

DEPARTMENT OF TRANSPORTATION

- CFDA 20.205** **HIGHWAY PLANNING AND CONSTRUCTION (Federal-Aid Highway Program)**
CFDA 20.219 **RECREATIONAL TRAILS PROGRAM**
CFDA 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 Federal 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 most other public roads; (2) provide aid for the repair of Federal-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 Puerto Rico, Guam, the Virgin Islands, American Samoa, the Commonwealth of the Northern Mariana Islands, and 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 Federal-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 Federal-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 alternative and enhancement activities, 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 categories of funds may be granted directly to other Federal agencies, tribal governments, other State agencies, or Local Public Agencies (LPAs), such as cities, counties, Metropolitan Planning Organizations (MPOs), and other political subdivisions. States also may pass funds through to such agencies. Federal-aid funds may be used for (1) surveying; (2) engineering; (3) engineering 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; and (25) 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 Program (STP) or Congestion Mitigation and Air Quality (CMAQ) Improvement Program) may be used for improvements to transit. CMAQ funds are for projects and programs in air quality, nonattainment and maintenance areas for ozone, carbon monoxide, and small 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 Federal-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 metropolitan plans and programs. 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.

The ADHS was a cost-to-complete program (i.e., sufficient funding is to be 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 STP programs. 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 Federal requirements have been satisfied, FHWA authorizes the work with the ADHS funds. FHWA provides full oversight of the ADHS and accepts the ADHS projects upon satisfactory completion of the work.

Source of Governing Requirements

The primary sources of program requirements are 23 USC (Highways) and **Title XII of the American Recovery and Reinvestment Act of 2009 (ARRA) (Pub. L. No. 111-5) (ARRA, 123 Stat. 203-208)**. Implementing regulations are found in 23 CFR (Highways) and 49 CFR (Transportation).

Availability of Other Program Information

The FHWA maintains a website that provides program laws, regulations, and other general information (<http://www.fhwa.dot.gov/>).

III. COMPLIANCE REQUIREMENTS

In developing the audit procedures to test compliance with the requirements for a Federal program, the auditor should first look to Part 2, Matrix of Compliance Requirements, to identify which of the 12 types of compliance requirements described in Part 3 are applicable and then look to Parts 3 and 4 for the details of the requirements.

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 and certain emergency repair work under 23 USC 125; (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, and 630.205).
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 Federal-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.
4. FLTTP funds may be used for work on projects that provide access to or within Federal or Tribal lands (23 USC 201 through 204).

F. Equipment and Real Property Management

See also DOT Cross-Cutting Section.

The State shall charge, at a minimum, fair market value for the sale, use, lease, or lease renewal of real property acquired with Federal assistance from the Highway Trust Fund (other than the Mass Transit Account). The State 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).

G. Matching, Level of Effort, Earmarking

1. Matching

- a. The State generally is required to pay a portion of the project costs. Portions vary according to the type of funds authorized and the type of project and are stated in project agreements.

- b. A State's matching share for a project may be credited by certain toll revenues used to build or improve highways, bridges, and tunnels (23 USC 120(i)).
- c. Donations of funds, materials, and services by a person or local government may be credited towards a State's matching share. Donated materials and services must meet the eligibility requirements of the project (23 USC 323(c)).
- d. The value of land provided by State or local governments for highway purposes is eligible for a credit towards the non-Federal share of project costs. The value of the donated land shall not include any increase or decrease in value of donated land caused by the project. The value of donated land shall be based on the fair market value of the land, established as of the earlier of (1) the date on which the donation becomes effective, or (2) the date on which equitable title to the land vests in the State. Real property acquired with State funds and required for federally-assisted projects may be credited toward the non-Federal share of project costs (23 USC 323(b); 23 CFR section 710.507).
- e. For Transportation Enhancement (TE) projects using TE funds apportioned prior to October 1, 2012, funds from Federal agencies (except U.S. DOT) may be credited toward the non-Federal share of the cost of a project. The value of other non-cash contributions may be credited toward the non-Federal share. The non-Federal share may be calculated on a project, multiple-project, or program-wide basis. The total cost of an individual project may be funded with up to 100 percent Federal funds; however, for a fiscal year, the ratio of Federal funds to non-Federal funds for all TE funded projects must comply with the maximum Federal share provisions in 23 USC 120(b). FHWA guidance on these provisions is available at http://www.fhwa.dot.gov/environment/transportation_enhancements/guidance/1999guidance.cfm#summa.
- f. For projects funded under 23 USC or 49 USC Chapter 53, any Federal funds (except for funds available under 23 USC and 49 USC) may be used to pay the non-Federal share of any transportation project that is within, adjacent to, or provides access to Federal land (23 USC 120(j)).
- g. Federal Lands Transportation Program funds and Tribal Transportation Program funds may be used to pay the non-Federal share of projects which provide access to or within Federal or Indian lands which are funded under 23 USC or 49 USC Chapter 53 (23 USC 120(k)).

- h. For the Recreational Trails Program (RTP), funds from other Federal programs (including the U.S. Department of Transportation) may be credited toward the non-Federal share of the cost of a project. RTP funds may be used to match other Federal programs. The non-Federal share may be calculated on a project, multiple-project, or program-wide basis (23 USC 206(f)). FHWA guidance on these provisions is available at http://www.fhwa.dot.gov/environment/recreational_trails/guidance/matchingfunds.cfm.

Any project sponsor (except for Federal agencies), whether a private individual or organization or a public agency, may donate funds, materials, services (including volunteer labor), or new right-of-way to be credited to the non-Federal share of an RTP project. Federal project sponsors may provide funds, materials, or services as part of the Federal share, but may not provide new right-of-way (23 USC 206(h)(1)).

- i. Any cost in excess of 20 percent of the cost of the replacement or rehabilitation of a bridge not on a Federal-aid highway that is wholly funded with State and local funds may be used to meet the matching share requirement of projects funded under 23 USC 133 (23 USC 133(g)(3)).

2. Level of Effort – Not Applicable

3. Earmarking – Not Applicable

I. Procurement and Suspension and Debarment

See also DOT Cross-Cutting Section.

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 for a construction project using Federal-aid highway funding (23 USC 112(b)(2); 23 CFR part 172). Requirements applicable to engineering and design-related services contracts using Federal-aid highway funding include:

1. Written procedures for each method of procurement used to procure engineering and design services. State DOT procedures must be approved by FHWA. Subrecipient (LPA) procedures must be approved by the recipient, generally the State DOT. These procedures must provide for the following related to procurement of consultant services:
 - a. Preparing a scope of work, evaluation factors, and cost estimate;
 - b. Soliciting proposals;
 - c. Evaluating and ranking proposals and a documented basis for selection;

- d. Negotiating the amount to be paid;
 - e. Monitoring the consultant's work and preparing a performance evaluation when the work is completed; and
 - f. Determining the extent to which the consultant, who is responsible for the professional quality, technical accuracy, and coordination of services, may be reasonably liable for costs resulting from errors or deficiencies in design furnished under its contract (23 CFR section 172.9(a)).
2. Instead of performing its own audits of engineering and design contractors, contracting agencies (State DOTs and LPAs) are required to accept indirect cost rates that have been established by a cognizant Federal or State agency in accordance with the Federal Acquisition Regulation (48 CFR part 31) for 1-year applicable accounting periods, if such rates are not currently under dispute (23 USC 112(b)(2)(C) and 23 CFR section 172.7).
 3. Contracts for a consultant to act in a management role for the contracting agency for services that are directly related to a construction project must be approved by FHWA before the consultant is hired (23 CFR section 172.9(d)).

J. Program Income

See also DOT Cross-Cutting Section.

State and local governments may only use the Federal share of net income from the sale, use, or lease of real property previously acquired with Federal funds if the income is used for projects eligible under 23 USC (23 USC 156).

L. Reporting

1. Financial Reporting

- a. SF-270, *Request for Advance or Reimbursement* – Not Applicable
- b. SF-271, *Outlay Report and Request for Reimbursement for Construction Programs* – Not Applicable
- c. SF-425, *Federal Financial Report* – Not Applicable
- d. PR-20, *Voucher for Work Under Provisions of the Federal-Aid and Federal Highway Acts, as Amended (OMB No. 2125-0507)*

2. Performance Reporting – Not Applicable

3. Special Reporting – Not Applicable

M. Subrecipient Monitoring

State DOTs are responsible for determining that subrecipients of Federal-aid highway funds have adequate project delivery systems for projects approved under 23 USC. They also are required to determine whether subrecipients have sufficient accounting controls to properly manage such Federal-aid funds (23 USC 106(g)(4)(A)).

N. Special Tests and Provisions

1. Wage Rate Requirements

Compliance Requirement - The Wage Rate Requirements are applicable to construction work on highway projects on Federal-aid highways or with ADHS or FLTTP funds. These requirements generally do not apply to Federal-aid construction projects that are not located within the right-of-way of a Federal-aid highway; however, the Transportation Alternatives Program projects (except for the Recreational Trails Program set-aside) and the SAFETEA-LU Safe Routes to School Program must comply with wage rate requirements regardless of location. FHWA has provided guidance on the applicability of these requirements at <http://www.fhwa.dot.gov/construction/contracts/080625.cfm> (23 USC 113 and 40 USC 14701).

See Wage Rate Requirements Cross-Cutting Section (page 4-20.001-1).

2. Use of Other State or Local Government Agencies

Compliance Requirement – 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)).

Audit Objective – Determine whether other public land acquisition organizations or private consultants are carrying out the State’s authorities under 23 CFR section 710.201(b) in accordance with their agreements with the State.

Suggested Audit Procedures

- a. Examine records and ascertain if other agencies were used for right-of-way activities on Federal-aid projects.
- b. Review a sample of right-of-way agreements with other agencies.
- c. Perform tests of selected right-of-way activities to other agencies to verify that they comply with the written agreement.

3. Replacement of Publicly Owned Real Property

Compliance Requirement – 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).

Audit Objective – Determine whether the functional replacement of real property was accomplished within FHWA requirements.

Suggested Audit Procedures

- a. Ascertain if there were any functional replacements of publicly owned real property.
- b. Verify that FHWA concurred in the State's determination that the functional replacement is in the public interest.
- c. Review a sample of transactions involving functional replacements and verify that the transactions were consistent with the FHWA requirements.

4. Project Extensions

Compliance Requirement – FHWA must approve extensions affecting project costs or the amount of liquidated damages, except those for projects administered by the State DOT under 23 USC 106(c) which allow the State DOT to assume the responsibilities for design, plans, specifications, estimates, contract awards and inspection of progress (23 USC 106(c); 23 CFR section 635.121).

Audit Objective – Determine whether proper FHWA approvals were obtained for contract extensions affecting project costs and the amount of liquidated damages assessed.

Suggested Audit Procedures

- a. Review the systems for monitoring and controlling contract time and review project files to determine if there were project extensions.
- b. Verify that FHWA approval was obtained for time extensions affecting project cost and, where applicable, the amount of liquidated damages assessed.

5. Quality Assurance Program

Compliance Requirement – 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, and 637.207).

Audit Objective – 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.

6. Contractor Recoveries

Compliance Requirement – 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 Federal-aid project involved shall be credited with the Federal 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 Objective – Determine whether the proper credit was made to the Federal 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 Federal-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.

7. Project Approvals

Compliance Requirements – FHWA project approval and authorization to proceed are required before costs are incurred for all construction projects. 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. For those projects not authorized under 23 USC 106(c), construction projects cannot be advertised nor force account work commenced until FHWA (a) approves the plans, specifications, and estimates; and (b) authorizes the State DOT to advertise for bids or approves the force account work (23 CFR sections 630.205(c), 635.112(a), 635.204, and 635.309). In addition, construction cannot begin until after FHWA concurs in the contract award (23 CFR section 635.114).

Audit Objective – Determine whether project activities are started with required Federal 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 FHWA's approval dates.

8. Value Engineering

Compliance Requirement – 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-aid highway program funding; (b) bridge projects located on the NHS with an estimated total cost of \$40 million or more that utilize Federal-aid 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 Objective – Determine whether VE programs have been established that include VE policy 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 has established a VE program in accordance with Federal 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.

9. Utilities

Compliance Requirement – 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-aid 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-aid 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)).

Plans, Specifications and Estimate (PS&E) packages on projects using Federal-aid highway program funds must have a utility agreement or statement verifying the appropriate coordination with all utilities on the project has 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-aid highway program funded project. The agreements and supporting documentation, and the Federal requirements they reference, require that:

- There must be itemized cost estimates for the proposed utility work (23 CFR section 645.113(c));
- 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));
- Reimbursement of utility costs will occur after the work is completed (23 CFR section 645.107(a));
- 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
- Billed costs were eligible for reimbursement (23 CFR section 645.117).

Audit Objective – Determine whether the agreements, supporting documentation, and reimbursement for the adjustment and/or relocation of utility facilities on Federal-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-aid 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.