



Fire Program Analysis – Preparedness Module

For Reporting Period: October 1, 2004 through December 31, 2004

Scope and Status

The Fire Program Analysis (FPA) project is developing an automated system for wildland fire planning and budgeting. Phase 1, the Preparedness Module (PM) will eventually replace the budget systems currently used by the five federal wildland fire management agencies for initial response resource funding.

- The FPA-PM will model how cost-effective initial response organizations best meet fire management objectives. Initial response includes initial attack and wildland fire use.
- The FPA-PM system will use an optimization approach to maximize effectiveness for a range of cost levels.

The FPA-PM application continues to be modified and improved with new version releases scheduled. Beta testing for version 1.1 began on December 15, 2004 and includes the wildland fire use functionality in the optimization model.

Simultaneously, scoping continues for FPA Phase 2. The FPA Steering Committee and Core Team are beginning to work toward building a Phase 2 framework.

Key Tasks, Milestones and Accomplishments

FPA-PM v 1.0 released on time, October 1, 2004 – Version 1.0 of FPA's Preparedness Module is the first version of an interagency wildland fire planning and budgeting system that will eventually replace current systems used for wildland fire initial response resources.

Beta testing for FPA-PM v1.1 began on December 15, 2004 – Version 1.1 includes incorporating the functionality of wildland fire use into optimization and a modification to the optimization formulation for better efficiency. V1.1 is scheduled to be released on or about January 15, 2005.

Established Helpdesk & User Support – The FPA Help Desk is up and running. It is being hosted by the Forest Service's National Information Systems Team located at NIFC.

FPA Training – Over 204 students have been trained in Historic Analysis and 234 in the Preparedness Module. These students represent about one third of the nation's fire planning units (FPUs) and will use FPA-PM outcomes for Fiscal Year (FY) 2007 budget formulation. The students represent federal, state and tribal governments. The FPUs that did not receive training in 2004 will attend courses planned for March through November, 2005, in preparation for the FY 2008 budget submission.

Conceptual National Transition Plan –A conceptual national transition plan has been drafted by the FPA Steering Committee and reviewed by the Fire Directors. This plan provides an

overview that tracks eight action items through FY 05-09. These items include budget allocation and formulation, implementation activities at various organizational levels, and a schedule of Phase 2 development activities. The conceptual transition plan is the foundation of a living document that will evolve into the national transition plan. It will be released following briefings at the Departmental level (Agriculture and Interior). The national transition plan will be the basis for the individual Fire Planning Unit (FPU) transition plans, developed and managed by the line officers and fire staffs within each FPU.

Budget Formulation and Certification of the FPA-PM Process –The budget formulation for FY07 is planned to be a combination of FPA-PM analysis outcomes and existing budget formulation systems. The amount of time available for the trained FPUs to complete the analysis and validate the outcomes is very restrictive and will be a factor affecting completion. The quality of these initial efforts will also be affected by the continuous flow of software improvements.

FPA Phase 2 scoping continues – The FPA Steering Committee has defined some recommendations and sideboards for the Core team to address, expand and develop business requirements for Phase 2. The scoping effort is expected to be extensive since phase 2 will include the development of modules for large fire, extended attack, fuels, prevention and rehabilitation along with the interface with Phase 1. Initial scoping efforts have provided some insight into Phase 2 requirements but more needs to be done. Future scoping will include using subject matter experts to assist in defining business requirements. The goal is to have the scoping phase completed by early March 2005.

Phase 2 Prototypes identified – Six prototype Fire Planning Units (FPUs) have been identified to assist in designing and testing components of Phase 2. These prototype areas will test the software and provide feedback and suggestions about Phase 2 development and implementation. Three of the prototypes were used in Phase 1, Central Oregon, Southern Sierra, and Alaska. The new proposed prototypes are: Color Country, Utah, Great Falls, Montana, and Central Florida. These prototypes have existing wildland fire collaborative working groups and two overlap the Landfire prototype areas.

Communications – An interagency memo went out to line officers and agency administrators providing an update on training, guidance for line officers, and general information about the conceptual transition plan. An error was discovered regarding the training information link. The correct url is: <u>http://fpa.nifc.gov/Training.htm</u>.

Early in 2005 an orientation/information package for line officers will be developed to compile relevant information in one resource publication. Distribution will be extensive throughout all levels of the participating land management agencies.

Changes in Team Membership - Wally Josephson from The Department of Interior's Office of Wildland Fire and Coordination is leaving Washington, D.C. to join FPA as the new Business Lead beginning in January, 2005.

Craig Thompson, from the National Park Service's Delaware Water Gap National Recreation Area, is the FPA Project's new Geographic Information System Coordinator.

Jim Rosetti, Bureau of Land Management FPA Implementation Coordination Group representative has retired.

Key Communications Events

October 21	National Fire and Aviation Executive Board briefing, Boise, ID
November 1	National Park Service (NPS) fuels meeting, Nebraska City, NE
November 2	Forest Service Fire Directors meeting, San Diego, CA
November 3	Forest Service Economists meeting, Fort Collins, CO
November 4	National Predictive Services fall meeting, Portland OR
November 16	Forest Service National Operations meeting, San Diego, CA
November 18	National Park Service Pacific West Regional Fire Management Officer
	meeting, Portland, OR
December 6	Last training in 2004 for FPA-PM held, Boise, ID
	(additional training will resume in March 2005)
December 6	Washington D.C. briefing for the Department's of Agriculture and Interior
December 7	BLM Fire Leadership Team meeting, Cheyenne, WY
December 13	Steering Committee/Core Team workshop on Phase 2 scoping, Boise, ID
December 14	National Fire and Aviation Executive Board briefing, Boise, ID
December 8 -	NPS Fire Management Leadership Board briefing, Boise, ID

Project Progress

Project progress is measured in terms of cost and schedule variance using "Earned Value Management" (EVM) processes. EVM is required by OMB and the departments as the standard method for reporting progress for complex projects.

FPA Earned Value Summary		
1/15/2005		
Budget At Completion	BAC	\$ 11,879,998
% Complete	%Comp	87%
Actual Cost (Sum of Invoices)	AC	\$ 10,664,171
Planned Value	PV	\$ 10,314,644
Earned Value	EV = BAC * %Comp	\$ 10,315,841
Cost Variance	CV = EV - AC	\$ (348,330)
Cost Performance Index	CPI = EV / AC	0.97
Schedule Variance	SV = EV - PV	\$ 1,197
Schedule Performance Index	SPI = PV / PV	1.00
Estimate at Completion	EAC = AC / CPI	\$ 12,281,144
Variance at Completion	VAC = BAC / EAC	0.97

The FPA-PM approved OMB baseline budget is 11,879,998. As of 12/31/04 we have been invoiced for 10,664,171. Our Cost Performance Index is 0.97, which means we are 3% over budget. The Schedule Performance Index is 1.00, which means our spending is keeping pace with our planned spending. The Variance at Completion is 0.97, which means we expect to be 3% over budget when we complete the project.

Project Cost Report

4 Actual Performance and Variance from OMB approved baseline (as of December 30, 2004): OMB Approved Baseline Actual												
	Schee		Duration		Sch							
				Planned Cost (Budget At				Actual Cost				
Description	Start Date	End Date	Days	Completion) BAC	Start Date	End Date	% Complete	(AC=ACWP) (Sum of Invoices)				
01. Project Initiation	5/15/2002	6/30/2002	46	\$ 115,000	5/15/02	6/30/2002	100%	\$115,000.00				
02. Develop Initial Architecture	5/15/2002	12/30/2002	229	\$ 160,776	5/15/02	12/30/2002	100%	\$160,315.41				
03. Technical Approval & Contract Prep	6/15/2002	4/14/2003	303	\$ 150,000	6/15/02	4/14/2003	100%	\$150,000.00				
04. Contract Award	6/15/2002	5/2/2003	321	\$ 43,386	10/15/02	5/2/2003	100%	\$89,000.00				
05. Requirements Specifications	9/15/2002	6/30/2003	288	\$ 1,004,024	9/20/02	6/30/2003	100%	\$1,137,799.11				
06. Security Planning	5/7/2003	12/31/2003	238	\$ 156,024	8/1/02	8/20/2003	100%	\$159,281.16				
07. Program Management	1/1/2003	5/6/2005	856	\$ 489,310	5/2/03	-	90%	\$1,009,290.27				
08. Task 6 - Iteration 1 - Optimiztion Model	7/7/2003	3/16/2004	253	\$ 1,872,667	7/7/03	1/8/2005	100%	\$2,172,621.91				
09. Implementation of Work Lenz	8/1/2003	6/1/2004	305	\$ 10,000	1/1/04	6/1/2004	100%	\$977.88				
10. Updated Security Planning	6/1/2004	10/7/2004	128	\$ 150,000	3/1/04	9/21/2004	100%	\$0.00				
11. Certification and Accreditation of FPA-PM	7/1/2003	9/30/2004	457	\$ 200,000	1/15/04	9/30/2004	100%	\$0.00				
12. Task 7 - Iteration 2 - User Interface	9/15/2003	7/12/2004	301	\$ 1,707,019	9/15/04	9/23/2004	100%	\$1,701,939.20				
13. Task 8 - Iteration 3 - Reports & Outputs	12/16/2003	10/20/2004	309	\$ 1,416,724	1/8/04	9/23/2004	100%	\$1,432,908.63				
14. Task 9 - Iteration 4 - National Database	3/4/2004	11/24/2004	265	\$ 345,873	3/4/04		85%	\$225,801.19				
15. Field Data Development	6/30/2003	9/30/2004	458	\$ 150,000	6/10/03	9/30/2004	100%	\$85,000.00				
16. Develop Policy & Procedures	8/1/2002	2/1/2005	915	\$ 80,839	8/1/02	-	95%	\$94,099.89				
17. Beta Testing	6/3/2004	1/12/2005	223	\$ 1,640,446	5/12/04	-	90%	\$1,032,700.78				
18. Release	6/30/2004	4/6/2005	280	\$ 192,791	4/8/04	-	95%	\$166,257.50				
19. Training	5/25/2004	2/8/2005	259	\$ 201,653	4/8/04	12/21/2004	100%	\$661,315.00				
20. Data Migration	6/30/2003	11/1/2004	490	\$ 210,767	2/15/04	11/1/2004	100%	\$98,149.73				
21. Implementation	8/1/2004	5/1/2005	273	\$ 382,699	1/15/04	-	40%	\$0.00				
22. Operations and Maintenance	9/30/2004	9/30/2008	1,461	\$ 1,200,000	9/30/2004	-	12%	\$171,713.17				
PROJECT TOTAL:	5/15/2002	9/30/2008	2,330	\$ 11,879,998		Total	87%	\$ 10,664,171				

FPA Project Earned Value																
	Planned Cost (Budget At Completion) BAC		% Complete	Actual Cost (AC=ACWP) (Sum of Invoices)	Planned Value (PV=BCWS =Amount I planned to have spent by this time).		(EV=BCWP		Cost Variance (EV-AC)	Cost Performance Index (CPI=EV/AC)	Schedule Variance (EV-PV)		SPI	Estimate at completion (EAC)		Variance at Completion
01. Project Initiation	\$	115,000	100%	\$115,000.00	\$ 115,00	00 \$	115,000	\$	-	1.00	\$ -		1.00	\$	115,000	1.00
02. Develop Initial Architecture	\$	160,776	100%	\$160,315.41	\$ 160,7	76 \$	160,776	\$	461	1.00	\$	-	1.00	\$	160,315	1.00
03. Technical Approval & Contract Prep	\$	150,000	100%	\$150,000.00	\$ 150,00	00 \$	150,000	\$	-	1.00	\$	-	1.00	\$	150,000	1.00
04. Contract Award	\$	43,386	100%	\$89,000.00	\$ 43,38	36 \$	43,386	\$	(45,614)	0.49	\$	-	1.00	\$	89,000	0.49
05. Requirements Specifications	\$	1,004,024	100%	\$1,137,799.11	\$ 1,004,02	24 \$	1,004,024	\$	(133,775)	0.88	\$	-	1.00	\$	1,137,799	0.88
06. Security Planning	\$	156,024	100%	\$159,281.16	\$ 156,02	24 \$	156,024	\$	(3,257)	0.98	\$	-	1.00	\$	159,281	0.98
07. Program Management	\$	489,310	90%	\$1,009,290.27	\$ 416,7	14 \$	440,379	\$	(568,911)	0.44	\$	23,665	1.06	\$	1,121,434	0.44
08. Task 6 - Iteration 1 - Optimiztion Model	\$	1,872,667	100%	\$2,172,621.91	\$ 1,872,66	67 \$	1,872,667	\$	(299,955)	0.86	\$	-	1.00	\$	2,172,622	0.86
09. Implementation of Work Lenz	\$	10,000	100%	\$977.88	\$ 10,00	00 \$	10,000	\$	9,022	10.23	\$	-	1.00	\$	978	10.23
10. Updated Security Planning	\$	150,000	100%	\$0.00	\$ 150,00	00 \$	150,000	\$	150,000		\$	-	1.00	\$	-	
11. Certification and Accreditation of FPA-PM	\$	200,000	100%	\$0.00	\$ 200,00	00 \$	200,000	\$	200,000		\$	-	1.00	\$	-	
12. Task 7 - Iteration 2 - User Interface	\$	1,707,019	100%	\$1,701,939.20	\$ 1,707,0 ⁻	19 \$	1,707,019	\$	5,080	1.00	\$	-	1.00	\$	1,701,939	1.00
13. Task 8 - Iteration 3 - Reports & Outputs	\$	1,416,724	100%	\$1,432,908.63	\$ 1,416,72	24 \$	1,416,724	\$	(16,185)	0.99	\$	-	1.00	\$	1,432,909	0.99
14. Task 9 - Iteration 4 - National Database	\$	345,873	85%	\$225,801.19	\$ 345,87	73 \$	293,992	\$	68,191	1.30	\$	(51,881)	0.85	\$	265,648	1.30
15. Field Data Development	\$	150,000	100%	\$85,000.00	\$ 150,00	00 \$	150,000	\$	65,000	1.76	\$	-	1.00	\$	85,000	1.76
16. Develop Policy & Procedures	\$	80,839	95%	\$94,099.89	\$ 77,92	23 \$	76,797	\$	(17,303)	0.82	\$	(1,126)	0.99	\$	99,053	0.82
17. Beta Testing	\$	1,640,446	90%	\$1,032,700.78	\$ 1,544,8 ⁻	15 \$	1,476,401	\$	443,701	1.43	\$	(68,413)	0.96	\$	1,147,445	1.43
18. Release	\$	192,791	95%	\$166,257.50	\$ 126,00)3 \$	183,151	\$	16,894	1.10	\$	57,149	1.45	\$	175,008	1.10
19. Training	\$	201,653	100%	\$661,315.00	\$ 170,5 [°]	10 \$	201,653	\$	(459,662)	0.30	\$	31,143	1.18	\$	661,315	0.30
20. Data Migration	\$	210,767	100%	\$98,149.73	\$ 210,76	67 \$	210,767	\$	112,617	2.15	\$	-	1.00	\$	98,150	2.15
21. Implementation	\$	382,699	40%	\$0.00	\$ 211,6	76 \$	153,080	\$	153,080		\$	(58,596)	0.72	\$	-	
22. Operations and Maintenance	\$	1,200,000	12%	\$171,713.17	\$ 74,74	13 \$	144,000	\$	(27,713)	0.84	\$	69,257	1.93	\$	1,430,943	0.84
PROJECT TOTAL:	: \$	11,879,998	87%	\$ 10,664,171	\$ 10,314,64	14 \$	10,315,841	\$	(348,330)	0.97	\$	1,197	1.00	\$ 1	12,281,144	0.97