS, STBG, and/or NHPP funds. FHWA provides oversight for the design and construction of the ADHS (23 USC 106(g)(5)(B)).

The Federal Lands Access Program (FLAP) was established under the MAP-21 and continued under the FAST Act (Pub. L. No. 114-94) (23 USC 204). The program makes funds available for transportation projects on federal lands access transportation facilities located on or adjacent to, or that provide access to federal lands. Priority is given to projects accessing high-use federal recreation sites or federal economic generators, as identified by the secretaries of the appropriate federal land management agencies.

# **Source of Governing Requirements**

The primary sources of program requirements are 23 USC (Highways). Implementing regulations are found in 23 CFR (Highways) and 49 CFR (Transportation). The ADHS program requirements are found in 40 USC (Public Building, Property, And Works).

# **Availability of Other Program Information**

FHWA program laws, regulations, and other general information can be found at http://www.fhwa.dot.gov/ and https://www.fhwa.dot.gov/fastact/.

### III. COMPLIANCE REQUIREMENTS

In developing the audit procedures to test compliance with the requirements for this federal program, the auditor must determine, from the following summary (also included in Part 2, "Matrix of Compliance Requirements"), which of the 12 types of compliance requirements have been identified as subject to the audit (noted with a "Y" in the summary matrix below), and then determine which of the compliance requirements that are subject to the audit are likely to have a direct and material effect on the federal program at the auditee. For each such compliance requirement subject to the audit, the auditor must use Part 3 (which includes generic details about each compliance requirement other than Special Tests and Provisions) and this program supplement (which includes any program-specific requirements) to perform the audit. When a compliance requirement is shown in the summary below as "N," it has been identified as not being subject to the audit. Auditors are not expected to test requirements that have been noted with an "N." See the Safe Harbor Status discussion in Part 1 for additional information.

A	В	C	Е	F	G	Н	I	J	L	М	N
Activities Allowed or Unallowed	Allowable Costs/Cost Principles	Cash Management	Eligibility	Equipment/ Real Property Management	Matching, Level of Effort, Earmarking	Period Of Performance	Procurement Suspension & Debarment	Program Income	Reporting	Subrecipient Monitoring	Special Tests and Provisions
Y	Y	N	N	Y	N	N	Y	Y	N	Y	Y

#### A. Activities Allowed or Unallowed

- 1. Federal funds can be used only to reimburse costs that are (a) incurred subsequent to the date of authorization to proceed, except for certain property acquisition costs permitted under 23 USC 108, certain emergency repair work under 23 USC 125, and preliminary engineering under Section 1440 of the FAST Act (23 USC 121 note); (b) in accordance with the conditions contained in the project agreement and the plans, specifications, and estimates (PS&E); (c) allocable to a specific project; and (d) claimed for reimbursement subsequent to the date of the project agreement (23 CFR sections 1.9, 630.106, 630.205, and 635.112). The authorization to proceed date is the same as the authorization date of the project agreement except for instances when the project needs to advance before the project agreement can be completed.
- 2. Federal funds can be used for administrative settlement costs incurred in defending contract claim proceedings before arbitration boards or state courts only if approved by FHWA for state-aid projects. If special counsel is used, it must be recommended by the State Attorney or State Department of Transportation (State DOT) legal counsel and approved in advance by FHWA (23 CFR section 140.505).
- 3. ADHS funds may be used only for work included in the ADHS cost estimate approved by the ARC (40 USC 14501).
- 4. FLTTP funds may be used for work on projects that provide access to or within federal or tribal lands (23 USC 201 through 202 and 25 CFR Part 170).

# F. Equipment and Real Property Management

1. The state and LPA subrecipients shall charge at a minimum, fair market value for the sale, use, lease, or lease renewal of real property acquired with federal highway funds. The state or LPA shall use such income for projects eligible under 23 USC. Exceptions may be granted to allow use for social, environmental, or

- economic purposes (23 USC 156). Tribal governments are not subject to 23 USC 156 and fall under tribal self-governance provisions and 2 CFR Part 200.
- 2. A state may use other public land acquisition organizations or private consultants to carry out the state's authorities under 23 CFR section 710.201(b) in accordance with a written agreement (23 CFR section 710.201(h)).
- 3. Federal funds may be used to reimburse the reasonable costs actually incurred for the functional replacement of publicly owned and publicly used real property provided that FHWA concurs that it is in the public interest. The cost of increases in capacity and other betterments are not eligible except (1) if necessary, to replace utilities; (2) to meet legal, regulatory, or similar requirements; or (3) to meet reasonable prevailing standards for the type of facility being replaced (23 CFR section 710.509).

# I. Procurement and Suspension and Debarment

- 1. In general, state DOTs and LPAs must award construction contracts on the basis of the lowest responsive bid submitted by a bidder meeting the contracting agency's criteria for responsibility. Competitive bidding is required unless the contracting agency is able to demonstrate to FHWA that some other method is more cost effective or that an emergency exists (23 USC 112(b)(1); 23 CFR sections 635.104 and 635.114), or if exempt by other law, such as for the Recreational Trails Program (23 USC 133(i)), or through the use of qualified youth service or conservation corps (MAP-21 Section 1524). Contracting agencies also may procure construction services through competitive proposals by using design-build contracts (23 USC 112(b)(3); 23 CFR Part 636) or construction manager/general contractor contracts (23 USC 112(b)(4)).
- 2. For construction contracts, bidding documents must be advertised for at least three weeks, unless a shorter period is justified in the project files. Recipients may not negotiate with the potential contractors during the time between bid opening and contract award (such negotiations would be noted in the contract files). Awards must be made to the lowest responsible bidder. If the award was made to a bidder other than the low bidder, then the project files must contain justification (23 CFR sections 635.112(b), 635.113, and 635.114).

### J. Program Income

State and local governments may only use the state share of net income from the sale, use, or lease of real property previously acquired with state funds if the income is used for projects eligible under 23 USC (23 USC 156). The amount of state funds and the total projects costs are recorded in the project agreement to determine the proportional nonfederal share.

# M. Subrecipient Monitoring

State DOTs are required to determine whether subrecipients have sufficient accounting controls to properly manage such federal funds (23 USC 106(g)(4)(A)).

# N. Special Tests and Provisions

# 1. Quality Assurance Program

Compliance Requirements A State DOT or LPA must have a quality assurance (QA) program, approved by FHWA, for construction projects on the NHS to ensure that materials and workmanship conform to approved plans and specifications. Verification sampling must be performed by qualified testing personnel employed by the State DOT, or by its designated agent, excluding the contractor (23 CFR sections 637.201, 637.205, 637.207, and 637.209).

**Audit Objectives** Determine whether the State DOT or LPA is following a QA program approved by FHWA.

# **Suggested Audit Procedures**

- a. Obtain an understanding of the recipient's QA program.
- b. Verify that the QA program has been approved by FHWA.
- c. Review documentation of test results on a sample basis to verify that proper tests are being taken in accordance with the QA program.
- d. Verify that verification sampling activities are performed by qualified testing personnel employed by the agency, or by its designated agent, excluding the contractor.

#### 2. Contractor Recoveries

**Compliance Requirements** When a state recovers funds from highway contractors for project overcharges due to bid-rigging, fraud, or anti-trust violations or otherwise recovers compensatory damages, the state-aid project involved shall be credited with the state share of such recoveries (Tennessee v. Dole 749 F.2d 331 (6th Cir. 1984); 57 Comp. Gen. 577 (1978); 47 Comp. Gen. 309 (1967)).

**Audit Objectives** Determine whether the proper credit was made to the state share of a project when recoveries of funds are made.

### **Suggested Audit Procedures**

a. Determine the extent to which the state has recovered overcharges and other compensatory damages on state-aid projects through appropriate interviews and a review of legal, claim, and cash receipt records.

b. Review a sample of cash receipts and verify that appropriate credit is reflected in billings to the federal government.

# 3. Project Approvals

Compliance Requirements FHWA project approval/authorization to proceed is required before costs are incurred for all phases or projects, except for certain property acquisition costs permitted under 23 USC 108, certain emergency repair work under 23 USC 125, and preliminary engineering under Section 1440 of the FAST Act (23 USC 121 note). Based on the Stewardship and Oversight agreement between the State DOT and the FHWA Division office, projects may be authorized under the authority in 23 USC 106(c), which allows the State DOT to assume responsibilities for designs, plans, specifications, estimates, contract awards, and inspection of progress. When FHWA authorizes a construction project or phase in a project agreement, the State DOT may incur costs (i.e., advertise for bids or use force account work) (23 CFR sections 630.205(c), 635.112(a), 635.204, and 635.309).

**Audit Objectives** Determine whether project activities are started with required state approvals.

#### **Suggested Audit Procedures**

- a. Review a sample of projects and identify dates of the necessary approvals, authorizations, and concurrences.
- b. Identify dates that projects were advertised and contract or force account work was initiated and compare to the date of FHWA's project agreement.

# 4. Value Engineering

Compliance Requirements State DOTs are required to establish a value engineering (VE) program and ensure that a VE analysis is performed on all applicable projects. The program should include procedures to approve or reject recommendations and for monitoring to ensure that resulting, approved recommendations are incorporated into the plans, specifications, and estimate. Applicable projects are (a) projects located on the NHS with an estimated total project cost of \$50 million or more that utilize federal highway program funding; (b) bridge projects located on the NHS with an estimated total cost of \$40 million or more that utilize federal highway program funding; and (c) any other projects that the FHWA determines to be appropriate. Projects utilizing the design-build method of construction do not require a VE analysis (23 USC 106(e)(5)). Critical elements of VE programs include identification of a state VE coordinator; establishment of a VE policy, and documented VE procedures, including requirements to identify applicable projects, verify required VE analyses are completed on State DOT and subrecipient projects; and monitor, assess, and report on the performance of the VE program (23 USC 106(e); 23 CFR Part 627).

**Audit Objectives** Determine whether established VE programs include VE policies and procedures, documented analyses conducted for applicable projects, evaluations of VE

recommendations, and incorporation of approved recommendations into the plans, specifications, and estimate for the project.

### **Suggested Audit Procedures**

- a. Verify that the State DOT established a VE program in accordance with state requirements.
- b. Review a sample of applicable projects to ensure that a VE analysis was conducted, recommendations were evaluated, and approved recommendations were incorporated into the design of the project, and that the results of the analysis and recommendations implemented were documented in accordance with the established VE program's policies and procedures.

#### 5. Utilities

Compliance Requirements State DOTs are required to develop policies and procedures pertaining to the use, accommodation and/or relocation of public and private utility facilities on highway rights-of way using federal highway funds. State DOTs are required to develop, maintain, and obtain FHWA approval of their Utility Accommodation Policy (UAP) (23 CFR section 645.215). Expenses incurred for relocating utility facilities necessitated by highway construction projects using federal highway program funds are eligible for reimbursement from FHWA provided these costs were incurred in a manner consistent with state laws or FHWA regulations, whichever is more restrictive (23 CFR section 645.103(d)).

PS&E packages for projects using federal highway program funds must have a utility agreement or statement verifying the appropriate coordination with all utilities on the project occurred prior to FHWA construction authorization. Each agreement or statement should specify that the utility use and occupancy of the right-of-way or any required utility work will be completed prior to the highway construction, or there were conditions specified allowing for the utility work to be coordinated with and completed in coordination with the highway construction schedule (23 CFR section 635.309(b)).

Utility agreements, permits, and supporting documentation define the conditions and provisions for accomplishing and reimbursing utility companies for utility relocation work that was required due to a federal highway program funded project. The agreements and supporting documentation, and the state requirements they reference, require that:

- a. There must be itemized cost estimates for the proposed utility work (23 CFR section 645.113(c));
- b. The utility agreement was approved prior to the utility incurring any costs or conducting any work that would be eligible for reimbursement (23 CFR section 645.113(g)(3));
- c. Reimbursement of utility costs will occur after the work is completed (23 CFR section 645.107(a));

- d. The utility incurred the costs and billings submitted verifying the work was completed in accordance with the utility agreement (23 CFR section 645.113(a-f) and 23 CFR section 645.117); and
- e. Billed costs were eligible for reimbursement (23 CFR section 645.117).

**Audit Objectives** Determine whether the agreements, supporting documentation, and reimbursement for the adjustment and/or relocation of utility facilities on state-aid highway projects were accomplished in a manner which complies with state laws and FHWA regulations.

# **Suggested Audit Procedures**

- a. Verify that the State DOT has a current UAP approved by FHWA.
- b. Review a sample of PS&E packages on projects using federal highway program funds to verify that there is a utility agreement or statement confirming that the appropriate coordination with all utilities on the project has occurred prior to FHWA construction authorization.
- c. Review a sample of utility agreements and supporting documentation to verify required supporting material was prepared and that costs reimbursed met the requirements of the agreements.
- 6. Administration of Engineering and Design-Related Service Contracts

Compliance Requirements In general, state DOTs and LPAs must use qualifications-based selection procedures (Brooks Act) when acting as contracting agencies to procure engineering and design-related services from consultants and sub-consultants for projects using federal highway funds (23 USC 112(b)(2); 23 CFR Part 172). Requirements applicable to engineering and design-related services contracts include:

- a. Contracting agencies (state DOTs and LPAs) must have written policies and procedures for each method of procurement used to procure engineering and design services. State DOT policies and procedures, or recipient LPA policies and procedures, must be approved by FHWA. LPAs that are subrecipients may adopt written policies and procedures prescribed by the awarding State DOT or prepare and maintain their own written policies and procedures approved by the State DOT (23 CFR section 172.5(b)).
- b. Contracting agencies (state DOTs and LPAs) are required to accept the indirect cost rates for consultants and sub-consultants that have been established by a cognizant agency in accordance with the Federal Acquisition Regulation (48 CFR Part 31) for one-year applicable accounting periods if such rates are not currently under dispute. Consultants and sub-consultants providing engineering and design-related services contracts must certify to contracting agencies that costs used to establish indirect cost rates are in compliance with the applicable cost principles contained in the Federal Acquisition Regulation (48 CFR Part 31) by submitting a

- "Certificate of Final Indirect Costs" (23 USC 112(b)(2)(C); 23 CFR section 172.11(c)(3)).
- c. Contracts for a consultant to act in a management support role on behalf of a contracting agency or subrecipient for engineering or design related services must be approved by FHWA before the consultant is hired unless an alternative approval procedure has been approved by FHWA (23 CFR section 172.7(b)(5)).

**Audit Objectives** Determine if consultants performing engineering and design-related services for projects using federal highway funding were procured using FHWA-approved qualifications-based selection procedures.

### **Suggested Audit Procedures**

- a. Verify that the State DOT, or recipient LPA, has written policies and procedures (usually in the form of a Consultant Manual) for procurement of engineering and design services and that those procedures have been approved by FHWA. For subrecipient LPAs, verify that they are using written policies and procedures prescribed by the awarding State DOT or that the subrecipients' written policies and procedures have been approved by the State DOT.
- b. Verify that contracting agencies are accepting the appropriate indirect cost rates.
- c. Verify that consultants and sub-consultants have submitted to the contracting agency a "Certificate of Final Indirect Costs."
- d. Verify that contracts for consultants acting in a management support role have been approved by FHWA or are covered by an FHWA-approved alternate procedure.