



Cooperating Technical Partners

Guidance Document

Fiscal Year 2004

(Please check the FEMA website at http://www.fema.gov/fhm/ctp_guid.shtm for updated versions of this document.)

Background

The Federal Emergency Management Agency (FEMA) Flood Hazard Mapping Program has specific mandates within the Housing and Urban Development Act of 1968 (also known as the National Flood Insurance Act of 1968), as amended; the Housing and Urban Development Act of 1969; the Flood Disaster Protection Act of 1973, as amended; and the National Flood Insurance Reform Act of 1994. These Acts authorize FEMA to identify, publish, and update information with respect to all floodprone areas in the nation. FEMA has complied with this mandate by publishing and updating flood maps for more than 19,000 communities.

Because flood hazard conditions change over time due to natural and manmade changes in watersheds and floodplains, FEMA has an ongoing program to update flood maps for floodprone communities. However, flood map update needs are increasing and Federal funds are limited, thus a significant portion of the approximately 100,000-panel flood map inventory is outdated. To reverse this trend, FEMA designed a [plan](#) to modernize the flood map inventory. The plan outlined the steps necessary to update FEMA's flood maps for the nation to digital format and streamline FEMA's operations in raising public awareness of the importance of the maps and responding to requests to revise them. Since that time, the plan has continually evolved as new products, processes, and technical specifications have been developed and implemented.

One of the key objectives of the FEMA Map Modernization Plan is to increase local involvement in, and ownership of, the flood mapping process. To meet this objective, FEMA created the Cooperating Technical Partner (CTP) Program. As technologies have improved and applications have expanded dramatically, many State agencies, regional agencies, and local communities (including tribal governments) have become technologically sophisticated and have invested significant resources in flood hazard identification. This document presents guidance for the CTP Program. Additional information about the CTP Program is available from FEMA's Flood Hazard Mapping website at http://www.fema.gov/fhm/ctp_main.shtm.



There are several beneficial reasons for partnering with State, local, and regional organizations to produce National Flood Insurance Program (NFIP) maps:

- ❑ The data used for local permitting and planning will also be the basis for the NFIP map, facilitating more efficient floodplain management.
- ❑ The CTP Program provides the opportunity to interject a tailored, local focus into a national program; thus, where unique conditions may exist the special approaches to flood hazard identification that may be necessary can be taken.
- ❑ The partnership mechanism provides the opportunity to pool resources and extend the productivity of limited public funds.
- ❑ For participating in the CTP Program, community Partners will receive Community Rating System credits, which may lead to discounted flood insurance premiums for property owners. (Additional information on the Community Rating System is available on the FEMA website at <http://www.fema.gov/nfip/crs.shtm>.)

In support of the CTP Program, FEMA has committed to the following:

- ❑ Recognize the contributions made by FEMA's State, regional, and local Partners by providing timely and accurate flood hazard information.
- ❑ Maximize the use of Partners' contributions as a means of leveraging limited public funds to the fullest extent while maintaining essential NFIP standards.
- ❑ Fully integrate Partners into the flood hazard data development process with the corresponding authorities and responsibilities.
- ❑ Provide training and technical assistance to the Partners when appropriate.
- ❑ Facilitate mentoring to increase capability for both existing and Potential Partners.

Administration

FEMA and its Partners will administer activities under the CTP Program through close and frequent coordination. There are three formal agreements involved—**Partnership Agreements**, **Mapping Activity Statements**, and **Cooperative Agreements**.

Each Partner will enter into a **Partnership Agreement** with the appropriate FEMA Regional Office. The Partnership Agreement is a broad statement of principle, emphasizing the value of the NFIP's three components of insurance, floodplain management, and mapping.

The Partnership Agreement recognizes the fundamental importance of flood hazard identification in the successful reduction of future flood losses and the Partner's commitment to the effort. The Partnership Agreement is a prerequisite to any further activities under the CTP Program. The Partnership Agreement template may be viewed or downloaded from the FEMA website at http://www.fema.gov/fhm/dl_moa.shtm.



As the Partner and FEMA identify specific tasks to undertake, **Mapping Activity Statements (MASs)** will be developed to define the project scope and the roles and responsibilities of all Partners involved in a particular Flood Map Project. Developing the MASs will be a collaborative effort where both the Partner(s) and FEMA contribute data and units of work to maximize the extent, accuracy, and usability of flood hazard studies to best meet local, State, and Federal needs, while minimizing costs for all parties. The MAS is a key component of the Cooperative Agreement package because it defines the activities that will be accomplished, the entity responsible for them, how the activities will be funded, and the nature of the working relationship between FEMA and its Partners. The MAS template may be viewed or downloaded from the FEMA website at http://www.fema.gov/fhm/dl_atemp.shtm.

For projects that meet eligibility requirements, FEMA may award funds through the mechanism of a Cooperative Agreement. The Cooperative Agreement provides for the disbursement of Federal funds and defines the legal responsibilities associated with it. A Cooperative Agreement is not required for locally funded mapping activities.

Activities

FEMA may provide technical assistance, training, and/or data to a Partner to support flood hazard data development activities. As funding levels permit, the mapping activities for which Partners may receive funding in Fiscal Year 2004 through a Cooperative Agreement with FEMA are summarized in Table 1.

The Cooperative Agreements awarded for mapping activities under the CTP Program are intended to supplement, not supplant, ongoing mapping efforts by a Partner, whether it be a community/tribal government, regional agency, or State agency. The FEMA funds would be in addition to the resources provided by the Partner for the mapping activities.

Table 1. Fundable Mapping Activities

Activity	Partners	Description
Refinement or Creation of Approximate Zone A Boundaries	Community Regional Agency State Agency	The Partner works with FEMA to perform analyses to refine Zone A boundaries shown on the effective Flood Insurance Rate Map (FIRM) or create new Zone A areas to be included on the FIRM. Emphasis is placed on automated analysis and production techniques.
Hydrologic and Hydraulic Analyses and Floodplain Mapping		The Partner develops digital engineering data and floodplain mapping using Geographic Information System (GIS)-based or traditional hydrologic and hydraulic modeling.

Coastal Flood Hazard Analyses and Floodplain Mapping	The Partner develops digital engineering data and floodplain mapping using GIS-based or traditional coastal flood hazard analysis methods.
Digital Flood Insurance Rate Map (DFIRM) Preparation	The Partner digitizes information from the effective hardcopy FIRM and prepares a DFIRM that meets FEMA specifications.
Redelineation of Detailed Floodplain Boundaries Using Updated Topographic Data	The Partner redelineates the effective floodplain boundaries shown on the FIRM using more up-to-date topographic data. GIS technology is used, where available.
Digital Topographic Data Development	The Partner develops digital topographic data for flood hazard identification purposes.
Scoping up to 10%	Up to 10% of the total estimated funding may be provided to do an extensive project scope that leads to the development of the Mapping Activity Statement.

While no funding under the CTP Program will be provided to Partners for the mapping activities listed in Table 2, FEMA may provide technical assistance, support, and/or data for an activity.

Table 2. Non-Fundable Activities

Activity	Partners	Description
Digital Base Map Inventory	Regional Agency State Agency	The Partner performs an investigation and provides an inventory of base maps meeting FEMA specifications for NFIP communities in a particular region or State.
Digital Base Map Data Sharing	Community Regional Agency State Agency	The Partner supplies base map data for use in producing a DFIRM. The base map must comply with FEMA minimum accuracy requirements and be distributable by FEMA to the public in hardcopy and electronic formats.
DFIRM Maintenance	Community Regional Agency State Agency	The Partner assumes responsibility for long-term, periodic maintenance of the DFIRM. This can include base map and/or flood hazard information.
Hydrologic and Hydraulic Review	Community Regional Agency State Agency	The Partner reviews hydrologic and hydraulic studies prepared for FEMA-funded flood data updates and/or map revisions processed under Part 65 of the NFIP regulations. The review focuses on compliance with the technical and regulatory requirements contained in <i>Guidelines and Specifications for Flood Hazard Mapping Partners</i> , the pertinent NFIP regulations, as well as standard accepted engineering practices.
Assessment of Community Mapping Needs (<i>to support FEMA's Mapping Needs Update Support System</i>)	Regional Agency State Agency	The Partner performs a detailed community-by-community assessment of mapping needs for every mapped (including flood data updates and map maintenance) and unmapped NFIP community within its jurisdiction. The Partner then submits the results of the assessment to FEMA for inclusion in the Mapping Needs Update Support System database.
Technical Standards Agreement	Community Regional Agency State Agency	The Partner works with FEMA to adopt specific technical standards or processes appropriate for local conditions for NFIP flood mapping purposes.

Eligibility Criteria

Partnerships are established based on the following criteria:

- ❑ The Potential Partner must have existing processes and/or systems in place to support mapping or data collection activities that contribute to flood hazard identification. These processes and/or systems must be supported by non-Federal funding.
- ❑ The Potential Partner must have the capability to perform the mapping activities for which it is applying. This capability may be indicated through (but not limited to) a FEMA Regional Office review of both the map products previously prepared by the Partner and the existing map production processes or systems the Partner intends to use for CTP Program-related mapping activities.
- ❑ The Potential Partner must be a community that participates in the NFIP and is in good standing in the Program as determined by the FEMA Regional Office, or be a State or regional agency that serves communities that participate in the NFIP.
- ❑ Partners that receive funding from FEMA through a Cooperative Agreement must be able to perform the financial management activities required as part of the Cooperative Agreement (i.e., account for Federal funds, prepare financial reports). FEMA Regional Offices will assist Partners with these financial management activities.
- ❑ The Potential Partner should demonstrate its ability to leverage funding received from FEMA. The National Goal for leverage is 20%. However, the more funding a Partner is able to leverage improves their probability of increases in funding from FEMA for current and future mapping activities.

FEMA will evaluate these criteria periodically, and the criteria may be enhanced further in the future.

Technical Capabilities

In addition to the eligibility criteria described above, a Potential Partner must have in-house staff capabilities in the appropriate technical area for the given mapping activity. If the work for any portion of a mapping activity is contracted, the Potential Partner must have in-house staff capable of monitoring the contractor(s) and approving the products developed by the contractor(s). For these purposes, “capability” means demonstrated experience in the performance of, or management through contracting of, similar activities.

Evaluation Criteria

Throughout the project and at the end of the period of performance for each MAS, FEMA will evaluate the effectiveness of the partnership to determine eligibility for future mapping activities under the CTP Program. If FEMA determines that the partnership has proven insufficient to complete the established project or achieve the goals of the partnership, FEMA’s funding of the mapping activity may be cancelled.

FEMA will base its evaluation of the Partner's demonstrated performance on the following criteria:

- ❑ Continued maintenance of the processes or systems in place to support mapping or data collection activities that contribute to flood hazard identification (e.g., continued data collection for changing flood hazards and related development, continued upgrades to data collection or mapping capabilities to incorporate new technologies, preparation of multiple-year mapping or data collection plans);
- ❑ Commitment to existing, and continued support of, flood hazard identification and mapping activities conducted with and by FEMA;
- ❑ Adherence to standards for timeliness and completeness of reports submitted to the FEMA Regional Office;
- ❑ Adherence to standards for timeliness and completeness of map products submitted to the FEMA Regional Office;
- ❑ Quality of product(s) submitted to the FEMA Regional Office; and
- ❑ Ability to cooperate and coordinate with the staff of the following organizations during all phases of the mapping activity as needed: FEMA Regional Office; Hazard Identification Section of the Mitigation Division in the FEMA Headquarters Office in Washington, DC; and designated FEMA contractors.

Standards

Unless otherwise indicated in specific MASs, all flood hazard identification activities will be accomplished in accordance with the relevant portions of the NFIP regulations (44CFR Parts 59-77) as well as the standards contained in FEMA's *Guidelines and Specifications for Flood Hazard Mapping Partners*, which can be downloaded from the FEMA website at http://www.fema.gov/fhm/dl_cgs.shtm.

Certification

All data generated under MASs must meet the applicable certification requirements for the identification and publication of flood hazard information in FIRM form as indicated in 44 CFR Part 65, Identification and Mapping of Special Hazard Areas. Some States have adopted more stringent mapping standards than the minimum NFIP regulatory requirements. For these cases, Partners must coordinate all activities with the State to ensure the MASs are reviewed and concurred upon, and all map products resulting from a CTP Program-related mapping activity must meet State certification requirements.

State Role

The role filled by a State will be a function of its authority and capabilities. Some States have developed state business plans, which explain in detail their capability and capacity to manage the Map Modernization Program in their state. These plans also include an explanation of the State's role in the CTP Program. Some states also review map revisions as part of their regulatory responsibilities.



As with the options available to communities and regional agencies, interested State agencies will be expected to have in-house staff capabilities to fulfill the CTP Program-related mapping activity it would like to perform. State agencies that do not participate in the CTP Program will continue the traditional functions of the State Coordinating Office as they relate to any activities performed by participating Partners in that state. In general, the activities that a State agency might perform are the same as those identified for communities, with the addition of collection and assessment of community mapping needs and a base map inventory.

Funding

CTP Program-related activities may be funded based on FEMA's priority of mapping needs the availability of FEMA funds for mapping, and the amount of leverage provided by the CTP Partner. If FEMA funds are provided, the Partner will receive funds through a Cooperative Agreement. Because the FEMA mapping budget varies annually, the amount of funding for CTP Program-related activities also will vary. Each FEMA Regional Office will determine how much of its annual mapping budget will be allocated to mapping activities under the CTP Program.

Typically, the funding for CTP Program-related Flood Map Projects is allocated through one Cooperative Agreement once the MAS is signed. However, for large or complex projects, extensive planning may need to be performed before the MAS is developed. For such projects, the Cooperative Agreement may be processed in a phased approach. Use of the phased approach will decrease the need for extensions of performance periods and project revisions and improve overall efficiency through the development of a thorough project scope. In such instances, the FEMA Regional Office may allocate up to 10 percent of the total estimated funding for the project to the Partner to develop a project scope and MAS. Once the MAS is signed and in place, the Partner may then request the remaining funding required for completing the project.

Contracting

Contractors used by Partners for FEMA-funded activities must meet the requirements of Part 13 of the Code of Federal Regulations (44 CFR Part 13), Uniform administrative requirements for grants and cooperative agreements to state and local governments. Within Part 13, §13.36 covers procurement standards that must be followed for any mapping-related activities for which a Partner wishes to contract with another party. Items in this Part include, but are not limited to, contract administration and record keeping, notification requirements, review procedures, competition, methods of procurement, and cost and pricing analysis. Part 13 may be downloaded in PDF or text format from the U.S. Government Printing Office website at http://www.access.gpo.gov/nara/cfr/waisidx_02/44cfr13_02.html.

If requested by the Partner, FEMA will provide assistance to a Partner on developing selection criteria for contracted tasks. All work must meet the certification requirements described below.

Cooperative Agreement Management

FEMA-funded activities must meet the requirements of 44 CFR Part 13, which sets forth requirements for Cooperative Agreement administration and management. These requirements include, but are not limited to, record keeping, allowable costs, and processes for use of



contractors. Part 13 may be downloaded from the U.S. Government Printing Office website at http://www.access.gpo.gov/nara/cfr/waisidx_02/44cfr13_02.html.

Additional FEMA Assistance

FEMA offers an array of technical and programmatic assistance to Partners participating in the CTP Program, free of charge, including the resources listed below.

- ❑ Archived support data will be available from the FEMA Flood Map Production Coordination Contractors. Available information includes:
 - Copies of FEMA-issued Letters of Map Change (i.e., Letters of Map Amendment, Letters of Map Revision);
 - Engineering and mapping Flood Insurance Study backup data;
 - Data collected as part of the FEMA Mapping Needs Assessment Process; and
 - FEMA's rule-based engineering software packages, including CHECK-2, CHECK-RAS, FISPLOT, and RASPLOT.
- ❑ Training courses will be offered through the FEMA Emergency Management Institute. The following topics relevant to the CTP Program will be included in the training (visit http://www.fema.gov/fhm/ctp_train.shtm for additional information on training opportunities at the Emergency Management Institute):
 - Up-To-Date Maps Through Partnerships;
 - Assessment of Community Mapping Needs;
 - Developing a Project Scope and Outreach Strategy;
 - Cooperative Agreements and Use of Contractors;
 - Mapping Activity Statements and Technical Support Data Notebooks;
 - Topographic Data Development;
 - Flood Hazard Data Development;
 - Base Mapping and Digital Flood Maps; and
 - Map Production and Processing Requirements.
- ❑ Specific technical and programmatic support, such as peer review, modeling guidance, base map selection, and/or tailored training, also may be provided by FEMA through designated FEMA contractors.
- ❑ General technical and programmatic information regarding the NFIP and the FEMA Flood Hazard Mapping Program can be downloaded from FEMA's Flood Hazard Mapping website at <http://www.fema.gov/fhm>.



Program Management

FEMA Regional Offices will manage all activities under the CTP Program. The FEMA Regional CTP Coordinators are listed below.

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