OREGON DEPARTMENT OF FORESTRY REQUEST FOR PROPOSALS "STRATEGIC INVESTMENTS"

SUMMARY OF THE STRATEGIC INVESTMENT PROGRAM

The Strategic Investments Program was established in 2014, following the passage of the Wildfire Protection Act (WPA). The WPA enabled the Emergency Fire Cost Committee to allocate Oregon Forest Land Protection Funds toward "strategic investments" as detailed in ORS 291.238 (2) sub (e).

"(2) Notwithstanding ORS 291.238, the moneys in the Oregon Forest Land Protection Fund are continuously appropriated to the Emergency Fire Cost Committee for the purposes of:"

"(e) Paying for nonroutine purchases of supplemental fire prevention, detection or suppression resources that will enhance the ability of the forester to perform fire protection responsibilities within a forest protection district."

WHAT IS A STRATEGIC INVESTMENT?

"Strategic investments" is defined broadly in law, as shown above: supporting fire prevention, detection or suppression activities that will enhance Oregon's fire protection system. The following EFCC guidelines are intended to provide further clarification on what is within the definition of strategic investment and what is outside the definition:

Strategic Investments:

- Are initial, one-time investments of OFLPF funds in measures that enhance fire prevention, detection or suppression activities within one or more Forest Protection Districts. These investments are intended to reduce overall cost and loss from wildfire.
- Once made, the resulting enhancement becomes part of the base level of protection supported by annual fiscal budgets.
- Can be District-specific projects, multiple districts, or State-wide in nature.
- Can include cost-sharing from other funding sources or be stand-alone OFLPF dollars.

Strategic Investments cannot:

- Be used to off-set base level of protection requirements as defined in the annual fiscal budgeting process for "adequate level of protection".
- Add permanent or seasonal staff capacity to ODF or Associations. Personnel costs associated with implementing a strategic investment project are a legitimate part of the project cost.
- Be used to make improvement to privately owned real property unless such improvements benefit a larger area of landowners, not just a single landowner, and can be backed up by an easement or agreement to ensure long-term benefit to the protection system.
- Be a loan to ODF or an Association. This is an investment program.
- Be retained by ODF or an Association if there is an unspent balance, but must be reimbursed to the OFLPF.

WHO IS ELIGIBLE TO PROPOSE A STRATEGIC INVESTMENT?

Proposals will only be considered that are submitted through ODF or the three operating Fire Protection Associations to the EFCC. Other individuals or organizations that want to propose investments must do so through one of those organizations.

PROCESS AND TIMELINE

When considering project proposals, please weigh carefully whether they should be funded by other means, such as your district's budget, SFA dollars or other grant options. Project proposals from the Districts will be coordinated with local Protective Associations and submitted to the appropriate Area. Each Area is responsible for prioritizing their respective project proposals and submitting them to the Deputy Division Chief by 5:00 P.M. on September 30th. Project Proposals from Division Staff will also be submitted to the Deputy Chief of the Protection Division by 5 P.M on September 30th. Please use the following electronic form only, for all project proposals. Area and State Office prioritized proposals will be evaluated by an internal ODF review committee consisting of Salem and Area staff representatives. This review committee will develop a ranking system and the prioritized list of proposals will be presented for consideration before the Headquarter Services Committee at their Fall meeting. If proposals are selected, they will be prioritized and submitted to the EFCC for consideration at the January meeting. The EFCC will award projects at their discretion and will reserve the right to call-back funding in events such as un-utilized funding or early fire seasons that interrupt available funding.

Questions regarding the program and process may be directed to the Deputy Division Chief.

OREGON DEPARTMENT OF FORESTRY/EMERGENCY FIRE COST COMMITTEE STRATEGIC INVESTMENT PROPOSAL FORM

PROJECT NAME:	Aerial Infrared and Mapping System	DATE: 02/27/2		27/2019
NAME OF PROJECT	Neal Laugle (Project Manager)	PHONE: 503-945-7508		
COORDINATOR:	Sarah Lathrop (Project Coordinator)	EMAIL:	Neal.d.laugle@oregon.gov	
		DISTRICT/		Salem/
		UNIT:		Protection
		AREA:		Division
AMOUNT REQUESTED:	\$750,000	PROPOSED 4 –5 months		
		PROJECT		
		DURATIO	N:	
TOTAL PROJECT COST:	\$750,000			
OFLPF FUNDS REQUESTED:	\$ 697,000			

PROJECT NARRATIVE: In a two-page limit, describe the investment proposal, including the following; a) how the investment will enhance prevention, detection or suppression activities; b) the scope of the benefits (district specific versus broader impact); c) how the investment will reduce risks or costs for the OFLPF, or reduce resource loss or environmental damage; d) how the district or program will provide for long-term maintenance and support; e) the extent to which the investment involves applying new technologies; f) the likelihood of success in implementing the project based on measurable outcomes such as "key performance measures", and; g) how you propose to measure the success/performance in meeting the intended outcomes across the lifespan of the project. Describe whether, and the extent to which the project is scalable (how will the project be impacted if it is only partially funded?)

a) How the investment will enhance prevention, detection or suppression activities;

Investing in, and installing an infrared sensor and mapping system on the agency owned Partenavia (P-68) will enhance detection and suppression activates in the following ways:

- <u>Detection/Initial Attack:</u> The use of the IR sensor and mapping system will allow the agency to detect new starts (day, night, or through smoke) and provide accurate size up information to districts for efficient and coordinated resource response.
- <u>Large Fire Support:</u> Real-time video to support firefighter safety, spot fire detection, and perimeter mapping. Enhanced tactical decision making to align appropriate resource response and support successful fire suppression outcomes.
- Agency prioritization and availability: Nationally, the demand for cooperator and contract aerial IR/mapping
 platforms has steadily increased, resulting in reduced availability or even unavailability during the peak of
 fire season.

Since 2015 fire season, the agency has researched and tested a variety of commercial manned and unmanned aircraft equipped with infrared (IR) sensor and mapping software during fire seasons. We have logged 230 total IR flight hours, with average costs of \$6500/hour, for a total cost of approximately \$1.5 million. Through this testing, the Aviation Unit determined the most advantageous model to utilize this technology is to address priority business needs where there have been service gaps, by outfitting our agency owned and operated P–68 aircraft with IR equipment. This model addresses consistency in our business needs and creates a per flight hour savings; the P-68's operating costs, and IR equipment is \$550 per hour. Bottom line, it puts ODF fire managers in control of IR resource availability and prioritization of IR aviation services on ODF protected lands.

b) The scope of the benefits (district specific versus broader impact);

This is a <u>statewide</u> resource available for detection and large fire support. The system provides detection capability during the day, at night, immediately following lightning events, and when visibility is impacted by smoke. When a fire is detected, accurate size up information is provided immediately to district personnel for efficient and effective resource response. Benefits for large fire support are firefighter safety, spot fire detection, and decision support. Enhanced tactical decision making will support alignment and appropriate resource response for successful fire suppression outcomes. This system will also close the existing gap in large fire perimeter mapping when USFS National Infrared Operations platforms are not available due to maintenance or higher national priorities. The IR sensor has a useful lifespan of approximately 20 years, and the system purchased can be transferred to new aerial platforms in the future. Lastly, this system can be installed and ready for use during fire season 2019.

c) How the investment will reduce risks or costs for the OFLPF, or reduce resource loss or environmental damage;

This investment directly contributes to reduced resource losses and financial exposure. Early detection of fires is key to keeping fires small. This platform will provide agency/association personnel with the critical information they need to prioritize and plan response to newly detected fires. In addition to the benefits of added detection capability, enhanced tactical decision making on large fires will support alignment and appropriate resource response for successful fire suppression outcomes.

d) How the district or program will provide for long-term maintenance and support;

A user based fee will be charged to cover the direct operating cost of the platform and sensor/system maintenance. The Aviation Unit estimates adding the system will increase the direct operating cost of the Partenavia by \$100 dollars (per hour) for IR/Mapping missions, raising the flight hour rate from \$450 to \$550 per hour. When looking at the historical annual flight hour average for IR/mapping, it is estimated that the agency will save approximately \$5,950 per hour by utilizing the agency owned and operated platform.

e) The extent to which the investment involves applying new technologies;

This is new technology for the agency and associations for detection and large fire support. There has been increased utilization and testing of this technology over the last four years with very successful results.

f) The likelihood of success in implementing the project based on measurable outcomes such as "key performance measures", and;

The likelihood of success is very high based on proven technology for fire detection and mapping. This system provides intelligence needed to prioritize fires and decrease response time helping the agency achieve the key performance measure of keeping 98% of fires at 10 acres or less.

g) How you propose to measure the success/performance in meeting the intended outcomes across the lifespan of the project. Describe whether, and the extent to which the project is scalable (how will the project be impacted if it is only partially funded?)

Metrics used to measure success:

- Flight Hours
- Mission type and number successfully completed
- Number of fires detected

These metrics listed above will clearly illustrate success/performance of the platform over time. If only partially

funded, a possible impact is having only IR capability and no mapping system, which reduces accuracy of intelligence and narrows the mission scope of the platform.

	Total Project Expense						
Budget Detail	\$ Amount Requested from OFLPF	Matching Funds					
(Provide additional information in Budget Narrative Block)		Source	Dollars	In-Kind	TOTAL		
Personnel / Labor:					\$ 0.00		
Travel:					\$ 0.00		
Equipment:	\$697,000	SFA	\$53,000		\$ 750,000.00		
Supplies:					\$ 0.00		
Contractual:					\$ 0.00		
Construction:					\$ 0.00		
Other:					\$ 0.00		
TOTAL:	\$697,000.00		\$53,000	\$ 0.00	\$750,000		

Budget Narrative (max 1 page):

This is a one-time investment cost to purchase and install IR equipment on the state-owned P-68 aircraft. The only sustainment costs are those related to maintenance and software updates of the IR equipment. These costs would be covered by the user-based fee outlined in question (d) of the investment narrative.

The project team is dedicated to executing this project at the lowest possible cost and has full confidence in the proposed budget. The available \$697,000 OFLPF funds will be matched with State Fire Assistance (SFA) Federal funds to meet the total project costs of \$750,000.