



August 2008

**FPA's First Year – this is not a test.** The first year of using Fire Program Analysis (FPA) is called a “learning year”. What does this mean? Fire Planners from both field and national offices will be learning how to use the FPA system’s capabilities. While using the system, they will identify improvements to include in following years. And, their results will be useful in developing the Preparedness and Hazardous Fuels portions of the 2011 federal wildland fire budget.

Using fire behavior modeling to help prepare the fire budget enables local fire management partners to explore organization efficiencies and request funding necessary to support their missions.

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## Current Topics:

- FPA's First Year
- Testing process
- Getting started offline
- Early-adopters validate inputs
- Using a single fuel model set
- Large Fire Module simulations
- Training opportunities increase

For more information visit

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## Fire Program Analysis

Fire Program Analysis (FPA) system is a common interagency decision support tool for wildland fire planning and budgeting.

This tool will enable wildland fire managers in the five federal land management agencies to plan jointly.

### ■ Testing process

The Prototype Fire Planning Units – these are the fire planning units that have been testing the system during development the past year—are running options through the Initial Response Simulator (IRS). They developed alternatives using their 2007 appropriated funding for preparedness and hazardous fuels as well as alternatives with increases and decreases in the 2007 funding. The model seems to be performing as expected. Bugs found in the software are referred to IBM and corrected as quickly as possible.

### ■ Getting started offline

While the FPA system goes through testing by the prototype and early-adopter Fire Planning Units (FPU), other FPUs can get a jump-start on data input. In the June newsletter, we noted that collaborative planning and data gathering could be the most time consuming part of getting ready to use the FPA system. However preparing data ahead of time can reduce data entry time when the system is accessible on September 29, 2008. Here are some things you can to prepare:

- Gather data on costs, dispatch locations for fire resources, types of fire resources, delays, staffing, annual operation costs for resources including staffing and vehicle costs
- Define Fire Workload Area (FWA) attributes such as approval for wildland fire use, maximum flame length acceptable, and the size/time limits for initial attack per land/fire management plans
- Review the FPA-PM pre-analysis input report to validate data like discovery size, delays, dispatch locations, fuel conditions, and state information to save time researching data


### ■ Early-adopters validate inputs.

The early-adopters, 20 FPUs that volunteered to test the FPA system in July and August, are working toward completing a validation run. The validation run calibrates the Initial Response Simulator (IRS) to verify the model is generating an initial response success rate typical for the FPU in the base year for validation (2007 is the current base year for validation). If the model needs calibration, fire planners can adjust delays, air-to-ground coefficients, diurnal coefficients, dispatch logic, or breakpoints until the initial attack success rate represents the FPU's typical success rate.

- More -



#### The FPA System:

- is designed to encourage state, local, and tribal agency participation.
  - incorporates geospatial data which provides the means to map effects of wildland fire on lands across the country.
  - generates outcomes from fire planning units that provide information to the national budget planning process.
  - provides a way for land managers to compare trade-offs between wildland fire program components.
  - is a tool to ensure wildland fire management actions help meet performance measures outlined in the 10-Year Comprehensive Strategy.
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All FPU's need to complete validation runs to calibrate IRS for their particular area before building investment options and alternatives. Before doing a validation run, FPU's must know their initial attack success rate. They also should review and update existing fire resources and identify which dispatch locations respond to which FWA. This can be done once the FPU can access the FPA system.

#### ■ Using a single fuel model set

On August 15, we sent a ListServ to subscribers on FPA's technical list regarding new guidance for using fuel model sets when developing fuel prescriptions and treatments. Fuel prescriptions used in the Large Fire Module and fuel treatments for the IRS must be developed using the same fuel model set – either the Anderson 13 or the Scott and Burgan 40. Following this guidance will ensure the results of the FPU's fuel treatment are effectively used in both the IRS and LFM.

For more details, refer to the revised [Technical Paper](#) or the [August 15, 2008 TechNews](#).

#### ■ Large Fire Module Simulations

The Large Fire Module development team is completing simulations for the early-adopter FPU's. For each FPU the team runs five simulations to create FPU-specific "predictive variables" for burn probability, flame length, fire size, and fire costs. These preparatory simulations generate an FPU's fire behavior profile that shows the unique relationships between landscape, fuels, weather, and fuel treatments in that FPU. The FPA system uses this predictive model when it analyzes that FPU's investment alternatives. The team is currently running simulations for the FPU's in the Southwest and Great Basin geographic areas.

The team found that the model, in most cases, more closely represents fuel treatment impacts on fire behavior (especially maintenance treatments) when fuel treatments are developed using the Scott and Burgan 40 fuel model set, which better characterizes fire behavior changes.

#### ■ Training opportunities increase

We revised the timeframe for online training due to contracting office delays - the first training module will be delivered in late-October. To bridge the gap between system access and online training availability, the FPA team is developing webinars – Web-based seminars. These will provide basic instruction on using the FPA system; the first three webinars will be available October 1. We'll provide more information in next month's newsletter.