

CHAPTER 2 – PLANNING AND PROGRAMMING

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CHAPTER 2 - PLANNING AND PROGRAMMING

2.1 GENERAL

The planning and programming process provides the designer with the program of projects and the funds available so that each specific project may be properly scheduled for design.

Planning with respect to the FLH program involves periodic monitoring of the highway system (network) to carry out the following:

- Identify functional, structural, or safety deficiencies.
- Identify the scope of a project and its respective limits.
- Develop preliminary cost estimates for various improvement alternatives for use by the owner agency to balance capital improvements, RRR projects, and maintenance programs.

Programming consists of scheduling of those identified highway improvements on Federal roads both within the FLHP and within the respective programs of the cooperating agencies. Funding requirements, personnel resources, and the relative need for the projects are all considered when programming them in a long range schedule.

The Federal roads associated with the FLHP consist of the following:

- Public lands highways are public roads within or serving Federal areas.
- The park roads and parkway (PR&P) system administered by the National Park Service (NPS).
- Designated forest highways (FH) on roads owned and maintained by State or local governments.
- The Indian reservation roads (IRR) system administered by the BIA.

Other roads that the FLH Divisions provides design and construction services for include forest development roads administered by the Forest Service (FS), public lands development roads administered by the Bureau of Land Management (BLM), Federal Aviation Administration (FAA), Metropolitan Washington Airports Authority (MWAA) owned roads, and various defense access roads off military reservations that are under the jurisdiction of a State or local government. In addition to the FLHP, funds may also be provided for National Park Service and Bureau of Indian Affairs owned roads through other appropriations.

2.2 GUIDANCE AND REFERENCES

There are many policy references (See Chapter 1 for definitions) on FLH programs and systems. The following are frequently used:

■ 23 United States Code (U.S.C.)

Section 101	Definitions and Declarations of Policy
Section 125	Emergency Relief
Section 201	Authorizations
Section 202	Allocations
Section 203	Availability of Funds
Section 204	FLH Program
Section 205	Forest Development Roads and Trails
Section 210	Defense Access Roads
Section 214	Public Land Development Roads and Trails

■ 23 Code of Federal Regulations (CFR)

Section 660A	Forest Highways
Section 660E	Defense Access Roads
Section 667	Public Lands Highway Funds
Section 668	Emergency Relief Program

■ Federal-Aid Highway Program Manual

FAPG 23CFR 660A	FH Administration (includes 23 CFR 660A)
FAPG 23 CFR 667	Public Lands Funds (includes 23 CFR 667)
FAPG 23 CFR 660E	Defense Access Roads (includes 23 CFR 660E)
FAPG 6090.13	Preliminary Engineering and Construction for Other Federal Agencies
FAPG 23 CFR 668B	Emergency Relief Program Procedures for Federal Agencies for Federal Roads (contains 23 CFR 668B)
FAPG 6090.17	Indian Reservation Roads

■ Federal Lands Highway Program Manual

Chapter 2 - Planning and Coordination

2.2 *GUIDANCE AND REFERENCES. (continued)*

■ **National Interagency Agreements**

Forest Service, effective May 11, 1981 (Exhibit 2.1)

Bureau of Land Management, Feb. 26, 1982 (Exhibit 2.2)

Bureau of Indian Affairs, May 24, 1983 (Exhibit 2.3)

National Park Service, May 19, 1983 (Exhibit 2.4)

2.3 PROGRAMS

FLHO is involved in several programs, including the Federal Lands Highway Program and other Federal agency road programs.

A. Federal Lands Highway Program (FLHP). The Surface Transportation Assistance Act of 1982 established the FLHP. This allowed Federal Highway Trust Funds to be spent on park roads and parkways and IRR roads that were previously not eligible for Trust Fund financing. Additionally, the FH and FLH programs that were previously financed by Trust Funds were brought under the umbrella of the FLHP.

The programs that come under the FLHP legislation are, public lands highways (includes the forest highway system), park roads and parkways, and Indian reservation roads.

1. Public Lands Highways. The Public Land Highway category incorporates the old Forest Highway and Public Lands Highway category, with a fixed percentage of the total category funding going to each subcategory.

a. Forest Highways (FH). Forest highways are forest roads that are (1) wholly or partly within or adjacent to and serving the National Forest System, (2) under the jurisdiction of and maintained by a public authority, and open to public travel. Forest highways are designated from the eligible forest roads by the FHWA in consultation with the FS and the appropriate State highway agency.

FH route designation is delegated to the FLH Division Engineer. Either the FS or the State can nominate a route, but it must adhere to the following criteria:

- The route is under the jurisdiction of a State or local government agency (cooperator) and open to the public.
- The route provides a connection between a safe public road and the renewable resources of the National Forest System that are essential to the local, regional, or national economy, and/or the communities, shipping points, or markets that depend upon those renewable resources.
- The route serves other local needs such as schools, mail delivery, commercial supply, and access to private property within the National Forest System; serves high-volume traffic, which is generated by use of the National Forest System and its resources; or serves National Forest System-generated traffic volumes that have a substantial impact on roadway design and construction.

FH funds are allocated by formula by FS region and by State area in States having national forest lands. Since the allocations are made for each State, project costs must fit within the available funds. FH funds may be borrowed from another State with unobligated monies provided such funds are returned by the end of the current highway authorization period. Project cost records are managed in the FLH Division offices, but obligation limitation is controlled at Headquarters.

Project selections for the FH program are made at annual program conferences. A conference is held in each State; projects are discussed and programs are developed. The meetings are attended by representatives of the State highway agency, the FS, the FHWA, and other interested agencies.

2.3 PROGRAMS. (continued)

FH Projects are selected based on the following criteria:

- The development, utilization, protection, and administration of the National Forest System and its renewable resources.
- The enhancement of economic development at the local, regional, and national level.
- The continuity of the transportation network serving the National Forest System and its dependent communities.
- The mobility of the users of the transportation network and the goods and services provided.
- The improvement of the transportation network for economy of operation and maintenance and for the safety of its users.
- The protection and enhancement of the rural environment associated with the National Forest System and its renewable resources.

The objective of the program conferences is to reach agreements on a minimum 5 year FH program that can be feasibly accomplished within the requirements and restraints of each agency.

b. Public Lands Highways (PLH). PLH are those main public highways through unappropriated or unreserved public land, non-taxable Indian lands, or other Federal reservations.

The funds for PLH are administered by the Office of Engineering; Federal-Aid Program Branch (HNG-12). Annually each State with eligible highways will submit candidate PLH projects for funding under this program. The FLHO is to work with Federal agencies and the Federal-aid Divisions to coordinate their involvement in the PLH program although the overall responsibility for the PLH program rests with HNG-12. Fund allocation is made on a project-by-project basis for an approved scope of work. Increases above the approved amount must be authorized by HNG-12. The increases are submitted through the appropriate SHA.

Preference is given to States containing at least three percent of the total public lands in the Nation, and additional preference is given to those projects that significantly benefit or improve Federal land and resource management, regardless of the type of Federal lands involved. All candidate projects submitted are reviewed by FHWA Headquarters, and a priority of need is determined on the basis of supporting information as submitted with the application dealing with the following considerations:

- Relationship to Federal land and resource management plans and activities including traffic carrying capacity and other effects on land use and resource development.
- Current status and adequacy of the present road with regard to route continuity, capacity, safety, and Federal and State agency transportation plans.
- Relationship of proposed improvement to the adequate development of a complete highway section.
- Schedule for physical construction, particularly how soon physical construction will begin.

After reviewing the applications and based on the above criteria, the FHWA will also give some consideration to the equitable distribution to States of available funds.

2.3 PROGRAMS. (continued)

2. Park Roads and Parkways (PR&P). Park roads are those public roads that are located within or provide access to an area in the National Park System with title and maintenance responsibility vested in the United States. Parkways are those roads authorized by an Act of Congress on lands to which title is vested in the United States. Eligible projects also include bridges that are primarily for pedestrian use, but with capacity to handle emergency vehicles.

Funds for PR&P are allocated based on a priority program of projects developed by the NPS and approved by the FHWA. When additional funds are required for a specific project, requests must be made simultaneously to the NPS Region and FLHO for approval and a new allocation is then developed. Generally, the allocations are very specific as to the use of the funds. For instance, the allocations will specify the amount for preliminary engineering, construction engineering, and construction. Since funds are allocated to specific projects for a specific scope of work, there is no flexibility to transfer from one account to another unless FLHO approval is granted.

Annually, each park submits to its Regional office a list of improvement priorities. Regional priorities are developed using the park requests. The Regional Directors then cooperatively develop a list of service-wide priorities (SWP). Each FLHD meets periodically with appropriate NPS Regions to establish a program of projects to be funded 5 to 10 years into the future. This program considers the SWP as well as resurfacing, restoration, and rehabilitation (RRR) and other miscellaneous projects that need improvements within the relative priority and availability of funds. This program of projects is then submitted to NPS Headquarters for coordination and consolidation to a nationwide PR&P program that NPS Headquarters (WASO) then submits to FLHO for approval.

Routes on the PR&P system are those designated with a functional classification I, II, III, VII, and VIII. (See pages 3, 4, and 5 in the NPS *Road Standards*.) There is no formal approval required for roads in this system.

3. Indian Reservation Roads (IRR). Indian reservation roads are public roads (consisting of BIA system roads as well as State and local roads), including those on the Federal-aid system, that are located within or provide access to either of the following:

- (1) An Indian reservation or Indian trust land or restricted Indian land which is not subject to fee title alienation without the approval of the Federal Government,
- (2) Indian and Alaska native villages, groups, or communities in which Indian and Alaskan natives reside whom the Secretary of the Interior has determined are eligible for services generally available to Indians under Federal laws specifically applicable to Indians.

Funds are distributed to the 12 BIA areas based on a relative needs formula. The formula takes into consideration land area served, Indian population, and road mileage with an adjustment for road surface. After the annual IRR priority program of projects is reviewed and approved by the FLHO, funds are transferred to the BIA for those projects being administered by the BIA. Funds are allocated to the respective Division offices for those projects for which FLHD has administrative responsibility.

The IRR annual priority program of projects is developed by the BIA areas, with input from the Tribes. The program of projects, which is based upon relative need, is submitted to the BIA Headquarters for review and approval. FLHO reviews the priority program of projects for eligibility and issues a concurrence/approval letter.

Routes on the IRR system are designated by the BIA after nomination by the Tribal governing body. The FLHO reviews and concurs in the selection of the various routes.

2.3 PROGRAMS. (continued)

B. Other Federal Agency Highway Programs. Other Federal agencies have jurisdiction or responsibility over road systems. From time to time, FHWA will perform work for these agencies.

The FS has jurisdiction over the forest transportation system. The forest transportation system includes forest development roads which are (1) forest roads under the jurisdiction of the FS, (2) wholly or partly within or adjacent to and serving the National Forest System, and (3) necessary for the protection, administration, use, and development of FS resources.

Some NPS and BIA projects on which FLHDs are asked to provide engineering services are funded through agency appropriations with special funding rather than through the FLHP. These include major special interest projects, cyclic maintenance projects, and projects with special features. In addition, the NPS and BIA also have road programs for non-public type roads within their jurisdictional boundaries which are not open to the public (such as administrative, maintenance, fire control, or other service roads).

The BLM has jurisdiction over public lands development roads and trails which are the public roads determined by the Department of the Interior to be of primary importance for the development, protection, administration, and utilization of public lands and resources.

The BLM also has jurisdiction over forest access roads on and to the O & C lands (revested Oregon and California Railroad and reconveyed Coos Bay Wagon Road grant lands) in Oregon.

Department of Defense (DOD) access roads are roads designated by the DOD as important to the Military defense because they access military reservations, defense industry sites, and sources of raw materials. These roads are generally owned by State or local governments and are not within the boundaries of military reservations. Also meeting the criteria of DOD access roads are highways and highway connections that are shut off from general public use by closures or restrictions at military reservations or defense industry sites.

In addition to working on highways under the jurisdiction of the above Federal agencies, FLHO may provide engineering services for the improvement of highways for other Federal agencies, cooperating foreign countries, and cooperating State agencies on a reimbursement basis.

2.3 PROGRAMS. (continued)

C. Emergency Relief Federally Owned Programs (ERFO). When Federal roads have suffered serious damage, the Secretary of Transportation may rule that Highway Trust funds can be used to repair the damage. This damage could have been the result of

- natural disasters over a wide area (such as floods, hurricanes, tidal waves, earthquakes, severe storms, landslides) or
- catastrophic failures from any external cause.

For ERFO purposes, 23 U.S.C. 125 (c) defines Federal roads as follows:

Forest highways, forest development roads, park roads, parkways, public lands highways, public lands development roads, and Indian reservation roads.

The administrative procedures for this program are outlined in the *Emergency Relief for Federally Owned Roads, Disaster Assistance Manual*. FHWA-FL-90-008. September 1990

2.4 PLANNING AND PROGRAM COORDINATION

There are many program planning and coordination vehicles, including interagency, State and local, and other miscellaneous project agreements. Additionally, there are standing agreements with several agencies (including the FS, BLM, BIA, and NPS) that cover the standard procedures for coordinating the respective programs. (See Exhibits 2.1 through 2.4)

A. Interagency Agreements. Whenever FLHO performs work for other agencies or other agencies perform work for FLHO, an interagency agreement is executed between the organizations. The agreement must spell out the responsibilities and the method of payment for the services rendered. This agreement may cover a continuing program or cover an individual project.

B. Federal/State Forest Highway Cooperative Agreements. Each State participating in the FH program is asked to enter into an agreement setting forth the terms by which FH projects will be planned, programmed, designed, constructed, and maintained. (See Exhibit 2.5.)

C. Federal/County Forest Highway Cooperative Agreements. Each county participating in the FH program is asked to enter into an agreement similar to the State agreements. (See Exhibit 2.6.)

D. Forest Highway Project Agreements. Every project constructed under the FH program should have a project agreement implementing the FH cooperative agreement. (See Exhibit 2.7.) However, the FH regulations require a project agreement only when the following conditions exist:

- A cooperator's funds are to be made available to the FHWA for the project or any portion of the project.
- Federal funds are to be made available to a cooperator for any work.
- Special circumstances exist that make a project agreement necessary for payment purposes or to clarify any aspect of the project.

E. Miscellaneous Agreements. In addition to the above agreements, the FLH Divisions use agreements with utilities, railroads, other Federal agencies, State agencies, and local governments to perform specific tasks such as utility removal, railroad crossing protection, signing and markings, materials testing or investigation, and special project design or construction management activities.

2.5 PLANNING STUDIES AND REPORTS

It is necessary to have complete, concise and accurate data for management to make an informed and judicious decision on needs, priorities and cost of projects.

FLHO and owner agencies conduct studies to assist in this decision-making process; these include road and bridge inventory programs, unit-wide evaluation studies, and special function studies. These studies are for identifying needs, costs, and alternatives, and for establishing relative priorities for improvements.

Route and location studies are outlined in Chapter 4. Special feature studies are evaluations of specific engineering problems and are usually conducted by the appropriate engineering staff specialist.

Unit-wide engineering studies are investigations (through data collection and evaluation) to identify and access various alternative courses of action and make pre-design recommendations to restore, resurface, rehabilitate, or reconstruct roads and bridges with the most reasonable and cost effective design.

Such studies can include the following:

- Parkwide road engineering studies (PRES).
- Project planning reports.
- Traffic forecasting and analysis.
- Other similar studies.

These studies discuss alternatives, identify needs, estimate costs, and set priorities for implementation of an improvement program.

The Bridge Inspection Program (BIP) and Road Inventory Program (RIP) consist of a periodic rating and assessment of the condition of the road and/or bridge. A BIP is required for all bridges open to public traffic. Bridges are inspected on a 2-year cycle. The inspections are used to monitor and identify structural conditions that may lead to a catastrophic failure of the bridge. The RIP is planned for a 3-year cycle for paved roads.

Unit-wide engineering studies are intended to provide direction and scope of the alternative courses of action for improvements identified in RIP/BIP or other planning processes for preparation of detailed designs.

These studies should provide important decisions for preparing long-range programs and project design or development activities. The studies should be completed in most areas where FLHO involvement is continuous and significant road construction improvements are anticipated.

Supplemental or special feature engineering studies may also be needed for traffic engineering, traffic safety, geotechnical, pavement design, and similar activities.

2.5 PLANNING STUDIES AND REPORTS. (continued)

The types of engineering studies to be conducted should be determined on a case-by-case basis that would gain the most from each study. The selection process must always be inclusive of those studies that identify, evaluate, and compare impacts of each alternative; establish design flexibility; define commitments to protect and preserve the environment; and provide long-term planning guidance.

The scope and extent of the data gathering, analysis, and reporting will vary for each study. Engineering studies should be in sufficient detail to support alternative engineering solutions, estimates, and schedules. A recommended alternative should be identified. These studies may incorporate extensive engineering, economic, traffic, and environmental data collection and analysis to support the recommendations.

In other instances the study may be less exhaustive and analytical depending upon the circumstances. Engineering studies will be used for budgeting and programming purposes to form the basis for initial cost estimates. In most instances, further in-depth field investigations and engineering analyses will be required during design stages.

A diligent effort should be made to complete these types of studies at the earliest possible time to assist in developing a program of projects. Coordination is needed to ensure that decisions and tasks accomplished in the engineering studies will be compatible with the owner-agency management plans and functional classification to minimize the risk of significant changes after the studies are completed.

All studies should be scheduled so as to provide proper timing of input into the various engineering activities.

A. Park Roads and Parkway Studies. There are a variety of studies performed under the PR&P program.

1. Road Inventory Program (RIP). An inventory and condition rating has been completed on all NPS roads and is now being maintained by FLHO. During the initial RIP, the entire PR&P system was photo logged and roadway data collected. Subsequent photo logging and data collection is done as major changes to the roads are made. A RIP report is available for each of the NPS units.

2. Bridge Inspection Program (BIP). The FLHO has inventoried and rated all NPS bridges and tunnels and a biannual inspection is conducted under the national BIP. A BIP report is available for all NPS bridges and tunnels in the Structures unit.

3. Parkwide Road Engineering Studies (PRES). PRES are complete evaluations of individual parkwide road systems. The studies include evaluations of the condition, safety, and signing of a park's road system with a recommended program for upgrading deficiencies.

The PRES evaluations and recommendations are used by the NPS when considering the overall goals and objectives of a park's General Management Plan (GMP) relative to the park road system.

4. Road System Evaluation Reports. These reports are evaluations of the existing roadways conducted by the NPS. The reports make recommendations for needed maintenance or reconstruction.

2.5 *PLANNING STUDIES AND REPORTS. (continued)*

5. Safety and Traffic Accident Studies. These NPS studies evaluate the safety aspects of a park system and evaluate accident data. Safety improvements are recommended when needed.

To support these studies, the NPS has developed a system-wide traffic counting program and a service-wide traffic accident reporting system (STARS). This data is collected by the NPS, Denver Service Center, Transportation staff and is available for input in FLHD project planning and development.

B. Forest Highway Studies. Studies are conducted on all FH routes as directed by FLH Headquarters. The information taken includes ADT, FS related traffic, physical data, and estimated cost of improvements. This data is maintained in a national database in FLHO.

C. IRR Studies. The FLHO assisted the BIA in an inventory of its road system. FLHO also provides, on an as-requested basis, bridge inventory and inspection services.

D. Other Studies. FLHO also conducts special engineering studies for other agencies as requested, such as the defense access roads studies. Other location and engineering studies are discussed in Chapter 4.

2.6 PROJECT IDENTIFICATION AND ACCOUNTING

Formal fiscal procedures have been developed for allocating funds, establishing accounts and account numbers, recording obligations, producing project cost reports, and closing out project accounts. Procedures have also been adopted for using a standardized project numbering system.

A. Project Numbering System. The use of a formal numbering system assists in tracking and identifying the type, location, and source of funding for a particular project.

A uniform project numbering system has been adopted for projects being administered by the FLH. See Table 2-1.

**Table 2-1
Project Identification Numbers**

Source of Funding	Preferred Prefix ¹⁰	Optional Prefix	Route Number	Section or Sequence Number
Direct/Highway Trust Funded				
Park Road Parkway ¹	PRA	PR	2	6
Forest Highway	PFH	FH	3	6
Indian Reservation Roads	IRR	IR	4	6
Public Lands Highways ⁷	PLH	PL	4	6
Emergency Relief Federal Lands ⁸	ERFO	ER	4	6
Allocations/Transfer (Other Federal Agencies)				
National Park Service ¹	NPS		2	6
Forest Service	FS	FDR	4	6
Bureau of Indian Affairs	BIA		4	6
Bureau of Land Management ⁹	BLM		4	6
Department of Army	AAD		5	6
Department of Navy	NAD		5	6
Department of Air Force	RAD		5	6
Department of Air Force (O&M)	OMAD		5	6

Note: ¹On Park Road projects use official NPS Park Abbreviations. (See Planning and Coordination Unit.)

²Use road inventory program number.

³Use designated FH route number.

⁴Use official system route number.

⁵Headquarters, HFL-10, coordinates route and section number.

⁶Section and sequence numbers as agreed upon with appropriate Federal or State agency.

⁷SHA may designate route number.

⁸Project number may need coordination with appropriate Federal-aid Division.

⁹BLM will generally provide the numbers.

¹⁰Other prefixes may be warranted for special legislative requirements.

2.6 PROJECT IDENTIFICATION AND ACCOUNTING. (continued)

Project reports such as the Advertise and Award schedule that contain the following information should be submitted in all uppercase letters using the following format to permit FLH-wide compilation of data:

Project No. and Common Name: For example - **PRA BIBE 15(5), ROSS MAXWELL ROAD**

State: Use uppercase two letter designation. If multiple states, list the one with the predominate work.

Description: Begin with work category (See Table 2-2 for examples), then list length or No. of Bridges if a Bridge project, and finally list major items of work.

For example - **REC, 1.2 km, GR, DR, BS, PAVE**

Engineers Estimate: (Include estimated incentives).

Date Planned/Actually Advertised: Use actual date, not an estimated quarter.

Set Asides: Use an X under each category heading, SB, LS, 8a

Date Planned/Actually Awarded: Use actual date, not an estimated quarter.

Award Amount: (Include obligated incentives)

Number of Bids Received: Include only the number of responsive bids.

**Table 2-2
Descriptions of Work**

Description of Work	Abbreviation
Work Category	
New	NEW
Reconstruction	REC
Rehabilitation	REH
Resurfacing	RES
Major Items of Work	
Grading	GR
Drainage	DR
Base	BS
Graveling	GRVL
Paving	PAVE
Bituminous Surface Treatment	BST
Slide Repair	SLIDE REP
Bridge	BR

2.6 PROJECT IDENTIFICATION AND ACCOUNTING. (continued)

B. Accounting Procedures. The FLH has adopted a standardized alpha work code to be used in the last digit of the account number. The work code allows the FLHD(s) to develop several project cost reports for work performed by the various organizational units. The standardized work codes are shown in Table 2-2 and are to be used on all advanced planning, preliminary engineering, and construction engineering activities.

Preliminary engineering accounts are programmed in the amount estimated by the project manager to be expended in the fiscal year and are adjusted as required. At the end of the fiscal year, the account is balanced and then funds must requested at the start of the next fiscal year at a new estimated amount.

Construction accounts are established prior to advertisement with an amount matching engineer' estimate or the initial contract bid amount, plus incentives, and adjusted during the life of the contract as necessary to reflect project costs. The accounts are kept open until the project is complete and the final voucher is paid.

Construction engineering accounts are programmed in the amount estimated to be expended by the construction engineer within the fiscal year. These accounts are adjusted as required so that they balance at the end of the fiscal year.

Other accounts, such as utility, R/W, planning and archeology accounts, are handled differently depending on how the work is being handled. If the work is under contract or a formal interagency agreement, then it is programmed and handled like a construction contract. If the work is done in-house, then the procedures for construction engineering and preliminary engineering accounts apply.

Account numbers are assigned to each facet of work in each project.

Account numbers shall be established prior to expenditures being incurred. The DAFIS accounting system requires a lengthy account string for each projects, activity and workcode. A typical account number would look like this:

X180-050-14-0 180051 150420 D²2041234567AD

where:

X180-050-14-0	=	Funding source
180051	=	Activity (051 = PE, etc.)
150420	=	Location (Region/State/Park)
D ²	=	Federal Lands
04	=	State (AL)
1234567	=	Specific project
A	=	Activity associated with project (A=PE, C=CE, H=Construction)
D	=	Work code (See Table 2-2)

This accounting string is required for all expenditures.

2.6 PROJECT IDENTIFICATION AND ACCOUNTING. (continued)

**Table 2-3
FLH Activity Codes**

Code	Activity Code Title
A	51 (PE)
B	51, 95 (CTIP)
C	52 (CE)
D	51, 59 (RIP)
E	53 (RR, AGM)
G	53 (ARC, AGM)
H	54 (CNT, CNST)
I	55 (MAINT)
J	56 (PST, CNST)
K	57 (LNDSCP)
L	59 (ADV PL)
M	NOT USED
P	33 (RC CST/O)
Q	IC (DEMO PJT)
R	NOT USED
S	
T	NOT USED
U	53, 58 (UTIL AGM)
V	40 (EQ DPT)
W	13 (DEMO PRJT)
X	NOT USED
Y	4Y (DEMO PJT)
Z	

2.6 PROJECT IDENTIFICATION AND ACCOUNTING. (continued)

**Table 2-4
FLH Work Codes**

Work Code	Work Code Title
A	ADP/CADD
B	Bridge
C	Contract Administration (Construction and A/E Contracts)
D	Highway Design
E	Environment/Public Involvement/Permits
G	Geotechnical
H	Hydraulics
I	Construction Inspection
J	A/E Procurement (Work on A/E proposals, Work Order, etc.)
K	ERFO (Disaster and Damage Assessments)
L	Location
M	Materials (Testing)
P	P&C, Procurement, Coordinate PS&E, & Advertise
Q	TQM Branch
R	Right of Way
S	Survey/Mapping
T	Technical/Engineering Contract Services (A/E Contracts)
U	Utilities
V	
W	
X	
Y	
Z	

2.7 DIVISION PROCEDURES

Reserved for Federal Lands Highway Division office use in supplementing the policy and guidelines set forth in this chapter with appropriate Division procedures and direction.

LIST OF EXHIBITS

- Exhibit 2.1 Memorandum of Understanding with Forest Service (Reserved)
- Exhibit 2.2 Memorandum of Agreement with Bureau of Land Management (Reserved)
- Exhibit 2.3 Interagency Agreement with Bureau of Indian Affairs (Reserved)
- Exhibit 2.4 Interagency Agreement with National Park Service (Reserved)
- Exhibit 2.5 Sample Cooperative Agreement with a State Highway Agency
- Exhibit 2.6 Sample Cooperative Agreement with a County
- Exhibit 2.7 Sample Project Agreement with a County

Note: All Memoranda of Understanding and Agreements with our Partner Federal Lands Agencies are undergoing revision. The agreements are not included here, and Exhibits 2.1 through 2.4 are reserved for the revised documents.

FOREST HIGHWAY COOPERATIVE AGREEMENT

Parties to Agreement: Federal Highway Administration, U.S. Department of Transportation, hereinafter called "FHWA," and Department of Highways, State of _____ hereinafter called the "Cooperator. "

■ **Purpose.** The purpose of this agreement is to set forth the general terms and conditions, mutually acceptable to the parties hereto, for the cooperative planning, programming, survey, design, construction, and maintenance of Forest Highways in the State of _____ pursuant to the provisions of Title 23 U.S.C. 204 and Title 23 CFR 660.

The Congress has, from time to time, authorized and appropriated funds for highways within, adjoining, or adjacent to and serving the national forests that are of primary importance to the State, counties, or communities. Recognizing that substantial benefits will accrue to the State and to the Nation from the construction and maintenance of such Forest Highways, and from their integration into the State or local road system over which the Cooperator has jurisdiction, and further that the Cooperator has systems planning, maintenance, right-of-way acquisition, and interdisciplinary facilities available to assist in the accomplishment of the work, it is accordingly deemed fitting and desirable to the parties hereto to express by this instrument, the general terms of their mutual cooperation in that regard with the object of achieving maximum benefits therefrom in the public interest.

It is recognized that where Forest Highway programs exist, separate memorandums of understanding setting forth procedures for administering the Forest Highway program are in effect between the Forest Service and the Cooperator.

■ **Forest Highway Routes.** This agreement shall cover the Forest Highway routes, previously approved for inclusion in the Forest Highway system and approved amendments thereof. This list of such approved routes may be varied from time to time by mutual agreement between the Cooperator and FHWA either by adding routes thereto, or removing routes therefrom, or by altering the description of any route to give it proper identity. Each such action shall be indicated by: (1) a revised list; or (2) a revised page or pages bearing the signatures of the parties together with a showing of the effective date of the revision.

■ **System Planning.** It is recognized that Forest Highways are an integral part of the Federal-Aid System of roads in any State. Systems planning is then a function that will be performed by the Cooperator who will work with the Forest Service and FHWA on long-range planning activities of mutual concern. The Cooperator agrees that in performing these functions, the Cooperator's Action Plan approved by the FHWA will be adhered to.

■ **Programs.** Programming will be in accordance with Title 23 U.S.C. and Title 23 CFR 660 paragraph 109.

■ **Project Agreement.** A Forest Highway project agreement is to be entered into between the parties hereto whenever: (1) the survey, construction, acquisition of rights-of-way, or maintenance in connection with a project included in an approved Forest Highway program is to be accomplished in a different manner from that set forth in the Forest Highway Cooperative Agreement; (2) Federal funds are to be made available to the Cooperator for the work; or (3) Cooperative funds are to be made available to FHWA for the project. Project agreements are to be executed in duplicate, one executed copy being for the Cooperator and one for FHWA. Additional copies (conformed) will be available for the Regional Forester of the Forest Service, and for offices of the Cooperator or FHWA as may be desired. Functions performed by FHWA with its own organization with 100 percent Federal funding will not require a project agreement.

■ **Compliance With Federal-Aid Procedures and Action Plans In Project Development.** Where survey, design, and construction are performed by the Cooperator, Federal-Aid procedures and the Cooperator's approved social, economic, and environmental action plan shall apply. Unless otherwise provided in the project agreement for the specified project, phases of project development performed by FHWA from program conferences through construction, FHWA will adhere to the Nationwide Direct Federal Action Plan prepared by FHWA under the guidelines established under 23 U.S.C. Section 109(h). This Action Plan requires that a Social, Economic, and Environmental (SEE) Study Team be formed to insure that SEE effects of each project are identified in conjunction with all its objectives outlined in the FHWA Action Plan. The Cooperator agrees to assign, on a project basis, a member or members to the SEE Study Team from within the Cooperator's force. This team member shall be given authority by the Cooperator to make decisions necessary to insure that the SEE Study Team can meet its objectives as outlined in the FHWA Action Plan. The Cooperator also agrees to furnish to the team whatever interdisciplinary capabilities their team member may request insofar as such capability is already available within the Cooperator's in-house staff. The FHWA agrees that the Cooperator's SEE Study Team member has the authority to insure that during project development the public and other agencies are given the same opportunity for input that they would have under the Cooperator's approved Action Plan.

■ **Federal Funds.** When any proposed work provided for in an approved Forest Highway program is to be performed by the Cooperator, and financed in whole or in part with Federal funds, such circumstances shall be set forth in the project agreement together with a statement of the amount of Federal funds and cooperative funds. If it appears that the project cost may exceed the estimate and additional Federal funds may be needed, no obligation shall arise against the Federal Government with respect to the increased cost except by modification of the project agreement prior to incurring any commitment.

As the work progresses, or upon its completion, the Cooperator shall submit vouchers to FHWA for payment of the United States pro rata share of the cost of the work. Usual Federal-aid procedures are to be followed when submitting billings.

■ **Cooperative Funds.** If cooperative funds are provided on an advance basis, they shall be deposited in the Treasury of the United States to the credit of cooperative work, Forest Highways, Federal Highway Administration. Payments for work performed shall be made out of the funds provided by the Cooperator, and by FHWA, in equal amounts until either fund is exhausted, and then from the remaining fund until the project is completed or all funds are exhausted. Any unused balance of cooperative funds will be returned to the Cooperator after completion of the project.

If FHWA is constructing the work and cooperative funds are to be made available on a reimbursement basis as the work progresses or upon its completion, FHWA shall submit to the Cooperator periodic billings, but not more often than monthly, or a final billing as the case may be, showing the total amounts expended for work accomplished and the amount owing to FHWA from the Cooperator. The amount of cooperative funds as set forth in the project agreement shall be the maximum commitment of the Cooperator to the project, unless changed by a modification of the project agreement duly executed by the parties hereto.

- **Construction of Projects.** Construction by the Cooperator of Forest Highway projects on the listed Forest Highway routes will be accomplished in accordance with the project agreement and the approved Forest Highway program. Construction shall be in compliance with plans, specifications, and estimates approved for the project, and in conformity with the Forest Highway Regulations. If the construction is to be accomplished by FHWA without cooperative funds, no project agreement is necessary.

The project shall be undertaken as promptly as possible after funds are made available, and shall be carried to completion with all reasonable speed. Minor changes in grade, alignment, surface course, or structures made necessary by unforeseen contingencies or deemed desirable by conditions developing during the progress of the work may be made by the constructing agency without the prior or separate approval of the other. It is incumbent upon the constructing agency to insure that any such changes are not in conflict with any of the SEE considerations developed during project implementation.

All work is to be performed by contract entered into by competitive bids unless some other method is mutually deemed to be more advantageous to the public interest.

For any publicly-owned equipment furnished for the work, the charge therefor, including items for depreciation and repairs, shall be in accordance with procedures established by the constructing agency.

- **Cost of Project.** Whenever FHWA performs the work and cooperative funds are involved, FHWA shall furnish to the Cooperator a summary statement of the cost of the project. When no cooperative funds are involved, a statement of the cost of the project will be available upon request.

- **Rights-of-Way.** Rights-of-way or other interests in property acquired by the Cooperator are to be at the Cooperator's expense unless otherwise provided in the project agreement. In the event the project agreement provides that reimbursement from Federal funds be made to the Cooperator for the cost of right-of-way, the procedure to be used and the submission of supporting papers shall follow current Federal-Aid practice.

The FHWA will cooperate in the procurement of rights-of-way, over or upon Federal lands or other lands under the jurisdiction of the United States, required for any project included in an approved Forest Highway program and will furnish the Cooperator copies of survey notes, maps, and other records.

Pending the execution and recording of deeds or other instruments for the rights-of-way over private lands, the Cooperator guarantees right of entry thereon for construction purposes.

When contract administration is performed by FHWA and the approved plans for the construction of the project provides for obtaining local material from designated quarries, gravel pits, or borrow pits situated on private lands, the FHWA may request the Cooperator to negotiate and enter into all necessary agreements for the right to remove such material, and enter into necessary agreements with the owner of the land for the price to be paid for material removed. Such agreements are to be made sufficiently in advance of construction to assure they can be fully set forth in the invitation for bids.

- **Maintenance.** Upon the completion and acceptance of Forest Highway projects constructed pursuant to an approved Forest Highway program, the Cooperator agrees to assume and continue the maintenance thereof at the Cooperator's expense. Maintenance shall include the preserving and keeping of each roadway, road structure, and road facility as nearly as possible in its original condition as constructed, or as subsequently improved, to provide satisfactory and safe highway service.

In the event it is determined that conditions on a project under maintenance require extraordinary repairs, removal of unusually extensive slides, or similar work outside the scope of ordinary highway maintenance, the performance thereof may be accomplished as a Forest Highway project, subject to regular Forest Highway program procedures. The cost of such work shall be eligible for payment from Federal funds, and if the work is to be performed by the Cooperator or if cooperative funds are involved, it shall be covered by a project agreement.

A Forest Highway project shall be deemed in maintenance status when: (1) all construction work has been completed in accordance with the approved plans and specifications as documented by the separate approvals of FHWA and the Cooperator; and (2) the clearing and disposal of refuse has been approved by the Regional Forester of the United States Forest Service.

- **Amendments to Forest Highway Cooperative Agreements.** It is the intention that this Cooperative Agreement shall exist and continue as the formal instrument expressing the terms of the mutual cooperation entered into by the parties hereto for accomplishing the systems planning, programming, survey, design, construction, and maintenance of projects on the Forest Highway routes. It is the further understanding and desire of said parties that this Cooperative Agreement shall be and is subject to modification by advance notice of 60 days from either party to the other. Otherwise, the cooperative arrangements set forth herein shall continue from the effective date hereof.

This agreement shall be effective as of the _____ day of _____, _____, and shall supersede all prior existing cooperative agreements for the same routes entered into pursuant to 23 U.S.C. 204 and 23 CFR 660 except those involving a commitment of funds or arrangement for the performance of construction work on projects underway but not yet completed and final settlement made.

_____ DEPARTMENT OF HIGHWAYS	DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION
By: _____	By: _____
_____	_____
(Title)	(Title)

FOREST HIGHWAY AGREEMENT

Parties to Agreement: Federal Highway Administration, U.S. Department of Transportation, hereinafter called "FHWA," and the County of _____, State of _____, hereinafter called the "County."

■ **Purpose.** The purpose of this agreement is to set forth the general terms and conditions, mutually acceptable to the parties hereto, for the project selection, project agreements, survey, design, construction, rights-of-way acquisition, and maintenance of forest highways in _____ County, _____, pursuant to the provisions of Title 23 U.S.C. 204 and Title 23 CFR 660 Subpart A.

■ **Project Selection.** Projects will be selected by mutual agreement of the FHWA, the Forest Service (FS), and the State Highway agency (acting on behalf of the County) in accordance with Title 23 CFR Part 660.109.

■ **Project Agreement.** In addition to this Forest Highway Agreement, a project agreement shall be entered into between the FHWA and the County for each project prior to the expenditure of Federal funds. The purpose of the project agreement is to spell out the project specifics that cannot be covered in this general agreement, including project length, geometrics, rights-of-way requirements, and utility relocation requirements.

The project agreement shall set forth the procedure between FHWA and the County when (1) the survey, construction, acquisition of right-of-way, or maintenance in connection with a project included in an approved Forest Highway program is to be accomplished in a different manner from that set forth in this Forest Highway Agreement; (2) Federal funds are to be made available to the County for the project; or (3) County funds are to be made available FHWA for the project. Project agreements are to be executed in triplicate, one executed copy being for the County, one for the Forest Service, and one for FHWA.

■ **Survey, Design, and Construction.** The FHWA will administer the survey, design, and construction of each Forest Highway project unless otherwise provided for in a project agreement. The location of the survey and the general design will be accomplished to the mutual satisfaction of the County, the FS, and the FHWA. The County is encouraged to provide input in the project development phase during the action plan process.

The project will be constructed as promptly as possible after funds are made available. Minor changes in grade, alignment, surface course, or structures made necessary by unforeseen contingencies or deemed desirable by conditions developing during the progress of the work may be made by the FHWA without the prior or separate approval of the County. The FHWA will, to the extent practicable, insure that any such changes are not in conflict with any of the Social, Economic, and Environmental (SEE) considerations developed during the action plan process.

All work will be performed by contract entered into by competitive bids unless some method is mutually deemed to be in the public interest.

No construction shall be undertaken on any Forest Highway project until plans, specifications, and estimates have been concurred in by the County and the FS and approved by the FHWA.

- **Compliance with Federal-aid Procedures and the Direct Federal Nationwide Action Plan in Project Development.** Projects or phases of projects administered by the County will be developed in accordance with applicable Federal-aid procedures, including appropriate environmental procedures as set out in Title 23, CFR. Projects or phases of projects administered by FHWA will be developed in accordance with 23 CFR Parts 660 and 771 and with the Nationwide Action Plan for the Direct Federal Program. This action plan requires that a SEE Study Team be formed for projects that require the preparation of an environmental assessment or impact statement to insure that SEE effects of each project are identified and considered.

The County will assign a representative(s) to the SEE Study Team for each such project. The County representative(s) shall be given authority by the County to make decisions necessary to insure that the SEE Study Team can meet its objectives as outlined in the Nationwide Direct Federal Action Plan. The County also agrees to furnish to the team whatever interdisciplinary capabilities it is able to provide within its existing staff.

- **Rights-of-Way and Utilities:** Right-of-way or other interests in property needed for a project will be acquired by the County or their agent in the name of the County. The cost of such right-of-way or other interest in property will be at the County's expense unless otherwise provided in the project agreement. Federal-aid procedures (Title 23, CFR, Part 712) shall be used for rights-of-way acquisition.

The FHWA will cooperate in the procurement of rights-of-way over or upon Federal lands or other lands under the jurisdiction of the United States Government that is required for any project and will furnish the County copies of survey notes, maps, and other records unless otherwise provided for in a project agreement.

Pending the execution and recording of deeds or other instruments for the rights-of-way over private lands, the County shall obtain right-of-entry thereon for construction purposes. Utilities which are located within the construction limits of the proposed rights-of-way shall be relocated at the expense of the County prior to awarding the construction contract. Utilities may be accommodated on the rights-of-way when such utilities do not interfere with the free and safe flow of traffic or otherwise impair the highway or its visual quality.

- **Maintenance.** After construction of Forest Highway projects, the County agrees to operate and maintain the highway at the County's expense. Maintenance is the preservation of the entire highway, including surface, shoulders, roadside, structures, and such traffic-control devices as are necessary for its safe and efficient utilization.

During construction, the contractor shall bear all expense of maintaining traffic over the project other than during the period of winter suspension. If the facility is to remain open for public use during the winter suspension, the County agrees to provide routine maintenance, including all snow removal, as necessary.

A Forest Highway project shall be accepted by the County for operation and maintenance when all construction work has been completed in substantial conformity with the approved plans and specifications and the project has been inspected by the County, the FS, and the FHWA.

■ **Amendments to Forest Highway Agreements.** This Forest Highway Agreement may be modified by mutual agreement of the parties. Either party may prepare a modification by giving notification at least 60 days in advance of the proposed effective date of the modification.

This agreement shall be effective as of the _____ day of _____, and shall supersede all prior existing cooperative agreements for the same routes entered into pursuant to 23 U.S.C. Section 204 and 23 CFR Part 660, Subpart A except those involving a commitment of funds or arrangement for the performance of the construction work on projects underway but not yet completed and final settlement made.

_____ County, _____

Department of Transportation
Federal Highway Administration
_____ Federal Lands
Highway Division

By: _____

(Title)

By: _____

Division Engineer

By: _____

(Title)

By: _____

(Title)

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
CENTRAL FEDERAL LANDS HIGHWAY DIVISION

FOREST HIGHWAY PROJECT AGREEMENT

State: Colorado Forest: Flatland

County: Clark Forest Highway Route No.: FH Route 75, Glasgow to Opheim

Project No.: FH75-2(1) Project Length (km): 2.1 + Terrain: Mountainous

This Agreement is entered into between the undersigned parties pursuant to the provision of 23 U.S.C. 204, and the Forest Highway Regulations issued thereunder jointly by the Secretary of Transportation and the Secretary of Agriculture, and in accordance with the terms of the Forest Highway Agreement dated July 14, 1988.

Project Location: The bridge over Willow Creek located about 8 miles southwest of Opheim, Colorado, on Clark County Route No. 236.

Description of Work: The replacement of Willow Creek bridge and reconstruction of the approaches.

Funding: The cost of preliminary engineering, construction engineering, and physical construction will be the responsibility of the Federal Highway Administration (FHWA). The cost of rights-of-way, utility relocation, and maintenance after completion of the project will be the responsibility of Clark County.

Responsibility for the Survey, Design, and Construction: The FHWA will administer the survey, design, and construction as stipulated in the Forest Highway Agreement. Additionally, the FHWA will obtain all the necessary environmental clearances, Section 404 fill permits, materials source permits, and other Federal or State required permits.

Design Standards: The project will be designed in accordance with the AASHTO Policy on Geometric Design of Highways and Streets, 1994 edition.

Structures will be designed in accordance with the AASHTO Standard Specifications for Highway Bridges, Fifteenth Edition, 1982, as supplemented.

The following general criteria will be applied for this project:

Design speed: 50 km/h Roadway surface: Asphalt concrete

Design volume: Less than 400 ADT Roadway width: 7.3 meters

Design loading: MS 18 Bridge width: 8.5 meters

Rights-of-Way: Rights-of-way needed for this project will be acquired by the County or their agent in the name of the County.

The FHWA will prepare rights-of-way plans and legal descriptions of the necessary property needed for the project.

Pending the execution and recording of deeds or other instruments for the rights-of-way over private lands, the County shall obtain right-of-entry thereon for construction purposes.

Utility Relocation: Utilities which are located within the construction limits of the proposed rights-of-way shall be relocated at the expense of the County prior to awarding the construction contract. Utilities may be accommodated on the rights-of-way when such utilities do not interfere with the free and safe flow of traffic or otherwise impair the highway or its visual quality.

Construction: As soon as practical after the plans are complete and as soon as funds are available, the FHWA will either advertise for or negotiate with a contractor to construct the project in accordance with the Federal Acquisition Regulations (48 CFR 1) and the Transportation Acquisition Regulations (48 CFR 12). During the construction phase, FHWA will provide a project engineer to oversee and inspect the work to assure a quality product. The construction will be governed by the plans supported by the *Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects* (FP 96). The project engineer is the designated FHWA contact for the County and the Forest Service during the construction phase.

Maintenance: After construction, the County shall operate and maintain the highway at the County's expense. Maintenance is the preservation of the entire highway, including surface, shoulders, roadside, structures, and such traffic control devices as are necessary for its safe and efficient utilization.

During construction, the contractor shall bear all expense of maintaining traffic over the project other than during the period of winter suspension. If the facility is to remain open for public use during the winter suspension, the County shall provide routine maintenance, including all snow removal, as necessary.

Amendments to the Project Agreement: This Project Agreement may be modified by mutual agreement of the parties. This Agreement shall be effective as of the 30th day of September, 1996.

CLARK COUNTY, COLORADO

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
CENTRAL FEDERAL LANDS HIGHWAY DIVISION

By: _____

By: _____

(Title)

By: _____

DEPARTMENT OF AGRICULTURE
FOREST SERVICE
ROCKY MOUNTAIN REGION

By: _____

By: _____

(Title)

Regional Engineer