



FEMA

Semi-Annual Geospatial Data Coordination Report

May 29, 2013



Introduction

The Department of Homeland Security's (DHS's) Federal Emergency Management Agency (FEMA) has developed a Geospatial Data Coordination Policy that establishes the principles for coordinating, communicating, documenting, and reporting existing and proposed geospatial data collected, produced, or manipulated under FEMA's Risk MAP Program. The purpose is to facilitate data sharing and secondary data use. The primary goals of this policy are to ensure that the Risk MAP Program will:

1. protect its investments in geospatial data by requiring data to be documented, standard-compliant, and easily accessible to the general public when appropriate and release of the data does not pose a security risk;
2. maximize the use of partnerships, including Federal, State and local partners, for the acquisition and production of geospatial data;
3. minimize duplicative requests from Federal agencies to State and local data stewards;
4. recognize the value of existing coordination efforts at the State and local levels; and
5. comply with all Federal requirements for coordination and reporting of geospatial activities.

This report supports the objectives of the coordination policy and summarizes some of the key results of the policy implementation.

Summary

This report has three sections. The first is a table showing FEMA's imagery and elevation data acquisition activity per FEMA Region and per fiscal year of the Risk MAP program. The acquisition activity is of three types: FEMA spending, gathered leverage (reuse of existing data), and production leverage (partner resource contributions towards data production.)

The second section, "Gathered Leverage in Risk MAP Projects, Fiscal Year 2012", provides a detailed listing of Risk MAP project tasks funded in FY2012 utilizing gathered leverage. The section includes the leverage contributing partner and a valuation of the leveraged data.

The third section, "Elevation Data Sets Produced in Risk MAP, Fiscal Year 2012", provides Agency members of the National Digital Elevation Program (NDEP) and other potential users with a summary of FEMA's elevation data sets produced with FY2012 funding. "Produced in Risk MAP" means that FEMA provided at least part of the funding for the data production.

Orthophoto data used on the Risk MAP program is managed, distributed and archived by the USGS EROS Data Center.

Elevation data used on Risk MAP program is often available through the USGS, but the comprehensive archive is managed by the FEMA Engineering Library. Most of the data is available without restriction, but fees are usually charged for research and retrieval. Some partners who provide elevation data for FEMA projects restrict the redistribution of the data and FEMA does not make it available. Information on obtaining data from the FEMA Engineering Library is available at:

http://www.fema.gov/plan/prevent/fhm/st_order.shtm

This report is updated on a semi-annual basis occurring in the Spring and Fall.



Geospatial Data Usage in FEMA Flood Studies - FEMA Funding versus Leverage

Region	Source	Base Map Data				Elevation Data			
		FY 2009	FY 2010	FY 2011	FY 2012	FY 2009	FY 2010	FY 2011	FY 2012
1	FEMA budget	\$ 44,089	\$ 34,542	\$ 70,313	\$ 59,887	\$ 680,262	\$ 888,075	\$ 790,000	\$ 6,402
	Gathered Lev.	\$ 733,100	\$ 93,480			\$ 3,400	\$ 306,060	\$ 320,416	
	Production Lev.		\$ 23,900				\$ 138,620	\$ 307,084	
2	FEMA budget	\$ 258,446	\$ 64,646	\$ 27,266	\$ 26,899	\$ 1,133,327	\$ 665,070	\$ 1,010,000	\$ 182,992
	Gathered Lev.	\$ 288,923		\$183,100		\$ 40,505			
	Production Lev.	\$ 160,000				\$ 650,016			
3	FEMA budget	\$ 308,136	\$ 120,473	\$185,528	\$37,939	\$ 128,578	\$ 1,405,038	\$ 1,200,000	\$ 24,119
	Gathered Lev.	\$ 156,700	\$ 52,900			\$ 214,200			
	Production Lev.	\$ 2,935				\$ 740,950			
4	FEMA budget	\$ 317,364	\$ 150,467	\$173,184	\$65,334	\$ 1,498,014	\$ 7,661,773	\$ 3,400,000	\$ 860,701
	Gathered Lev.	\$ 2,350,042	\$ 424,700	\$185,025		\$ 4,398,672	\$ 1,420,968	\$ 2,653,946	
	Production Lev.	\$ 307,862				\$ 1,722,676	\$ 32,384	\$ 2,689	
5	FEMA budget	\$ 193,396	\$ 114,260	\$108,890	\$36,602	\$ 60,517	\$ 1,931,721	\$ 1,870,000	\$ 49,915
	Gathered Lev.	\$ 523,521	\$ 185,923	\$30,556	\$235,112	\$ 2,463,526	\$ 1,533,016	\$ 5,315,513	\$ 1,282,170
	Production Lev.	\$ 144,224	\$ 45,834	\$47,534		\$ 1,105,931	\$ 208,800	\$ 1,515,659	
6	FEMA budget	\$ 134,260	\$ 40,861	\$35,205	\$2,805	\$ 742,584	\$ 3,188,209	\$ 4,340,000	\$ 393,138
	Gathered Lev.	\$ 333,816		\$4,700		\$ 413,800			
	Production Lev.		\$ 3,717			\$ 237,800	\$ 5,837		
7	FEMA budget	\$ 140,927	\$ 35,055	\$126,192	\$26,017	\$ 867,853	\$ 1,282,326	\$ 1,830,000	\$ 9,360
	Gathered Lev.	\$ 1,337,012	\$ 734,250	\$398,810	\$75,400	\$ 2,736,184	\$ 549,600	\$ 793,800	\$ 479,000
	Production Lev.	\$ 91,562	\$ 10,760	\$5,460		\$ 1,430,545	\$ 459,670	\$ 756,250	
8	FEMA budget	\$ 87,064	\$ 77,179	\$46,469	\$32,239	\$ 483,992	\$ 1,043,986	\$ 1,570,000	\$ 77,078
	Gathered Lev.	\$ 103,500	\$ 5,100			\$ 538,895			
	Production Lev.	\$ 133,862				\$ 115,775			
9	FEMA budget	\$ 284,329	\$ 217,473	\$69,276	\$43,039	\$ 2,266,866	\$ 1,871,184	\$ 2,390,000	\$ 73,561
	Gathered Lev.	\$ 134,300	\$ 21,718	\$8,672		\$ 28,742	\$ 36,828		
	Production Lev.			\$3,000				\$ 24,000	
10	FEMA budget	\$ 135,624	\$ 196,991	\$92,975	\$25,451	\$ 383,541	\$ 921,081	\$ 1,600,000	\$ 84,293
	Gathered Lev.	\$ 96,719	\$ 94,332			\$ 894,730	\$ 190,354	\$ 212,350	\$ 192,778
	Production Lev.						\$ 168,000		
Nation	FEMA budget	\$ 1,903,635	\$ 1,051,947	\$935,298	\$356,212	\$ 8,245,534	\$ 20,858,463	\$ 20,000,000	\$ 1,761,559
	Gathered Lev.	\$ 6,057,633	\$ 1,612,403	\$810,863	\$310,512	\$ 11,732,654	\$ 4,036,826	\$ 9,296,025	\$ 1,953,948
	Production Lev.	\$ 840,445	\$ 84,211	\$55,994		\$ 6,003,693	\$ 1,013,311	\$ 2,605,682	

* Dollar values represent the total FEMA budget or value of Leverage, per region / per fiscal year / per data type (base map

In the columns immediately to the right of the dollar values are those FEMA budgets and Leverages expressed as a percentage of (FEMA budget + Leverage).

Empty cells indicate that no activity is reported.

FY12 is the last full reporting year. Budget and leverage data for FY13 is not complete as of the publication of this report.



Gathered Leverage in Risk MAP Projects, Fiscal Year 2012

Reg.	State	Case Number	Data Type	Leverage Contributing Partner	Leverage Funded	Leverage Dollar Value	Leverage Task Comments
5	MI	13-05-4239S	Base Map	USDA Farm Service Agency (FSA)	2012	\$12,500	
5	MI	13-05-4234S	Base Map	USDA Farm Service Agency (FSA)	2012	\$7,400	NAIP Imagery
5	MI	13-05-4234S	Elevation	U.S. Army Corps of Engineers, Detroit District	2012	\$14,800	Lake Michigan coastal LiDAR
5	MI	13-05-4235S	Base Map	USDA Farm Service Agency (FSA)	2012	\$7,100	NAIP Imagery
5	MI	13-05-4235S	Elevation	U.S. Army Corps of Engineers, Detroit District	2012	\$14,200	Lake Michigan coastal LiDAR
5	MI	13-05-4236S	Base Map	USDA Farm Service Agency (FSA)	2012	\$7,300	NAIP Imagery
5	MI	13-05-4236S	Elevation	U.S. Army Corps of Engineers, Detroit District	2012	\$14,600	Lake Michigan coastal LiDAR
5	MI	13-05-4237S	Base Map	USDA Farm Service Agency (FSA)	2012	\$7,300	NAIP Imagery
5	MI	13-05-4237S	Elevation	U.S. Army Corps of Engineers, Detroit District	2012	\$14,600	Lake Michigan coastal LiDAR
5	MI	13-05-4238S	Elevation	U.S. Army Corps of Engineers, Detroit District	2012	\$10,800	
5	MI	13-05-4239S	Elevation	U.S. Army Corps of Engineers, Detroit District	2012	\$5,000	
5	MI	13-05-4240S	Base Map	USDA Farm Service Agency (FSA)	2012	\$7,600	
5	MI	13-05-4243S	Elevation	U.S. Army Corps of Engineers, Detroit District	2012	\$107,800	Lake Michigan coastal LiDAR
5	MI	13-05-4241S	Base Map	USDA Farm Service Agency (FSA)	2012	\$15,700	
5	MI	13-05-4241S	Elevation	U.S. Army Corps of Engineers, Detroit District	2012	\$5,200	
5	MI	13-05-4242S	Base Map	USDA Farm Service Agency (FSA)	2012	\$19,600	NAIP imagery
5	MI	13-05-4242S	Elevation	U.S. Army Corps of Engineers, Detroit District	2012	\$39,200	Lake Michigan LiDAR imagery
5	MI	13-05-4243S	Base Map	USDA Farm Service Agency (FSA)	2012	\$53,900	NAIP imagery
5	MI	13-05-4240S	Elevation	U.S. Army Corps of Engineers, Detroit District	2012	\$2,400	



Reg.	State	Case Number	Data Type	Leverage Contributing Partner	Leverage Funded	Leverage Dollar Value	Leverage Task Comments
5	MI	13-05-4238S	Base Map	USDA Farm Service Agency (FSA)	2012	\$35,600	
5	WI	13-05-3721S	Elevation	Sheboygan County, WI	2004	\$214,000	[topo][dollars][Sheboygan_County]
5	WI	13-05-3721S	Elevation	Washington County, WI	2007	\$745,200	[topo][dollars][Washington_County]
5	WI	13-05-3721S	Elevation	Wisconsin Department of Commerce	2010	\$94,370	[topo][dollars][Milwaukee_County]
5	WI	13-05-3721S	Base Map	Wisconsin Regional Orthophoto Consortium (WROC)	2010	\$61,112	[base_map][dollars][Fond_du_Lac_County][Milwaukee_County][Ozaukee_County][Sheboygan_County]
7	IA	13-07-0038S	Elevation	Iowa Department of Natural Resources	2013	\$98,200	[GCQ][topo][SquareMile]
7	IA	13-07-0036S	Elevation	Iowa Department of Natural Resources	2013	\$114,600	[GCQ][topo][SquareMile]
7	IA	13-07-0037S	Elevation	Iowa Department of Natural Resources	2013	\$115,400	[GCQ][topo][SquareMile]
7	NE	12-07-3386S	Base Map	USDA Farm Service Agency (FSA)	2012	\$75,400	[GCQ][base_map][SquareMile]
7	NE	12-07-3386S	Elevation	Natural Resources Conservation Service	2012	\$150,800	[GCQ][topo][SquareMile] Request 121751
10	WA	11-10-0395S	Elevation	Thurston County, WA	2010	\$192,778	This is for Thurston County, WA [GCQ]



Elevation Data Sets Produced in Risk MAP, Fiscal Year 2012

Reg.	State	Case Number	MIP Proj Name	Year Collecte	Leverage Value	NDEP State-County	Status	Vertical Datum	Data Format	Collection Method	Use Constraints	Horizontal Posting	Vertical Accuracy	Lead Agency
2	NY	13-02-1231S	REG-Hudson_Hoosic (W)-FY12-02020003											
4	FL	13-04-1869S	REG-SW Florida Coastal Study FY12 (C) Sarastoa-Collier											
4	MS	13-04-2388S	REG-Middle Pearl-Strong Topo MS FY12 (T) 03180002 Rankin+			Unknown	In work	North American	Mass Points/Break Lines; DEM	LIDAR	No	1 meter		FEMA
4	SC	13-04-3150S	REG-Seneca R Watershed SC FY11 (W) 03060101 Anderson+			Unknown	In work	North American	Mass Points/Break Lines; Contours; DEM	LIDAR	No	1 meter	1 meter	FEMA
5	MI	13-05-4243S	RM-REG-FY12-MI-Mackinac County Lake Michigan Coastal Update-C		\$107,800									
5	WI	13-05-4197S	RM-REG-FY12-WI-Oconto County Lake Michigan Coastal Update-C			Unknown	In work	To be Determined	Mass Points/Variable Spacing	LIDAR	Yes, contact the lead	To be Determined		USACE
5	WI	13-05-2619S	RM-REG-FY12-WI-Door County Lake Michigan Coastal Update-C			Unknown	In work	To be Determined	Mass Points/Variable Spacing	LIDAR	Yes, contact the lead	To be Determined		USACE
5	WI	13-05-4198S	RM-REG-FY12-WI-Sheboygan County Lake Michigan Coastal Update-C			Unknown	In work	To be Determined	Mass Points/Variable Spacing	LIDAR	Yes, contact the lead	To be Determined		USACE
5	WI	13-05-4199S	RM-REG-FY12-Manitowoc County Lake Michigan Coastal Update-C			Unknown	In work	To be Determined	Mass Points/Variable Spacing	LIDAR	Yes, contact the lead	To be Determined		USACE
5	WI	13-05-4200S	RM-REG-FY12-WI-Racine County Lake Michigan Coastal Update-C			Unknown	In work	To be Determined	Mass Points/Variable Spacing	LIDAR	Yes, contact the lead	To be Determined		USACE
5	WI	13-05-4202S	RM-REG-FY12-WI-Kenosha County Lake Michigan Coastal Update-C			Unknown	In work	To be Determined	Mass Points/Variable Spacing	LIDAR	Yes, contact the lead	To be Determined		USACE
5	WI	13-05-4205S	RM-REG-FY12-WI-Milwaukee County Lake Michigan Coastal Update-C			Unknown	In work	To be Determined	Mass Points/Variable Spacing	LIDAR	Yes, contact the lead	To be Determined		USACE
5	WI	13-05-4206S	RM-REG-FY12-WI-Kewaunee County Lake Michigan Coastal Update-C			Unknown	In work	To be Determined	Mass Points/Variable Spacing	LIDAR	Yes, contact the lead	To be Determined		USACE
5	WI	13-05-2177S	RM-REG-FY12-WI-Brown County Lake Michigan Coastal Update-C			Unknown	In work	To be Determined	Mass Points/Variable Spacing	LIDAR	Yes, contact the lead	To be Determined		USACE
6	TX	12-06-0897S	(REG) Middle Brazos-Palo Pinto TX HUC 12060201 (FY11 Watershed)			Texas	Proposed	North American	Mass Points/Variable Spacing	LIDAR	To be determined	To be Determined		FEMA
7	KS	13-07-0316S	Lower Kansas HUC 10270104 - FY12 (O-W)-REG			Unknown	Complete	North American	DEM	LIDAR	No	1.4m	0.125 meters	FEMA



Reg.	State	Case Number	MIP Proj Name	Year Collecte	Leverage Value	NDEP State-County	Status	Vertical Datum	Data Format	Collection Method	Use Constraints	Horizontal Posting	Vertical Accuracy	Lead Agency
8	SD	12-08-0739S	REG-Lewis and Clark; Big Sioux Watershed (Union County). W-FY12 HUC 10170101; 10170203											
10	OR	13-10-0371S	LiDAR- OR; Clackamas Co., Multnomah County- FY12 (E)											
10	WA	11-10-0395S	REG-WA-Deschutes FY12 (WO) HUC17110016		\$192,778									
10	WA	11-10-0425S	REG-WA-Island County Coastal-FY12 (C)			Island, Washington	Complete	North American	Contours; DEM	LIDAR	No	1 meter	0.3 meters	FEMA



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