



## **CTP INCENTIVES FOR STATES**

**(DRAFT FINAL REPORT)**

## ACKNOWLEDGEMENTS

Thanks are due to the States and existing CTPs that responded to the questionnaire developed for this project.

Thanks are also due the Federal Emergency Management Agency for providing support to ASFPM to work with state and local partners to prepare this report.

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# INTRODUCTION

Floods are the nation's most common and costly natural disaster. Responding to and recovering from disasters is first a State and local government responsibility. However, some flood disasters cause such extensive damage that State and local resources are overwhelmed and federal assistance is needed. In 1968 - to reduce the ever-growing expense to the federal government related to flooding - Congress established the National Flood Insurance Program (NFIP). The NFIP provides incentives to local government to manage development in the floodplain. The NFIP guarantees that flood insurance will be available in communities that agree to adopt land-use regulations so that new development is reasonably protected from flood damages.

Maps depicting flood-hazard areas are not only the foundation of the National Flood Insurance Program, but also the basis of sound floodplain management. If flood hazard areas are not correctly mapped, local governments have insufficient basis to regulate new development under their floodplain zoning ordinances. Nor is the sale of flood insurance mandated for areas not mapped in the floodplain. The NFIP promotes effective land use management and underwrites flood insurance – and both depend upon adequate, accurate and current floodplain mapping.

Maps of areas subject to flooding produced by the NFIP are one of the basic and essential tools for flood insurance, floodplain management and flood hazard mitigation. However, due to the manual cartographic processes used when the flood hazard maps were initially produced and because flood hazard conditions change over time, FEMA recognized that the flood map inventory needed updating. To correct this problem, FEMA, with input from its NFIP stakeholders designed a plan to “modernize” the flood map inventory.

In 2002, Congress appropriated funding for FEMA to implement a five year “Flood Map Modernization” effort. The NFIP Reform bills of 2006 propose to extend significant funding for improved flood mapping through an additional 6 years. One of the key objectives of the FEMA flood map modernization plan is to increase local involvement in, and ownership of, the flood mapping process.

This document:

- provides some background on State and local roles in water and floodplain management,
- includes a history of mapping floodplains in the US,
- summarizes some of the mechanisms FEMA is using to involve State and local governments in Flood Map Modernization, and
- discusses some impediments that exist and incentives that could be implemented to enhance the partnership.

FEMA entered into a cooperative agreement with the Association of State Floodplain Managers (ASFPM) to identify these impediments and suggest incentives to increase State, regional and local involvement in the Cooperating Technical Partner Program. ASFPM developed a questionnaire that it distributed to States and territories and to

existing CTPs. This document summarizes the information received, discusses some of the impediments and lists some possible incentives that could increase State involvement in Flood Map Modernization.

## **STATE & LOCAL ROLES IN WATER MANAGEMENT/FLOODPLAIN MANAGEMENT**

**LAND USE REGULATION** - When identifying federal government authorities in the US Constitution, the authoring State representatives did not include land use. The 10<sup>th</sup> amendment to the US Constitution explicitly reserves all rights not given to the federal government to the States. Therefore, States alone have the right to determine land uses within their boundaries. Individual State constitutions and/or legislation define the authorities granted to and/or required of local and regional government within each State associated with land use and water management.

**PUBLIC TRUST DOCTRINE/WATER RIGHTS** - States own, or retain public rights in “waters of the State”. In most States, this includes the land up to the high water mark on waters within their State boundary. In order to protect the public use and access, States are vested with regulatory responsibilities associated with the State’s public waters.

States have the responsibility<sup>1</sup> to ensure that encroachments or alterations of public waters by riparian land owners and others do not interfere with the public’s use or other riparian’s use of State waters defined by its constitution, legislative mandates, and/or State water rights case law. In addition, to address public safety issues, some State legislatures have passed laws that require the State to actively regulate activities beyond waters in public ownership to include all mapped flood hazard areas.

Both a hydrologic and hydraulic (H&H) engineering analysis and environmental assessment are required to determine the potential impacts of proposed encroachments into public waters and/or the floodplain. Most States require that H&H engineering analyses associated with encroachments into public waters and/or floodplains be conducted by a Professional Engineer (PE) registered<sup>2</sup> in their State. In addition, due to the severe consequences associated with technically flawed engineering analyses of encroachments, States often have staff responsible for reviewing the H&H engineering studies associated with these proposals. Since flood elevations have not been established for many floodplains and because the cost to establish flood elevations may have been deemed an excessive burden on riparian land owners, some State legislatures have passed laws or administrative rules requiring the State to establish flood elevations for encroachment proposals from individuals (not businesses).

Water management programs and staffing in each of the States were summarized in a document published by ASFPM (under agreement with FEMA) titled “Floodplain

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<sup>1</sup> To support of this regulatory responsibility, some States have provided authorities via legislation to regional and local governments to regulate stormwater and water drainage management.

<sup>2</sup> Registration of engineers is the responsibility of State government.

Management 2003 – State and Local Programs”. Additional states may now perform some of these functions, and that will be noted in updates to this publication.

Table 1  
Summary of State review of H&H and floodplain mapping

	No. of States
Review H&H	21
Issue Approval Letter	14
Review and approve floodplain maps	24
State approval of H&H and mapping required by law	7
Review of H&H and/or mapping meets FEMA requirements <sup>3</sup>	13
Set flood elevations	16

WATER POLLUTION CONTROL – Under its authorities related to interstate commerce, the federal government began addressing water quality issues with the passage of the Water Pollution Control Act of 1948 (PL 80-845). In the words of that statute, it was “...*the policy of Congress to recognize, preserve, and protect the primary responsibilities and rights of the State in controlling water pollution*”.

In 1972, the federal government passed PL 92-500 (commonly known as the Clean Water Act). PL 92-500 required that no one discharge pollutants to public waters without a permit and provided increased federally funding to communities to address water pollution issues. States roles were again recognized in PL 92-500: “*It is the policy of the Congress to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources ...*”

For communities to receive federal funds to upgrade wastewater treatment facilities, States were required to submit a summary report of the “*current status of the State pollution control program, including the criteria used by the State in determining priority of treatment works*” within 120 days of passage of PL 92-500 (and annually by October 1<sup>st</sup> thereafter).

In addition, PL 92-500 provided States the opportunity to request the authority to “administer its own permit program for discharges into navigable waters”. States desiring authority are required to submit a description of the program it wishes to establish. The law then states: “*The Administrator (meaning the head of EPA) shall approve each submitted program unless ...*”.

By requiring EPA to justify not delegating authorities to a State, Congress used the funding authorized under the Clean Water Act to build State capacity to address the long term maintenance of the quality of the waters of the nation.

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<sup>3</sup> In the opinion of the person providing the information for that State.

As a result, over 40 States have been delegated authority to implement provisions of the Clean Water Act. States have staff devoted to stormwater, water runoff, wetland management and a variety of other water management programs.

## **HISTORY OF FLOOD HAZARD MAPPING IN THE UNITED STATES**

Mapping of the nation's floodplains began in the 1950's when the US Army Corps of Engineers, the US Geological Survey, the Soil Conservation Service (now NRCS), and the Tennessee Valley Authority initiated efforts to delineate flood hazards. Soon after creation of the National Flood Insurance Program in 1968, the US Department of Housing & Urban Development (HUD) [which administered the NFIP] began publishing Flood Hazard Boundary Maps (FHBM). FHBMs were developed using "approximate study techniques." FHBMs were intended to provide an early warning for local officials that flooding could occur in their community. The original plan anticipated that more accurate Flood Insurance Rate Maps (FIRM) would be produced following completion of detailed studies of the flooding sources, and would replace FHBMs within 5 years. Detailed Flood Insurance Studies and FIRMs were produced throughout the 1970's for many communities across the country.

As this program matured:

- HUD realized that instead of 5,000 communities that were originally thought to have significant flooding problems – and, therefore, needed a map - there were in excess of 19,000 communities;
- FEMA was created in 1979 , and among other programs, assumed responsibility to administer the NFIP;
- FEMA was told to end the "emergency phase" of the NFIP in 1988 effectively limiting their ability to produce more approximate studies to complete the nation's mapping;
- The number, and costs, of Letters Of Map Amendments (LOMA), Letters Of Map Revisions (LOMR) and Letters Of Map Revisions Based On Fill (LOMR-F)- began to multiply;
- FEMA, after realizing they would likely never receive the funds to prepare all necessary detailed studies, undertook a mass conversion of the remaining Flood Hazard Boundary Maps to Flood Insurance Rate Maps (FIRMs), without benefit of further detailed studies.

By 1990, there were over 100,000 map panels, but there were still large areas of the country for which no maps had been developed. In addition, more and more of the funds earmarked for conducting Flood Insurance Studies (FIS) were diverted to deal with map revisions and corrections through LOMAs, LOMRs, and LOMR-Fs.

### **Technical Mapping Advisory Council (TMAC)**

In 1994, Congress directed FEMA to establish the Technical Mapping Advisory Council (TMAC). The TMAC (1995-2000) provided a series of recommendations to FEMA to improve the maps and the mapping process.

The Technical Mapping Advisory Council was created in November 1995, including in its membership representatives of a variety of governmental and professional

organizations with a stake in floodplain maps. The Council met regularly during its 5-year time span and developed a report with recommendations to FEMA regarding improving the flood maps and mapping process. FEMA prepared a plan to implement the Council recommendations and requested the resources necessary to fund its Map Modernization Plan. Congress appropriated funding for FEMA to begin the implementation of its Flood Map Modernization Plan in FY 2002.

A key Technical Mapping Advisory Council recommendation was to find ways to encourage State, regional and local government to take an active role in the flood hazard mapping process.

### **STATE ROLE IN NATIONAL FLOOD INSURANCE PROGRAM (CAP/MMMS/CTP)**

FEMA recognizes that it needs State assistance to effectively manage 21,000 community efforts to map and manage thousands of miles of floodplain. Further, States can assist communities to integrate a myriad of other federal and State programs that impact flood losses (highways and bridges, septic tanks, building codes, stormwater programs, wetland and water quality programs, etc). States can also build collaborative partnerships with other State agencies, such as the insurance commissioners, transportation departments, Governor's offices, emergency services, among others.

FEMA has implemented some mechanisms to provide some level of State government involvement in the administration of the National Flood Insurance Program. These include the Community Assistance Program, the Cooperating Technical Partner program and Map Modernization Maintenance Support.

### **Community Assistance Program (CAP)**

So that citizens can purchase flood insurance and receive certain forms of disaster assistance, the National Flood Insurance Program (NFIP) requires participating communities to adopt and enforce ordinances that require development to meet certain minimum standards. The NFIP requires States to authorize communities to take such action and provides funding to States to assist communities in floodplain ordinance enforcement and other flood loss reduction activities. States must provide State matching funds equal to 25% of the federal funding received.

CAP-SSSE activities closely associated with Map modernization include:

- Assessment of Community Mapping Needs, including a detailed community-by-community assessment of mapping needs for every NFIP community.
- Outreach, including mass mailings, community meetings, website postings and multi-media promotional activities.
- Local Ordinance review
- Local Ordinance adoption monitoring and assistance



Flood Map Modernization is causing a significant increase in each State's workload for map prioritization, project scoping, community outreach, and local ordinance review and adoption. Conversely, the community outreach required as part of Map Modernization provides an excellent opportunity to promote sound floodplain management, compliance with NFIP regulations and encouragement of more restrictive floodplain standards, as well as No Adverse Impact approaches to mapping and regulation.

### **Cooperating Technical Partner Program (CTP)**

One of the key objectives of the FEMA Map Modernization Plan is to increase State and local involvement in, and ownership of, the flood mapping process. To meet this objective, FEMA developed and implemented the Cooperating Technical Partners (CTP) Program.

In their CTP guidance materials, FEMA has identified the following benefits for partnering with State, regional, and local 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.”*

In addition, FEMA indicates it's commitment to:

- *“Recognize the contributions made by FEMA's State, regional, and local community Partners by providing timely and accurate flood hazard information.*
- *Maximize the use of Partner 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 Partners when appropriate.*
- *Facilitate mentoring to increase capability for existing and potential Partners.”*

*“Many local and regional CTPs have data and expertise that can significantly contribute to a better map modernization product. These may include GIS base maps, recent topography and rectified ortho photography, and in-kind staff capability. In some instances, State or local government may be able to assume the full responsibility for the map modernization effort within their jurisdiction.”*

There are 21,000 communities participating in the NFIP. FEMA recognizes that development of CTP agreements with all 21,000 participating communities is not a viable alternative. In addition, counties/parishes authorities often do not apply within

incorporated communities. Thus, some FEMA Regional Offices (e.g. Regions IV and V) are finding that developing State CTP agreements is a more effective and efficient use of FEMA Regional staff resources.

### **Map Modernization Management Support (MMMS)**

FEMA has allocated a portion of the Flood Map Modernization funding to Map Modernization Management Support (MMMS). MMMS is another mechanism to increase State involvement in the flood mapping process. For States not directly producing Flood Insurance Rate Map (FIRM)s, MMMS provides a means to involve State and Regional government in Flood Map Modernization.

In 2002, FEMA requested States to complete State Map Modernization Implementation Plans. These plans (which were later called and are hereafter referred to as State Business Plans) identify existing State mapping efforts and infrastructure and the role they feel the State could take in conjunction with FEMA's Flood Map Modernization.

FEMA guidance requested the State business plans to:

1. *“Identify and document the scope and level of effort needed to adequately map all flood hazard areas that have been, or could be developed, and to maintain the maps in the future.*
2. *Define what management or oversight roles and responsibilities state, local or regional agencies are willing to assume to improve and maintain flood maps, identify the authorities that have been established under law to assume the responsibilities, and estimate the resources required to carryout the functions.”*

FEMA has incorporated pertinent aspects of the State plans into a Multi-Year Flood Hazard Implementation Plan (MHIP). The MHIP is a nationwide, 5-year, rolling plan for implementing Map Modernization.

The State business plans are intended to define the role each State is willing to take in the modernization and long-term maintenance of flood hazard maps. In these plans, FEMA has asked States to identify:

- *“the legal authority provided by your state legislature, or if none, what authorities are needed to assume a role.*
- *benefits your state will realize by taking a proactive role, not only in the modernization of flood maps, but also in the long-term maintenance of the maps.*
- *all State agencies that will be involved and the role each would play.*
- *the relationships between the State and local or regional agencies that are Cooperating Technical Partners with FEMA, or are actively involved in the modernization and maintenance of their flood maps.”*

FEMA guidance asks States to distinguish between activities directly related to the State Coordination of the NFIP (CAP) and activities related to flood map modernization and maintenance (CTP/MMMS). States are to identify other State agencies that have

expertise and responsibilities that can support the NFIP coordinating office. States are also asked to identify the federal agencies that provide service within the State that can be expected to partner in the modernization or maintenance of flood maps.

### Mapping Activities Associated with CTP & MMMS

The following table lists activities associated with flood map modernization. It indicates which activities FEMA has indicated are fundable under CTP/IDIQ and which are fundable under MMMS. The state can assume the responsibility for any or all of these activities. These activities are in addition to States’ traditional role under the CAP-SSSE (mapping needs assessment, mapping prioritization, community outreach, and local ordinance review).

Table 2 – Comprehensive List of Flood Map Modernization Activities

Activity	Management (Oversight)	CTP/IDIQ (Projects)
Activity 1A – Scoping	X	X
Activity 1B – Outreach	X	X
Activity 1C – Field Surveys and Reconnaissance		X
Activity 1D – Needs Assessment	X	X
Activity 2a – Topographic Data Inventory	X	X
Activity 2b–Topographic Data Procurement		X
Activity 3 – Independent QA/QC of Topographic Data	X	X
Activity 4 – Hydrologic Analyses		X
Activity 4A – Coastal Hazard Analysis		X
Activity 5 – Independent QA/QC of Hydrologic Analyses	X	X
Activity 5A – Independent QA/QC of Coastal Hazard Analysis	X	X
Activity 6 – Hydraulic Analyses		X
Activity 7 – Independent QA/QC of Hydraulic Analyses	X	X
Activity 8 – Floodplain Mapping (Detailed delineation and redelineation Using Effective Profiles)		X
Activity 8a – Floodplain Mapping (Approximate)		X

<b>Activity</b>	<b>Management (Oversight)</b>	<b>CTP/IDIQ (Projects)</b>
Activity 9– Independent QA/QC of Floodplain Mapping	X	X
Activity 10 – Base Map Acquisition and Preparation	X	X
Activity 10a – Digital Base Map Inventory	X	
Activity 10b – Digital Base Map Sharing	X	
Activity 11 – DFIRM Production (Non-Revised Areas)		X
Activity 11A – Independent QA/QC of DFIRM Production (Non-Revised Areas)	X	X
Activity 11b – DFIRM Maintenance	X	X
Activity 12 – Merging of Revised and Non-Revised Information		X
Activity 12A – Application of DFIRM Graphic Specifications		X
Activity 12B – Independent QA/QC of DFIRM Graphics	X	X
Activity 13 – Preparation and Issuance of Preliminary FIS and FIRM		X
Activity 14 – Post-Preliminary Processing		X
Activity 15 – Project Selection	X	
Activity 16 – Contract Negotiation/Management	X	
Activity 17 – Establishment of minimum standards	X	
Activity 18 – Technical Standards Agreement	X	
Activity 19 – Due Process Activities – Conduct Time & Cost Meeting and Final Meeting, process appeals	X	X
Activity 20 – LOMCs	X	X
Activity 21 – Information Technology Systems	X	
Activity 22 – Reengineer Business Processes	X	
Activity 23 – Report to Oversight Authorities	X	
Activity 24 - Archival of superceded FIRMs, FIS, background data, etc.	X	

States expressed some frustration that in some cases the State has conducted an activity using State resources, provided the information to an IDIQ contractor – who was then paid by FEMA to provide FEMA the information.

## **Becoming a CTP**

FEMA has established eligibility criteria, technical capabilities and evaluation criteria associated with State and local governments interested in becoming CTPs.

### Eligibility Criteria

Partnerships are established based on the following criteria:

- The potential CTP Partner must have existing processes and/or systems in place to support mapping or data collection activities that contribute to flood hazard identification. Non-Federal funding must support these processes and/or systems.
- The potential CTP Partner must have the capability to perform, implement, or contract 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 CTP Partner and the existing map production processes or systems the CTP Partner intends to use for CTP Program-related mapping activities.
- The potential CTP 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.
- The potential CTP Partner should demonstrate its ability to leverage funding received from FEMA. The National Goal for leverage is 20 percent. However, the more funding a CTP Partner is able to leverage may improve their probability of increases in funding from FEMA for current and future mapping activities.

CTP Partners that receive funding from FEMA through a Cooperative Agreement must be able to perform the financial management activities required in the Cooperative Agreement (i.e., account for Federal funds, prepare financial reports). At a minimum, FEMA requires that a financial status report be provided quarterly. To assist CTP Partners with meeting this requirement, FEMA uses the FF 20-10 or the SF 269. The reports should be submitted to FEMA Regional CTP Coordinators. FEMA Regional Offices will assist CTP Partners with these financial management activities as necessary. FEMA will evaluate these criteria periodically and may further enhance the criteria in the future.

### Technical Capabilities

In addition to the eligibility criteria described above, a potential CTP 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 CTP 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 Mapping Activity Statement, 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 activities may be cancelled and future funding refused.

FEMA will base its evaluation of the CTP 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
- Ability to cooperate and coordinate with the staff of the following organizations during all phases of the mapping activity as needed: FEMA Regional Office, Risk Analysis Branch of the Mitigation Division in the FEMA Headquarters Office in Washington, DC, and, designated FEMA contractors.

## FLOOD MAP MODERNIZATION NATIONAL PERFORMANCE GOALS RELATED TO THE CTP PROGRAM

The Government Performance Results Act (GPRA) requires federal agencies to develop performance measures associated with their major programs. To that end, FEMA has developed annual targets for “Sub-Program Element Performance Measures” for Flood Map Modernization. Below are listings of performance measures published in FEMA’s MHIP.

Table 3 – Annual FEMA/DHS Targets for Sub-Program Performance Measures established for Flood Map Modernization – January 2004

Sub-Program Element Performance Measure(s)							
		2004	2005	2006	2007	2008	2009
1	Percentage of population that has digital GIS flood hazard data available on-line	20	50	65	75	85	100
2	Percentage of population that has adopted modernized GIS flood maps	10	20	35	50	70	90
3	Leveraged effort toward digital GIS flood hazard data	20	20	20	20	20	20
4	Percentage of Map Mod funding put through to CTPs	20	25	35	45	50	60

FEMA updates its Multi-Year Flood Hazard Implementation Plan (MHIP) twice a year. In the August 2004 MHIP (Version 0.5), performance measure #4 was changed – See Table 4 below.

Table 4 – Annual FEMA/DHS Targets for Sub-Program Performance Measures published in the August, 2004 Version 0.5 of the MHIP

Sub-Program Element Performance Measure(s)							
		2004	2005	2006	2007	2008	2009
1	Percentage of population that has digital GIS flood hazard data available on-line	20	50	65	75	85	97
2	Percentage of population that has adopted modernized GIS flood maps	10	20	35	50	70	90
3	Leveraged effort toward digital GIS flood hazard data	20	20	20	20	20	20
4	Percentage of Map Mod funding put through to CTPs	20	25	33*	33*	33*	33*

\* Note: These targets for FY06-FY09 depend upon the ability to develop State and local capability. These are significant assumptions. (These KPIs are consistent with FEMA FY 05 CTP guidance [accessed on August 20, 2006] however the asterisk note reads: “Percentages are subject to change pending further review.”)

Table 5 – Annual FEMA/DHS Targets for Sub-Program Performance Measures published in the June, 2005 Version 1.5 of the MHIP

Sub-Program Element Performance Measure(s)							
		2004	2005	2006	2007	2008	2009
1	Percentage of population that has digital GIS flood hazard data available on-line	20	50	65	75	85	97
2	Percentage of population that has adopted modernized GIS flood maps	10	20	35	50	70	90

Summary: The performance goals for CTP involvement for FY09 were initially set at 60%, were reduced to 33% in August, 2004. Though still listed as 33% in FEMA’s FY05 CTP Guidance posted on its web site – a KPI for CTP involvement was does not exist in its ***June 2005 Multi-Year Flood Hazard Implementation Plan***.

**PROCESS USED TO DETERMINE INCENTIVES & IMPEDIMENTS**

ASFPM developed a questionnaire with input from FEMA, the ASFPM Mapping and Engineering Standards Committee, the National Association of Stormwater and Floodplain Management Agencies (NASFMA) and FEMA’s National Service Provider (NSP). All State NFIP Coordinators were sent an email on May 25, 2005 that introduced the project and provided them with a link to an internet service that ASFPM used to post a questionnaire. A follow-up email was sent on July 10, 2005. A separate questionnaire tailored for local governments was sent to all existing CTPs on July 15, 2005.

**RESULTS**

State survey – 37 responses received.

The questionnaire asked States to identify tasks that are presently fully funded by FEMA to determine which components of Flood Map Modernization have the most significant CTP involvement.

**Activities where over 40% of respondents indicated FEMA was fully funding the activity:**

- DFIRM Production (Non-revised Areas) – 55%
- Floodplain Mapping (Detailed Riverine or Coastal Analysis) – 48%
- Floodplain Mapping (Refinement or Creation of Zone A) – 48%
- DFIRM Production (Merging Revised and Non-Revised Information) – 48%
- Pre-Scoping – 47%
- Scoping – 47%



Floodplain Mapping (Redelineation Using Effective Flood Profiles and Updated Topographic Data) – 45%  
Preliminary DFIRM and FIS Report Distribution – 45%  
Hydraulic Analyses – 41%  
Independent QA/QC of DFIRM Production (Non-Revised Areas) – 41%

### **Impediments and Incentives**

Respondents were asked two questions related to impediments and incentives and asked to indicate whether they Highly Agree, Somewhat Agree, No Opinion, Somewhat Disagree or Highly Disagree to a series of options associated with impediments and incentives. The options were numbered 5-1, so if the composite number for all the responses is 4.5 – most highly agreed or somewhat agreed. Following are the questions asked and the responses with the lowest composite numbers.

#### **What impediments are keeping your agency from participating more fully in Map Mod: 5 – Highly Agree to 1 – Highly Disagree**

Insufficient staff resources – 4.17  
Unable to hire additional staff due to uncertainty regarding continued funding – 4.17  
Funding for project not adequate to ensure minimum quality standards – 4.07  
Map Mod timelines are unrealistic – 4.07

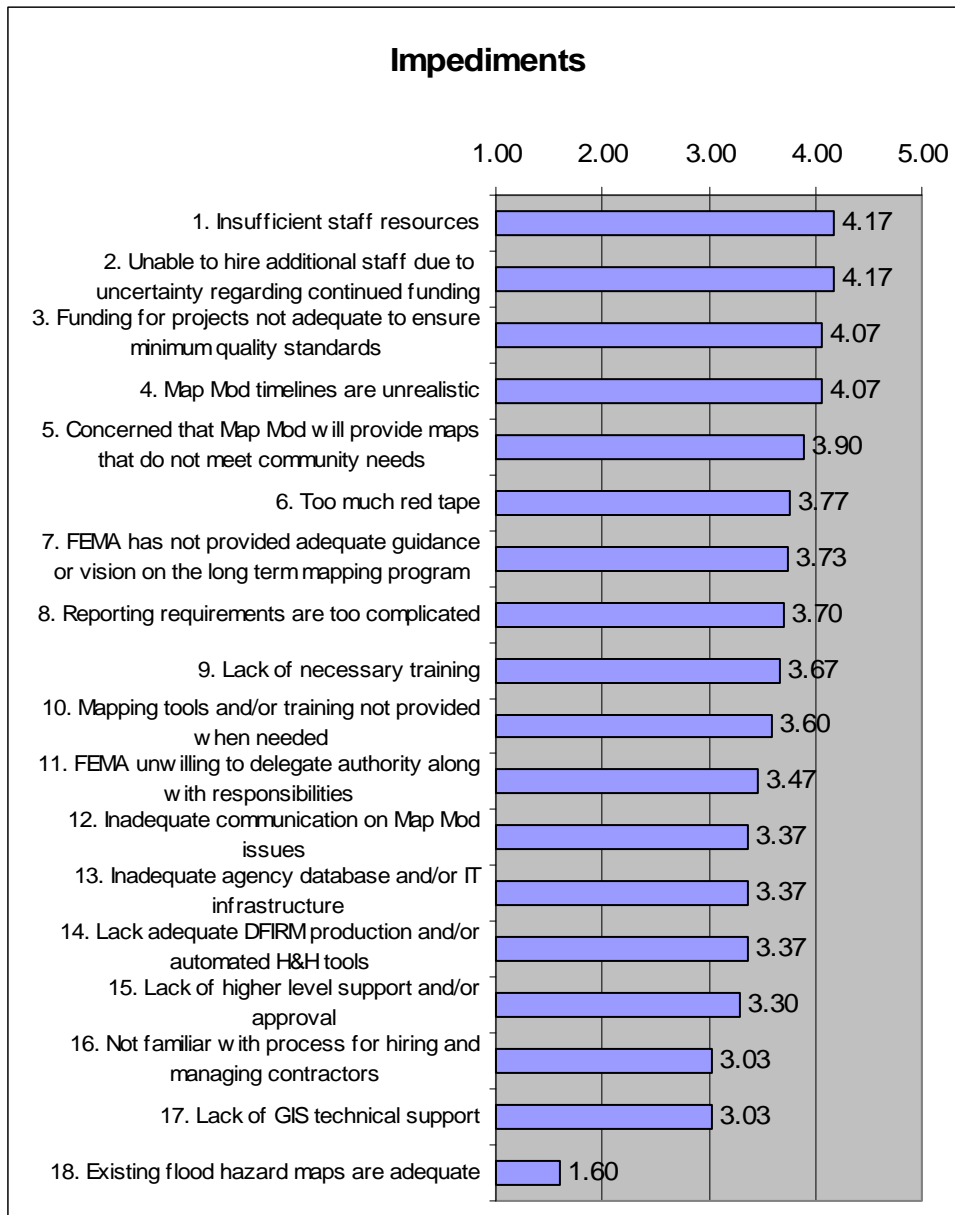
#### **What incentives would help increase your agency's participation in Map Mod: 5 – Highly Agree to 1 – Highly Disagree**

More realistic funding allocations to ensure maps produced will meet minimum standards (meet standards in MHIP Section 7) – 4.4  
More flexibility – less micromanagement – ability to shift funding between projects – 4.2  
Increased funding for project management – 4.07  
Improved communication on Map Mod issues – 4.03

Following are four graphs developed to help present the results. A full summary of the responses to open-ended questions are included in Appendices A and B.

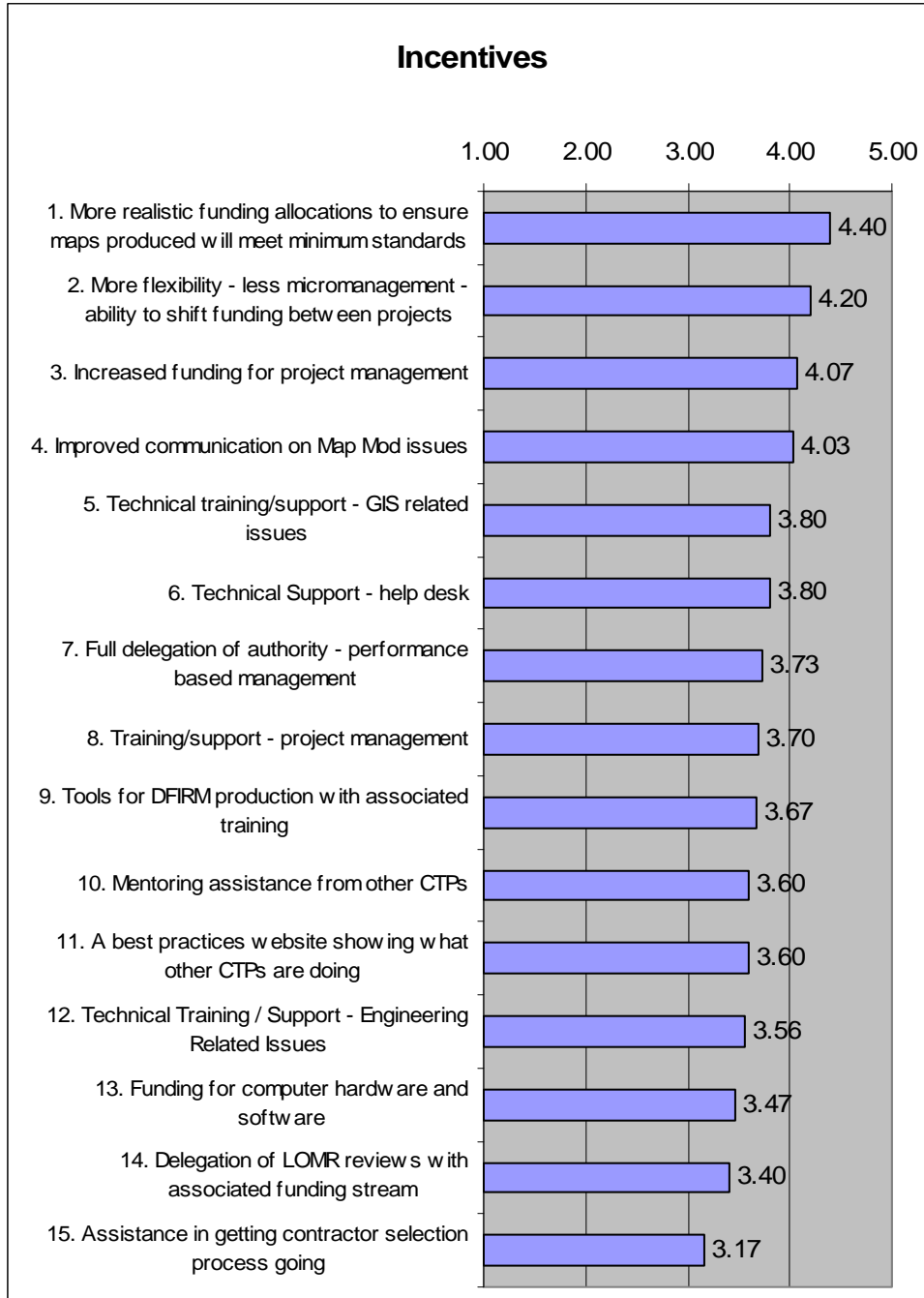
### Graph #1 - CTP Impediments – States

What impediments are keeping your agency from participating more fully in Map Mod?  
Please rate the following impediments from 5 – Highly Agree to 1 – Highly Disagree.



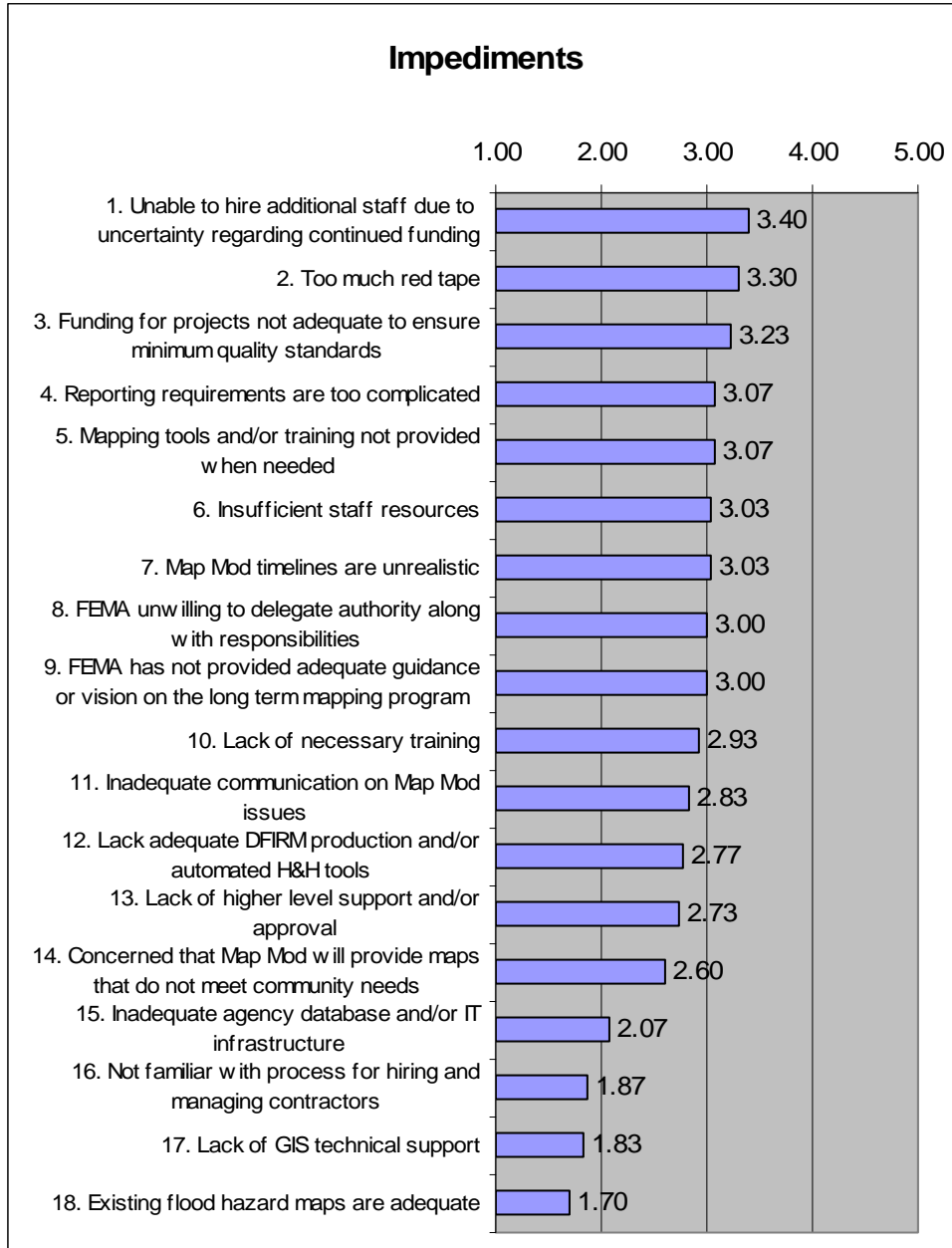
## Graph #2 CTP Incentives - States

What incentives would help increase your agency's participation in Map Mod? Please rate the following incentives from 5 – Highly Agree to 1 – Highly Disagree.



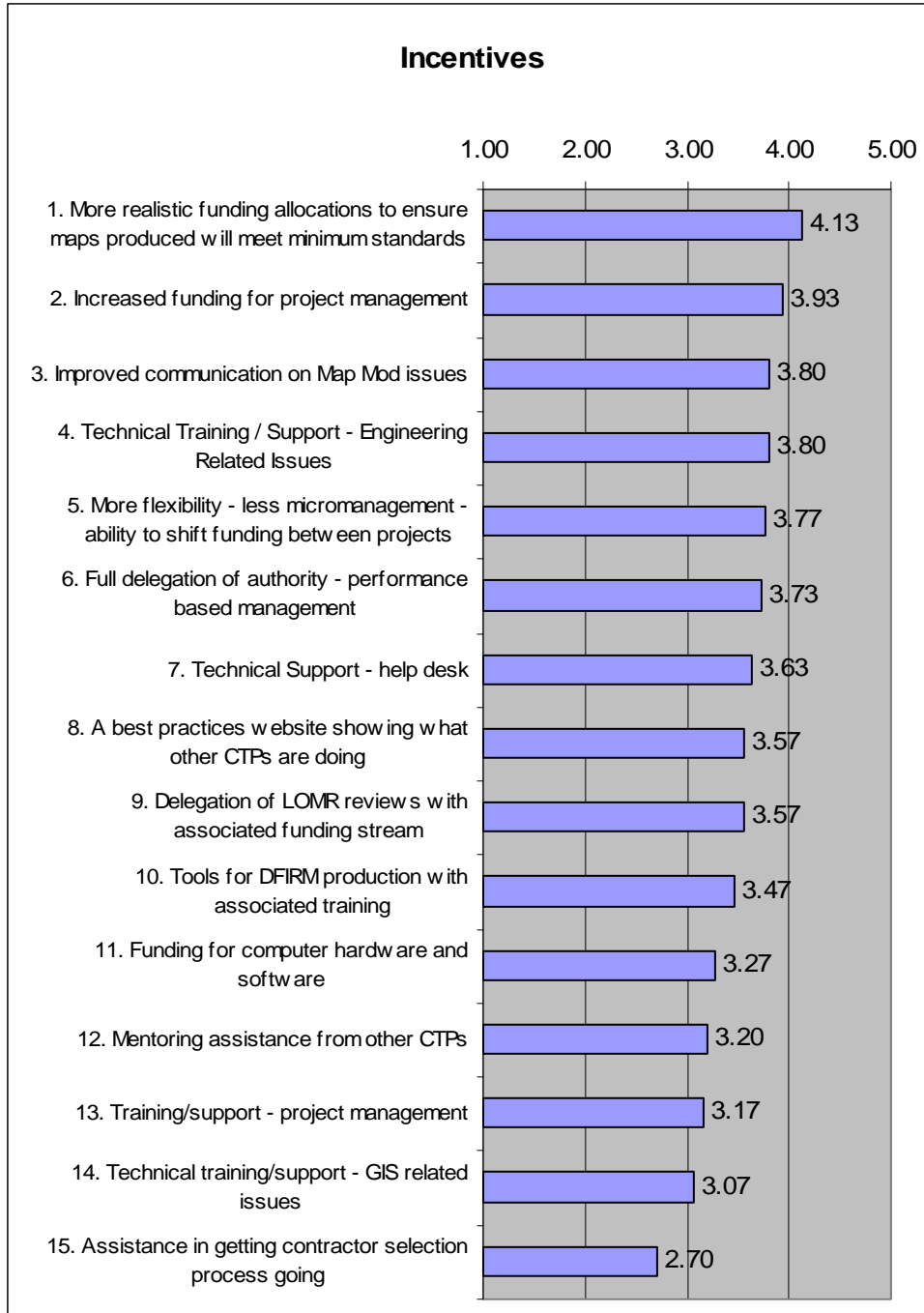
### Graph #3 - CTP Impediments – Non-State CTPs

What impediments are keeping your agency from participating more fully in Map Mod?  
Please rate the following impediments from 5 – Highly Agree to 1 – Highly Disagree.



### Graph #4 - CTP Incentives – Non-State CTPs

What incentives would help increase your agency’s participation in Map Mod? Please rate the following incentives from 5 – Highly Agree to 1 – Highly Disagree.



## State NFIP Coordinator Comments re: Impediments

4.1) Please describe any other impediments that are limiting your agency's participation in Map Mod	
<a href="#"><u>1.</u></a>	The main problem is that we are under tight deadlines for producing maps, but FEMA is not adequately providing resources in a timely manner. Therefore, our 'scorecard' looks terrible, but the problems are mainly external to our management of the program.
<a href="#"><u>2.</u></a>	State authorization of additional staff positions has not been possible; message at highest levels -- Commissioner's, Governor not there to support MMMS State staff.
<a href="#"><u>3.</u></a>	No long term vision is communicated. Inhibits the ability to build a ground swell of support.
<a href="#"><u>4.</u></a>	Insufficient State and Federal funding to fully support NFIP requirements.
<a href="#"><u>5.</u></a>	State does not want full authority of mapping. This is a FEMA responsibility.
<a href="#"><u>6.</u></a>	1. The Maine Floodplain Management Program has experienced difficulty working with Region I in an effort to become a CTP, even though many other States have become CTPs. We will continue to work toward this goal. 2. Reporting red tape: Plan updates, grant applications, and amendments, budget preparations, quarterly strategic budgeting activity reports, annual progress reports, extensive scoping reports to read.
<a href="#"><u>7.</u></a>	We remain concerned that the lack of financial support will result in inadequate digital maps which will endanger political support for Map Mod.
<a href="#"><u>8.</u></a>	Inadequate funding for riverine and coastal restudies that improve map accuracies by generating reliable inundation areas with current topographic data. Limited flexibility of allowable delineation areas impedes the State's ability to interject it's complimentary flood hazard mapping programs such as channel migration zones and erosion areas into Map Modernization.
<a href="#"><u>9.</u></a>	Tools provided by the NSP seem to cause more problems than they solve, even when used by the NSP staff. Without any training on the tools, the requirement that they must be used, and the knowledge that they - so far - seem shoddy at best, it is stressful and time-consuming to use them in the already vague processes.
<a href="#"><u>10.</u></a>	state funding cutbacks and hiring freezes. FEMA RED TAPE!!!
<a href="#"><u>11.</u></a>	Basic mission and goals are in direction somewhat broader than producing maps. The hazard identification is just one piece of a mission to protect the resources of floodplains in addition to reducing flood damage. Maps are just part of the tools and strategies.
<a href="#"><u>12.</u></a>	Delay in release of Map Mod consistent and comprehensive data standards. Inconsistency in the application of local leverage guidelines. Rigidity in County sequencing implementation.
<a href="#"><u>13.</u></a>	The DFIRM tools are being launched through CITRIX on the web. I have attempted to access these tools with very little success. Also, I attended training at EMI on these tools, and the presenters were unable to consistently access the tools. Web based tools have not proven to be reliable up to this point. FEMA is strongly suggesting that the tools be utilized, but as a CTP, I'm reluctant to work in an unreliable environment. If I can't access the tools for days at a time, which has happened, I'm stuck sitting and waiting to be able to finish my project.
<a href="#"><u>14.</u></a>	With the type of products that are being produced (i.e., digitizing existing coverages), there is not much incentive to have a greater role in Map-Mod. I expect there will be a great deal criticism regarding the mapping products resulting from Map-Mod and would prefer it not be aimed at this Department.

## DISCUSSION

The FEMA Regional Offices are directly responsible for the implementation of Flood Map Modernization. The mechanisms available to them include:

- Indefinite Delivery Indefinite Quantity (IDIQ) contracts – Each region establishes contracts with several engineering consulting firms for flood map production. Once the contracts have been established, task orders are developed for specific projects and the IDIQ contractor provides a cost estimate to complete the work.
- Cooperating Technical Partner (CTP) Cooperative Agreements – Regional offices can also develop cooperative agreements with State and local governments and universities for flood map production.
- Interagency Agreement (IAs) – FEMA regional offices can also develop cooperative agreements with other federal agencies for flood map production.

Flood Map Modernization has very aggressive timelines for implementation. The performance of each FEMA Regional Office is measured primarily against KPIs 1 and 2.

KPI 1: Population with digital GIS flood data available online.

KPI 2: Population with adopted flood maps that meet quality standards.

KPI 4: Percentage of funding that goes through CTPs – This performance measure has been deemphasized by FEMA headquarters. Initially, the ultimate goal for this KPI was 60%. It was later reduced to 33% and in the latest release of the MHIP KPI 4 was no longer included in the listing of key performance indicators.

Several States indicated in their responses that they were interested in becoming CTPs but have been unsuccessful in reaching agreement with the FEMA Regional Office. Due to the pressures associated with meeting the KPI 1 and KPI 2 performance measures associated with Flood Map Modernization, some FEMA Regional Offices are opting to use IDIQ contracts when States have expressed a willingness to take on more responsibility. It appears the reasons for opting to use IDIQ contracts are concerns that the State will not be able to meet the aggressive Flood Map Modernization time schedule or that the State does not have properly credentialed staff to oversee technical contracts. Some FEMA Regional Office staff feels that if States hire contractors to do the work that it adds another layer of oversight and costs to the flood map production process.

## **RECOMMENDATIONS:**

1. Provide written feedback to States on their State Business Plans. Several States were frustrated that they have requested to become a CTP and have gotten no response.
2. Provide directions to the FEMA Regional Offices reinforcing the concept that preference should be given to CTP agreements over IDIQ contracts. While the CTP guidance indicates that preference will be given to CTP agreements over IDIQ contracts, the performance measures do not.
3. Reinstate the 60% goal in KPI 4. Reducing this CTP KPI from 60% to 33%, makes it appear that Building State Capacity for floodplain mapping and floodplain management is not a high FEMA priority.