



CRS Report for Congress

Flood Map Modernization Funding

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Summary

Congress appropriated \$5 million in FY2000 for a Flood Map Modernization Fund (FMMF), the eventual source of funding for the Federal Emergency Management Agency's (FEMA's) long-term effort to modernize the nation's flood map program. As part of the Flood Map Modernization Initiative (FMMI), FEMA has been converting paper flood insurance rate maps (FIRMs) to digital electronic format, or DFIRMs. DFIRMs contain more accurate spatial measurements and digital data associated with flood risk and are developed with a geographic information system (GIS). The GIS also facilitates periodic updating of flood maps, as required by Congress, and helps determine flood insurance rates. Many DFIRMs are now available over the Internet from FEMA. Initial FMMI funding was requested in the Veterans Administration, Housing and Urban Development (HUD), and Independent Agencies Appropriations Act of FY2002 (P.L. 107-73). However, regular annual appropriations did not begin until FY2003. Since FY2004, Department of Homeland Security appropriations for FEMA have funded FMMI. To date, more than \$800 million has been provided. Congress has also approved supplemental spending authority for the FMMI that is offset by internally collected flood-map-related service fees. This report will be updated as events warrant.

Flood Insurance Rate Map Authorization Prior to the FMMI

Under the 1968 National Flood Insurance Program Act (1968 NFIPA),¹ Congress created a National Flood Insurance Fund (NFIF, 42 U.S.C., Ch. III § 4107) as a portion of total emergency monies available in FEMA's Disaster Relief Fund (DRF). The Flood Mitigation and Insurance Administration (FIMA) in FEMA had made DRF resources available for updating flood maps through the NFIF after a presidentially declared flood disaster emergency. The NFIF also covers the costs of producing flood hazard boundary maps (FHBMs) during the emergency phase of the program, when a community first joins

¹ P.L. 90-448, 82 Stat. 670.

the NFIP.² During this emergency phase, property owners can purchase limited amounts of federal flood insurance coverage. After a FEMA Flood Hazard Study (FHS) is conducted, initial Flood Hazard Boundary Maps can be updated to reflect actual flood risks and a FIRM can be published. When the FIRM is published, residents are eligible to purchase the full amount of coverage available under the regular program.

The 1968 NFIPA also authorized Flood Hazard Studies (FHSs) to assess flood risks in non-participating communities as a means for increasing membership in the NFIP.³ Federal grants have also been provided for non-emergency FHSs through certain state institutions to cities, towns, villages, and Metropolitan Sewerage Districts that want to become NFIP participants and that might be in imminent danger from flooding.⁴

Table 1 shows requested and congressional spending authority approved from FY2000 through FY2002 for the FEMA Flood Map Modernization Fund (FMMF) established in FY2000. These figures represent combined spending authority for emergency and non-emergency flood map modernization purposes.

Table 1. FY2000-FY2002 Spending Authority for the FMMF
(\$ million)

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	\$5.0	\$32.7	\$32.0

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

- The FY2000 request does not include spending authority of \$58.5 million proposed from mortgage transaction fees, which Congress did not approve.
- For FY2001, \$104.0 million in Flood Policy Fees (FPFs) was requested. Congress authorized \$30 million in disaster funds and \$2.7 million to be carried over from FY2000 for administrative costs.
- For FY2002, \$25 million was transferred to the FMMF from the DRF. Another \$7 million was authorized from flood service fees anticipated to be collected during FY2001-2002.

² Grants that are used for conducting Flood Hazard Studies (FHS) and developing preliminary flood insurance rate maps are authorized by the 1968 NFIPA (42 U.S.C. § 1360(f)(2)). See U.S. Congress, House, *Makings Appropriations for VA, HUD, and Independent Agencies, Fiscal Year 2000*, conference report to accompany H.R. 2684 (H.Rept. 106-379, October 13, 1999).

³ 42 U.S.C. § 4101c.

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

Presidential Budget Requests for FMMI

President Bush requested a total of \$300 million for the FMMI from FY2003 through FY2007 in his FY2003 budget submission for FEMA, which was transmitted to the House VA, HUD, and Independent Agencies Appropriations Subcommittee (Table 2).

Table 2. President's Funding Request and Appropriations for FMMI, FY2003-FY2008
(\$ millions)

Source	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008
President's Request	\$300.0	\$200.0	\$200.0	\$200.1	\$198.9	\$195.9
House	\$200.0	\$200.0	\$150.0	\$200.0	\$198.9	\$230.0
Senate	\$100.0	\$200.0	\$200.0	\$200.0	\$198.9	\$200.0
Conference	\$150.0	\$200.0	\$200.0	\$200.0	\$198.9	NA
Net Enacted ^a	\$149.0	\$198.8	\$199.8	\$206.8	\$203.5	NA

Source: Compiled by CRS from sources noted below.

- a. The FMMF funds more than just the FMMI. Net Enacted for FY2006, FY2007, and FY2008 figures are total FMMF funding, which includes employee salaries and benefits and other administrative costs that are limited to no more than 3% of annual FMMF appropriations. Funding for the FMMI was \$204.7 million for FY2006 and \$198.9 million for FY2007. For FY2008, \$191.1 million was requested.

The FY2003 budget indicated that FEMA would implement a five-year plan for the FMMI as part of a government-wide initiative to implement cost-effective disaster prevention strategies. It continued that "inadequate funding hinders the [flood map] program," and that "...maps are needed to assist rebuilding after disasters and to steer future development away from floodplains."⁵ It continued further 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,"⁶ and that "...modernizing flood maps would be critical to that effort."⁷ In addition, the request noted that many of the FEMA flood maps were "out-of-date and inaccurate."⁸

President Bush had also requested \$50 million in supplementary spending authority for FY2003 flood map modernization efforts. To offset that expenditure, he proposed a

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 *Fiscal Year 2003. Budget of the U.S. Government*, p. 316.

⁷ Ibid.

⁸ Ibid.

federal Flood Policy Fee (FPF) on commercial uses of DFIRMs to be paid by mortgage lenders. If Congress had approved FPFs, a total down payment for the FMMI of \$350 million would have been made, almost half of the estimated incremental costs of implementation.⁹ FPFs that were anticipated to be collected from FY2004-FY2007 would provide the balance.

The FMMI Under the Department of Homeland Security. On November 20, 2002, President Bush signed into law legislation creating the Department of Homeland Security (DHS).¹⁰ Under the law, FEMA relinquished its status as an independent agency and was subsumed under a newly established Emergency Preparedness and Response Directorate (EPRD) that reported directly to the DHS Secretary. The FY2003 request was the final budget submitted to the VA, HUD, and Independent Agencies Appropriations subcommittees for the FMMI. Funding was approved by Congress on February 2003 in P.L. 108-7, the Consolidated Appropriations Resolution, 2003. The first budget justification for the FMMI under the EPRD was submitted to Congress in March 2003, as part of the FY2004 DHS funding request. The justification noted that federal grant assistance would help allay some communities' concerns about costs incumbent on them for developing DFIRMs.

FMMI Program Review. Triggered by rising costs of program development that exceeded original estimates of FMMI implementation, in 2005, the Inspector General of DHS initiated a review of FEMA's management of the program.¹¹ A departmental (DHS) review was recommended to, among other things, assess whether the program's funding and the nation's investment in flood map modernization was being obligated optimally.¹² The result of the departmental review was the development of the *Multi-Year Identification Plan* that would prioritize flood map modernization resources annually, according to actual flood risk potential and imminent needs.¹³

Internet Access and Leveraging Costs of DFIRM Development. Notably, the FY2006 budget request for the FMMI indicated that funding for that fiscal year would help facilitate access to DFIRMs by making them available over the Internet from FEMA's website. The Administration stated that with Congress's approval, it might generate additional spending authority for the FMMI from map service fees collected for

⁹ *Fiscal Year 2003, Budget of the U.S. Government*, "Federal Emergency Management Agency: The President's Proposal," pp. 318-322. At the time, incremental costs for FMMI from FY2003-2007 were estimated to be \$750 million.

¹⁰ P.L. 107-296, 116 STAT. 2135.

¹¹ 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.

¹² Congress had also from time to time requested the Government Accountability Office (GAO) to perform a similar reviews. See for example, General Accounting Office (GAO), *Flood Map Modernization: Program Strategy Shows Promise, but Challenges Remain* [GAO-04-417], March 2004.

¹³ FEMA, National Flood Insurance Program, *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].

commercial uses of DFIRMS, sale of professional licenses, public downloads of DFIRMS, and CD-ROM sales.¹⁴

The FY2008 Request for FMMI. The DHS issued a stand-alone budget justification for the FMMI for FY2008¹⁵ that indicated that national implementation of the initiative was winding down. Accordingly, the Bush Administration requested a “last down payment” of \$195.9 million for the FMMI, which is \$7.6 million less than FY2007 appropriation of \$203.5 and \$10.9 million less than the FY2006 appropriation of \$206.8 million (see **Table 2**). In addition, the Administration affirmed a commitment to implement requirements of a newly prioritized FMMI¹⁶ and, despite a reduction of \$4.2 million for FY2008, asserted that the request accounted for new goals and priorities set forth in the May 2006 FMMI *Mid-Course Adjustment*.¹⁷ Also, as a major policy shift, FEMA decided to postpone a wholesale effort to convert the entire nation’s existing flood maps to DFIRMS, and instead would

- target federal resources to update maps for populations most vulnerable to flood risk, using census block-based data;
- ensure that new standards for accuracy of DFIRMS were applied for Flood Boundary Hazard Maps and FHSs in unmapped communities; and
- tie flood risk analysis to length of stream miles, rather than county-by-county, thereby focusing on risk where flooding is most likely occur (such as along riverbanks and U.S. coastal and Great Lake shores).

FEMA noted that the “adjusted” FMMI would be implemented by 2012 and that, if the President’s budget request for FY2008 were to be approved, no additional funding would be required.¹⁸ FEMA still has a goal of developing a comprehensive national digital flood hazard map database in the “post-FMMI implementation phase” (i.e., after 2012). Completion of that effort, FEMA asserts, would be an invaluable asset for guiding future land-use and development, emergency planning, and homeland security.¹⁹

FMMI Appropriations for FY2003-FY2008

Congress initiated regular appropriations for the FMMF beginning in FY2003, providing \$150 million for the FMMI, or half of the President’s request (**Table 2**). Since FY2004, appropriations have been similar to Administration requests of approximately \$200 million per year. Congress has not authorized emergency funding from the DRF for

¹⁴ A schedule of fees is available at [http://www.fema.gov/fhm/fm_fees.shtm].

¹⁵ Department of Homeland Security, Federal Emergency Management Agency, *Flood Map Modernization Fund: Fiscal Year 2008. Congressional Justification*, February 2007.

¹⁶ *Ibid.*

¹⁷ 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 2006.

¹⁸ Department of Homeland Security, FEMA, *Flood Map Modernization Mid-Course Adjustment*, March 30, 2006, pp. i-x, 1-38, and Appendices A, B.

¹⁹ *Ibid.*

flood map modernization activities since. Congress instead authorized limited spending authority for FEMA to conduct non-emergency, risk-averse studies for developing digital flood maps in unmapped, risk-prone communities. Spending authority for this was approved by Congress and offset with collection of flood map service fees;²⁰ use of FPFs was not approved. Supplementing annual congressional appropriations for the FMMI in this manner has become an accepted practice.²¹

FY2008 Appropriations. On June 8, 2007, the House Appropriations Committee reported H.R. 2638 (H.Rept. 110-181), Department of Homeland Security Appropriations for 2008. **Table 2** shows the House appropriation of \$230 million for FMMI for FY2008, which is \$34.1 million more than the FY2008 request and \$25.5 million more than FY2007 appropriation levels.²² On June 16, 2007, the Senate Appropriations Committee recommended \$200 million for FY2008 and directed FEMA to brief the committee, no later than October 31, 2007, about the progress of accurate flood plain mapping in the Gulf Coast region (S.Rept. 110-84, June 18, 2007, pp. 105-106). The recommendation of the Senate committee is \$4.1 million less than the request and \$3.5 million less than FY2007 appropriations.

Possible issues of Concern for the 110th Congress

Some budget managers in Congress have argued that, except for tallying new DFIRMs produced or updated annually, the effectiveness of the FMMI cannot be ascertained unless a flood disaster were to occur. Congress encouraged FEMA to find alternative measures of annual performance for the FMMI.²³ FEMA developed those measures and published them in the May 2006 FMMI *Mid-Course Adjustment*. Beyond evaluating annual performance measures, some lawmakers in the 110th Congress may want to consider how FEMA is implementing other recommendations in the *Mid-Course Adjustment*, including new priorities and goals.²⁴ Another factor to consider is FEMA's progress in remapping flood risks in areas damaged by Hurricane Katrina in 2005. Congress may also want to evaluate FEMA's ability to perform timely five-year (digital) updates of flood maps in NFIP communities.²⁵

²⁰ See "Federal Emergency Management Agency, Fee Schedule for Processing Requests for Map Changes, for Flood Insurance Study Backup Data, and for National Flood Insurance Map and Insurance Products," *Federal Register*, August 1, 2002: 49922-49925.

²¹ U.S. Congress, House Committee on Appropriations, *Omnibus Consolidated Appropriations Act for FY2003*, conference report to accompany H.J. Res. 2, (H.Rept. 108-10), Div. L, Homeland Security Act of 2002 Amendments, February 13, 2003, "FEMA Flood Map Modernization Fund," p. 1475.

²² House Appropriations, Department of Homeland Security Subcommittee recommendations for FY2008 (H.Rept. 110-181, pp. 109-110, June 5, 2007).

²³ See U.S. General Accounting Office, *Flood Insurance: Emerging Opportunity to Better Measure Certain Results of the National Flood Insurance Program*, [GAO-01-736T] May 16, 2001 (Washington, DC: 2001).

²⁴ These were incorporated in the latest *MHIP* (April 2007, version 2.7).

²⁵ As required by section 575 of P.L. 103-325, the 1994 National Flood Insurance Reform Act.