



FEMA Funding for Flood Map Modernization

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Summary

For FY2009, President Bush requested \$151 million to fully implement the Federal Emergency Management Agency (FEMA) Flood Map Modernization (MapMod) Initiative (FMMI) and to fund the post-FMMI MapMod program. FEMA introduced the FMMI in 1997 as a strategic plan to convert paper flood insurance rate maps (FIRMs) to digital electronic format, or DFIRMs. DFIRMs contain more accurate spatial measurements and digital data associated with flood hazards. DFIRMs are developed with an automated geographic information system (GIS) that facilitates mandatory periodic updating of flood maps and assists in determining flood insurance risk. In FY2000, Congress appropriated \$5 million for a Flood Map Modernization Fund (FMMF) to administer the FMMI. Regular appropriations for FMMI began in FY2003 under an independent FEMA. In FY2004, the FMMI was funded by Department of Homeland Security (DHS) appropriations. With FY2009 appropriations of \$220 million, Congress has funded a total of \$1.4 billion for FMMI and Map Mod. Congress also approved supplemental spending authority for FMMI offset by flood map service fees.

This report will be updated as events warrant.

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FY2009 Funding for the Flood Map Modernization Program

Some in Congress have been concerned about FEMA's inability to perform timely five-year (digital) updates of flood maps in National Flood Insurance Program (NFIP) communities.¹ For FY2009, President Bush requested \$151 million to complete the Flood Map Modernization Initiative (FMMI) and to fund the ongoing flood map modernization program (MapMod). The request is \$73 million less than the FY2008 appropriation. However, still recovering from historic coastal and riverine flooding during the 2005 hurricane season, President Bush's priorities for FMMI for FY2009 included \$90 million for better maps of coastal flood hazards and areas around flood protection structures (levees) and \$30 million for improving storm surge models to more accurately determine potential extent of coastal flooding hazards (Table 1).²

Table 1. President's Funding Requests and Appropriations for FMMF, Including the FMMI and Map Mod, FY2003-FY2009

(\$ millions)

	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	FMMI \$Total
Request	\$300.0	\$200.0	\$200.0	\$200.1	\$198.9	\$195.9	\$151.0	\$1,445.9
House	\$200.0	\$200.0	\$150.0	\$200.0	\$198.9	\$230.0	\$220.0	\$1,398.9
Senate	\$100.0	\$200.0	\$200.0	\$200.0	\$198.9	\$200.0	\$185.0	\$1,283.9
Conf.	\$150.0	\$200.0	\$200.0	\$200.0	\$198.9	\$215.0	\$220.0	\$1,383.9
Enacted	\$149.0	\$198.8	\$199.8	\$206.8	\$202.1	\$223.9	\$220.0	\$1,400.4

Source: Compiled by CRS from FEMA's annual budget justifications. Annual funding from House Appropriations Committee, Senate Appropriations Committee, and conference committee reports on annual VA, HUD, and Independent Agencies Appropriations for FY2003 and DHS Appropriations FY2004-0-FY2009.

Notes: Congress authorized appropriations from FY2003-FY2008 for the FMMI. The FMMF funds more than just the FMMI. Enacted figures for FY2006, FY2007, and FY2008 are total FMMF funding that includes employee salaries and benefits and other administrative costs which are limited to no more than 3% of annual FMMF appropriations. These figures also reflect all rescissions in FEMA's budget. Thus, funding for FMMI/Map Mod activities for FY2006 is estimated at \$204.7 million, \$198.9 million for FY2007, and \$217.5 million for FY2008. For FY2009, approximately \$144.4 million was requested and \$213.4 million funded for continuing post-FMMI/Map Mod activities.

FEMA officials have apprised lawmakers that the FY2009 budget decrease is somewhat misleading because MapMod costs are expected to be leveraged to a greater degree with other federal agencies, state and local governments, and private stakeholders, otherwise known as FEMA Cooperating Technical Partners.³

¹ As required by §575 of P.L. 103-325, the 1994 National Flood Insurance Program Reform Act (NFIPRA).

² FEMA, Flood Map Modernization Fund, Fiscal Year 2009, Congressional Budget Submission, "Budget Request and Supporting Information, Appropriations Overview," pp. FEMA-FMMI-1–FEMA-FMMI-22, February 2008.

³ FEMA, Flood Map Modernization Fund, Fiscal Year 2009. See also FEMA, NFIP, "CTP Frequently Asked Questions," at [http://www.fema.gov/plan/prevent/fhm/ctp_qa1.shtm].

A Brief Review of FMMI Budget Authority

In his FY2003 budget, President Bush requested \$300 million for the FMMF and for FEMA to implement the FMMI and fund associated MapMod activities.⁴ The FY2003 funding request for the FMMF was the last one transmitted to the House Department of Veterans' Affairs, HUD, and Independent Agencies Appropriations Subcommittee which then had funding jurisdiction for FEMA. Since 2004, funding for the FMMI has been recommended by the House Appropriations Subcommittee on DHS. The President's request for the FMMI has averaged about \$200 million annually since FY2004 through FY2007 (**Table 1**). For a summary of FMMI spending authority prior to appropriations (FY2000-FY2002), see **Appendix B**.

The President's Budget Request

For FY2003, President Bush proposed a five-year spending plan for the FMMI as part of a government-wide initiative to implement cost-effective disaster prevention strategies. It stated that many of the FEMA flood maps were "out-of-date and inaccurate," and that "inadequate funding hinders the [flood map] program."⁵ It continued that "focusing flood reduction efforts on identifying the areas at risk for flooding and steering development away from those areas ... [is] a less-costly, long-term approach to [flood] mitigation," and that "... modernizing flood maps would be critical to that effort."⁶ Additional spending authority of \$58.5 million was requested by President Bush for FMMI he proposed to be offset with a federal Flood Policy Fee (FPF) levied on mortgage lenders. He justified that the anticipated collections of a FPF for FY2004-FY2007 could provide the balance of funding needed to complete the FMMI by FY2008. Had Congress authorized FPFs in FY2003, the President would have made an initial down payment of almost \$359 million, or about 48%, of the estimated incremental costs of FMMI implementation.⁷

Congressional Appropriations

In FY2003, Congress designated the FMMF to be the source of funding for all non-emergency MapMod activities.⁸ Congress appropriated \$150 million for the FMMF, or half of President's request (**Table 1**). Congress asserted that it was a reasonable appropriation given its five-year commitment to fund the FMMI. Between FY2004 and FY2007, appropriations for FMMI tracked with Administration requests. For FY2006, in addition to his regular funding request for the FMMF, the President requested supplemental FMMI spending authority to be offset by flood map service fees collected for commercial uses of DFIRMS, professional licenses, and printed and compact disk-based DFIRMS, which Congress approved.⁹ FY2007 funding levels for the FMMF were about \$4 million less than those of FY2006.

⁴ For FY2003, President Bush also requested \$50 million in spending authorized by the Stafford Act (42 U.S.C. 5121 et seq.) for conducting map modernization projects after presidentially declared flooding disasters.

⁵ Executive Office of the President, Office of Management and Budget, Fiscal Year 2003, Budget of the U.S. Government, "Federal Emergency Management Agency: Status Report on Selected Programs" (Washington, DC: GPO, 2002), pp. 315-318.

⁶ Id.

⁷ Fiscal Year 2003, Budget of the U.S. Government, "Federal Emergency Management Agency: The President's Proposal," pp. 318-322. Incremental costs for FMMI from FY2003 to 2007 were estimated to be around \$750 million.

⁸ The NFIF continued as a source of assistance for emergency flood map modernization needs.

⁹ A current schedule of fees is available at (continued...)

The DHS issued a stand-alone budget justification for FMMI for FY2008, noting that the initiative was winding down and MapMod would supplant the FMMI.¹⁰ In effect, the Administration requested a “last down payment” for FMMI of \$195.9 million, or about \$7.6 million less than \$203.5 million appropriated for FY2007 (**Table 1**). The President noted in his budget that despite the funding reduction, the request would account for new goals and priorities set forth in FEMA’s FMMI Mid-Course Adjustment (MCA) issued in response to Hurricane Katrina.¹¹ The President noted that if his FY2008 budget were approved, no additional funding for the FMMI would be required.¹² The FEMA announced that MapMod program would continue into a “post-FMMI phase” and, among its goals, develop a seamless “multi-purpose” national digital flood hazard database layer. Achieving that goal, FEMA officials asserted, would benefit future land-use and development planning, disaster mitigation planning, and homeland security.¹³

For FY2008, the Consolidated Appropriations Act, 2008 (Div. E, DHS) increased funding for the FMMF to \$223.9 million and authorized collection of supplemental monies from state and local governments. FEMA was directed to follow National Academy of Sciences’ Base Map Inputs for Floodplain Mapping (January 2007) recommendations on integrating geophysical data and imagery for flood risk assessment.¹⁴ Congress approved \$220 million for the FMMF in the Consolidated Security, Disaster Assistance, and Continuing Appropriations Act, P.L. 110-329, Div. D (through March 6, 2009).

Program Review

During FMMI implementation, two major program reviews were taken that ultimately changed the direction and goals of FEMA’s MapMod program.

Inspector General (IG) of DHS Review

In 2005, when it appeared that the costs of FMMI implementation were exceeding original estimates, Congress ordered the Inspector General (IG) of DHS to review FEMA’s management of the FMMI and MapMod program to determine whether funding for the nation’s investment in long-term flood map modernization was being obligated optimally.¹⁵ The outcome of the

(...continued)

[<http://msc.fema.gov/webapp/wcs/stores/servlet/info?storeId=10001&catalogId=10001&langId=-1&content=orderCost&title=Ordering%20and%20Cost#Prices>].

¹⁰ See Department of Homeland Security, FEMA, Flood Map Modernization Fund: Fiscal Year 2008, Congressional Justification, February 2007.

¹¹ See Department of Homeland Security, FEMA, Flood Map Modernization Mid-Course Adjustment, March 30, 2006, pp. I-x, 1-38, and Appendices A, B.

¹² For detailed estimates of the FY2008 request, see Department of Homeland Security: FEMA Flood Map Modernization Fund: Funding Schedule, Exhibit H, “PPA Budget Justifications [FEMA - FMMI - 13],” February 2007.

¹³ FEMA, Flood Map Modernization—Preparing for FY2009 and Beyond, June 1, 2007.

¹⁴ See U.S. Congress, Senate, Committee on Appropriations, Department of Homeland Security Appropriations Bill, 2008 to Accompany S. 1644 (S.Rept. 110-84), June 18, 2007, pp. 105-106.

¹⁵ See DHS, Office of the Inspector General, Office of Information Technology, Challenges in FEMA’s Flood Map Modernization Program, OIG-05-44, “Mapping Plans and Priorities,” Washington, DC, September 2005, p. 5. Congress also requested the Government Accountability Office (GAO) to perform a similar review. See General Accounting Office (GAO), Flood Map Modernization: Program Strategy Shows Promise, but Challenges Remain, GAO-04-417, March 2004.

departmental review was a Multi-Year Flood Hazard Identification Plan (MHIP) that would prioritize resources for five-year updates of flood maps annually.¹⁶ Individual projects would be ranked according to degree of flood hazard risk and potential for loss of life and damage. Resources would be allocated locally to meet the greatest financial needs for compliance with NFIP. Also, a new standard for DFIRMs was mandated that would account for geophysical processes that may have changed base flood elevations (BFEs) and flood zones depicted on earlier flood maps.¹⁷

FMMI Mid-Course Adjustment (MCA)

As a major policy shift, FEMA decided to forego wholesale conversion of existing FIRMs to DFIRMs and instead: (1) target federal resources to update flood maps where populations are most vulnerable to flood risk, using Census block-based data rather than county-wide flood maps; (2) ensure that standards for DFIRM accuracy apply to an emergency FHBM and a FHS in unmapped communities; and (3) tie flood risk analysis to length of “stream miles” (i.e., along riverbanks and U.S. coastal and Great Lake shores), focusing MapMod resources where flood hazards are most likely occur.

Looking Forward

With the FMMI now completed, the 111th Congress may consider the future direction and effectiveness of FEMA’s MapMod program. Proponents of MapMod are concerned that FEMA continues to be challenged with meeting schedules for rolling five-year flood map updates mandated by law; educating the public effectively about the program and its possible fiscal impacts on local communities; notifying authorities of intent to initiate flood map updates; and providing financial assistance for local authorities to comply with new NFIP flood map requirements that many stakeholders view as a “federal unfunded mandate.”

¹⁶ As stated in FEMA, NFIP, Multi-Year Flood Hazard Identification Plan (MHIP), MHIP Version 2.5, April 2007, available at [http://www.fema.gov/plan/prevent/fhm/dl_mhip.shtm#1].

¹⁷ FEMA, Flood Map Modernization—Preparing for FY2009 and Beyond: Integrated Flood Data Update, Risk Assessment, and Mitigation Planning, Draft Concept Paper, June 1, 2007.

Appendix A. Acronyms

BFE	Base Flood Elevation
CTP	Cooperative Technical Partners
DHS	Department Of Homeland Security
DFIRM	Digital Flood Insurance Map
DRF	Disaster Relief Fund (FEMA)
FIRM	Flood Insurance Rate Map
FHS	Flood Hazard Study
FIA	Flood Insurance Agency (HUD)
FEMA	Federal Emergency Management Agency
FHBM	Flood Hazard Boundary Map
FMAGP	Flood Map Assistance Grant Program (FEMA)
FMMF	Flood Map Modernization Fund
FMMI	Flood Map Modernization Initiative (FEMA)
FPF	Flood Policy Fee
GIS	Geographic Information System
HUD	Housing and Urban Development, Department of
MapMod	Flood Map Modernization Program (FEMA)
MCA	Mid-Course Correction (FMMI/FEMA)
MHIP	Multi-Year Flood Hazard Identification Program (FEMA)
NFIF	National Flood Insurance Fund (FMMI/FEMA)
NFIP	National Flood Insurance Program
NFIPA	National Flood Insurance Program Act (1968)

Appendix B. A Brief Overview of Early FMMI Budget Authority

In FY2000, Congress appropriated \$5 million to establish the Flood Map Modernization Fund (FMMF) as a dedicated source of spending authority to meet administrative obligations of the FMMI. **Table B-1** shows annual spending authority for combined emergency and non-emergency flood map modernization activities from FY2000 to FY2002.

Table B-1. FY2000-FY2002 FMMF Spending Authority

(\$ millions)

Source	FY2000 ^a	FY2001 ^b	FY2002 ^c
Request	\$5.0	\$32.7	\$32.0
House	\$5.0	\$30.0	\$65.0
Senate	\$0.0	\$12.0	\$7.0
Final ^d	\$5.0	\$32.7	\$32.0

Source: Request figures were compiled by CRS from FEMA's annual budget justifications. Spending authorization figures are from House Appropriations Committee, Senate Appropriations Committee, and conference committee reports on annual VA, HUD, and Independent Agencies Appropriations for FY2000-FY2002.

- The FY2000 request does not include spending authority of \$58.5 million proposed from mortgage transaction fees which Congress did not approve.
- For FY2001, the President requested collections of \$104.0 million in Flood Policy Fees (FPFs). Instead, Congress authorized \$30 million in disaster funds, and \$2.7 million was carried over from FY2000 for FMMI administrative costs.
- For FY2002, \$25 million in emergency funding was transferred to the FMMF from the NFIF. Another \$7 million was authorized for FMMI from "flood service fees" that were anticipated to be collected for FY2001-FY2002, and which were approved by Congress.
- The final amount for FY2000 of \$5 million was a congressional appropriation to establish the FMMF.

Under the 1968 National Flood Insurance Program Act (1968 NFIPA), Congress created a National Flood Insurance Fund (NFIF, 42 U.S.C., Ch. III § 4107) administered by the Flood Insurance Administration (FIA) of the Department of Housing and Urban Development (HUD). The FIA was responsible for surveying flood hazards areas and drafting paper flood insurance rate maps (FIRMS) that ranked associated insurance risks. When President Jimmy Carter created FEMA (Reorganization Plan No. 4 of 1978), responsibility for the flood map program and flood hazard studies (FHSs) authorized under the NFIF were transferred to the new agency. Other resources for flood mapping were allocated after a presidentially declared flood disaster emergency through FEMA's Disaster Relief Fund (DRF). The NFIF also provided resources for preliminary flood hazard boundary maps (FHBMs) in unmapped communities during the post-flood disaster "emergency phase" if local authorities opted to join the NFIP. FEMA saw expansion of NFIP membership as increasing the pool of future NFIF resources.

The Riegle Community Development and Regulatory Improvement Act of 1994 (P.L. 103-325) amended the NFIPA and required that flood-prone NFIP communities be eligible to receive the fullest amount of federal flood insurance coverage available. The act also authorized the Flood Mitigation Assistance Grant Program (FMAGP). FMAGP is a source of assistance for local non-

emergency and mitigative MapMod needs for various cities, towns, villages, and Metropolitan Sewerage Districts that were potentially subject to flooding to help them come into compliance with the NFIP. Demand for federal assistance grew on the part of communities to undertake non-emergency, preemptive map modernization activities, such as Flood Hazard Studies (FHSs) for developing DFIRMs.

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