

**Title II Project Application**  
**Medford District Resource Advisory Committee**

**1. Project Number** (Assigned by federal unit): OR-110-02

- 2. Project Name:** Digital Orthophotos      **3. County:** Jackson  
**4. Project Sponsor:** Jackson Co./Medford BLM      **5. Date:** 10/01/01  
**6. Sponsors Phone # :** Keith Massie  
**7. Sponsor's E-mail:** 774 6028 (541)  
**8. Project Location** (attach project area map)

a. 4<sup>th</sup> Field Watershed Name and HUC #(if known): \_\_\_\_\_  
\_\_\_\_\_

b. 5<sup>th</sup> Field Watershed Name and HUC #(if known): \_\_\_\_\_  
\_\_\_\_\_

c. Legal Location:

Township _____	Range _____	Section(s) _____
Township _____	Range _____	Section(s) _____
Township _____	Range _____	Section(s) _____
Township _____	Range _____	Section(s) _____
Township _____	Range _____	Section(s) _____
Township _____	Range _____	Section(s) _____
Township _____	Range _____	Section(s) _____
Township _____	Range _____	Section(s) _____
Township _____	Range _____	Section(s) _____

d. BLM District Medford

e. BLM Resource Area: Ashland

f. National Forest Rogue

g. Forest Service District Butte Falls, Prospect

h. State / Private / Other lands involved?  Yes      No

**9. Statement of Project Goals and Objectives:** Provide digital orthophotos of Jackson County for use in wildfire modeling as well as other resource management objectives.

**10. Project Description:** (Provide concise description of project and attach map.)

Obtain digital orthophotos in that part of Jackson County that were not obtained through Title III monies in FY 02. In addition to the orthophotos, building outlines and five foot contours will be digitized. Aspect and slope information will be generated by Jackson Co. Staff.

**11. Coordination of this project with other related project(s) on adjacent lands?**

Yes      No      If yes, then describe.

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**12. How does proposed project meet purposes of the Legislation?** [Sec. 203(b)(1)]

- Improves maintenance of existing infrastructure. [Sec. 2(b)]
- Implements stewardship objectives that enhance forest ecosystems. [Sec. 2(b)]
- Restores and improves land health. [Sec. 2(b)]
- Restores water quality. [Sec. 2(b)]

**13. Project Type** (check one) [Sec. 203(b)(1)]

- Road Maintenance [Sec. 2(b)(2)(A)]
- Road Decommission/Obliteration [Sec. 2(b)(2)(A)]
- Other Infrastructure Maintenance (specify): \_\_\_\_\_ [Sec. 2(b)(2)(A)]
- Soil Productivity Improvement [Sec. 2(b)(2)(B)]
- Watershed Restoration & Mntc. [Sec. 2(b)(2)(D)]
- Fish Habitat Restoration [Sec. 2(b)(2)(E)]
- Reestablish Native Species [Sec. 2(b)(2)(G)]
- Other Project Type (specify) [Sec. 2(b)(2)]: Management of Fuel Hazards
- Trail Maintenance [Sec. 2(b)(2)(A)]
- Trail Obliteration [Sec. 2(b)(2)(A)]
- Forest Health Improvement [Sec. 2(b)(2)(C)]
- Wildlife Habitat Restoration [Sec. 2(b)(2)(E)]
- Control of Noxious Weeds [Sec. 2(b)(2)(F)]

**14. Measure of Project Accomplishments/Expected Outcomes** [Sec. 203(b)(5)]

- a. Total Acres: \_\_\_\_\_
- b. Total Miles: \_\_\_\_\_
- c. No. Structures: \_\_\_\_\_
- d. Estimated People Reached (for environmental education projects): \_\_\_\_\_
- e. No. of Laborer Days: \_\_\_\_\_
- f. Other (specify): Aerial flight of remaining lands not already flown for orthophotos

**15. Duration of Project and Estimated Completion Date** [Sec. 203(b)(2)]: 9/30/02

**16. Target Species Benefitted:** (if applicable) Lands with hazardous fuel conditions

**17. How will cooperative relationships among people that use federal lands be improved?** [Sec. 2(b)(3)] improve trust and coordination in the reduction of catastrophic fire incidents

**18. How is this project in the best public interest?** [Sec. 203(b)(7)] **Identify benefits to communities?**

Benefits the landowners and county planning department in controlling potential fire starts in hazardous fuel areas.

**19. How does project benefit federal lands/resources?** Helps minimize fire starts on private lands that could develop into major fires and resource damage to federal lands.

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**20. Status of Project Planning**

- a. NEPA Complete: Yes  No  Not applicable
- b. If No, give est. date of completion: \_\_\_\_\_
- c. NMFS Sec. 7 ESA Consultation Complete: Yes  No  X Not Applicable
- d. USFWS Sec. 7 ESA Consultation Complete: Yes  No  X Not Applicable
- e. Survey & Manage Complete: Yes  No  X Not Applicable
- f. DSL/ODFW\* Permits Obtained: Yes  No  X Not Applicable
- g. DLS/COE\* 404 Fill/Removal Permit Obtained: Yes  No  X Not Applicable
- h. SHPO\* Concurrence Received: Yes  No  X Not Applicable
- i. Project Design(s) Completed: X Yes  No

\* DSL = Dept. of State Lands, ODFW = Oregon Dept. of Fish and Wildlife, COE = Army Corps of Engineers, SHPO = State Historic Preservation Officer

**21. Proposed Method(s) of Accomplishment**

- X Contract  Federal Workforce
- County Workforce  Volunteers
- Other (specify): \_\_\_\_\_

**22. Will the Project Generate Merchantable Materials? ( Sec. 204(e)(3))**

- Yes  No

**23. Anticipated Project Costs [Sec. 203(b)(3)]**

- a. Total County Title II Funds Requested: \$ ~~320,000~~ **320,000**
- b. Is this a multi-year funding request? Yes  No  If yes, then display by fiscal year
  - c. FY02 Request: \$ **320,000** f. FY05 Request: \$ \_\_\_\_\_
  - d. FY03 Request: \$ ~~320,000~~ 06 Request: \$ \_\_\_\_\_
  - e. FY04 Request: \$ \_\_\_\_\_

Item	Fed. Agency Appropriated Contribution [Sec. 203(b)(4)]	Requested County Title II Contribution [Sec. 203(b)(4)]	Other Contributions [Sec. 203(b)(4)]	Total Available Funds
24. Field Work & Site Surveys				
25. NEPA & Sec.7 ESA Consultation				
26. Permit Acquisition				
27. Project Design & Engineering				

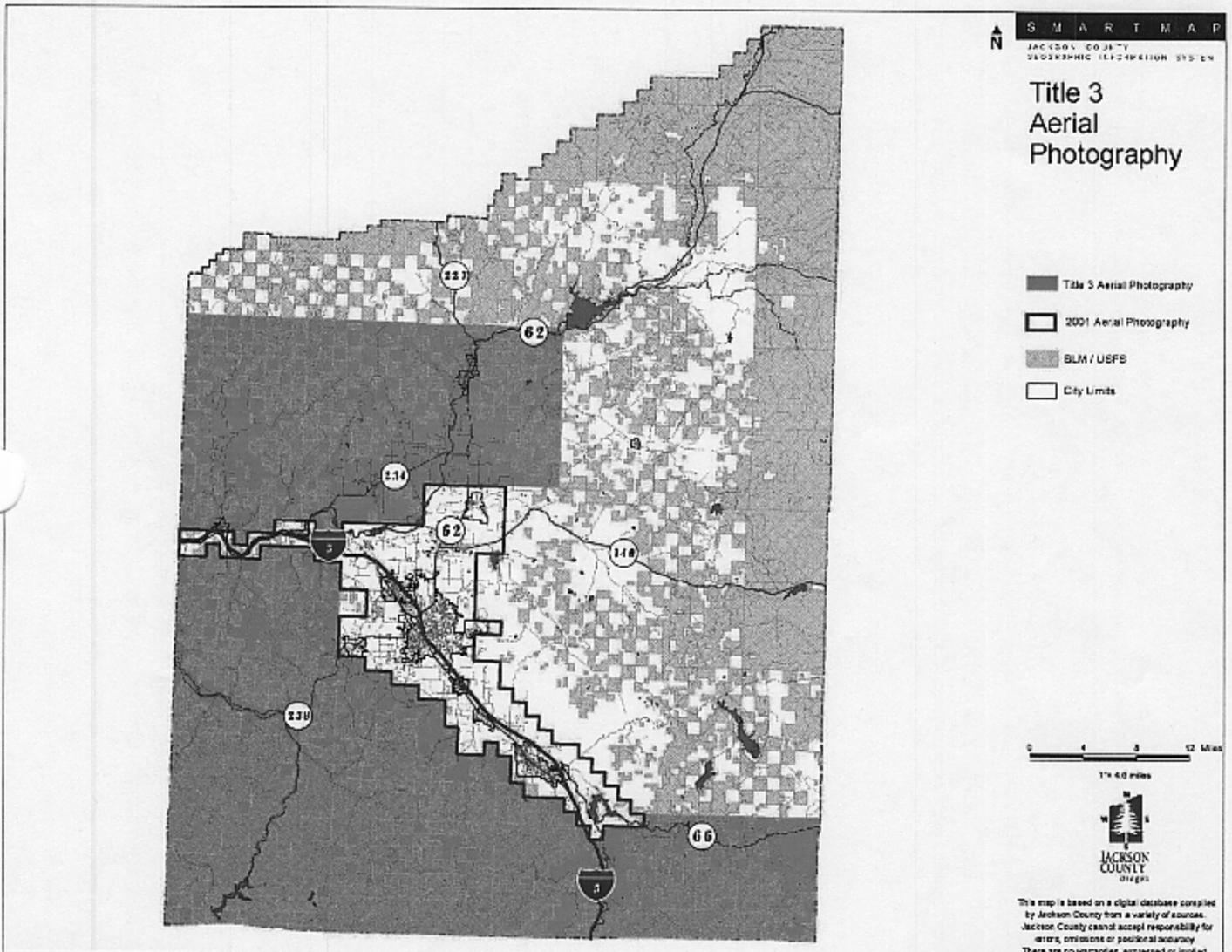
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Item	Fed. Agency Appropriated Contribution [Sec. 203(b)(4)]	Requested County Title II Contribution [Sec. 203(b)(4)]	Other Contributions [Sec. 203(b)(4)]	Total Available Funds
28. Contract Preparation				
29. Contract Administration				
30. Contract Cost		350000		
31. Workforce Cost				
32. Materials & Supplies				
33. Monitoring				
34. Other				
35. Project Subtotal		350000		
36. Indirect Costs (Overhead) (per year for multiple year projects)				
37. Total Cost Estimate	\$	\$ <del>350,000</del> 320,000	\$	\$

38. Identify Source(s) of Other Funding in Column C. Above [Sec. 203(b)(4)]

39. Monitoring Plan (Sec.203(b)(6))

- a. What measures or evaluations will be made to determine how well the proposed project meets the desired ecological conditions? [Sec. 203(b)(6)] Who will be responsible for this monitoring item?
  
- b. How will the project be evaluated to determine how well the proposed project contributes towards local employment and/or training opportunities, including summer youth jobs programs such as the Youth Conservation Corps? [Sec. 203(b)(6)] Who will be responsible for this monitoring item?
  
- c. What methods and measures of evaluation will be established to determine how well the proposed project improves the use of, or added value to, any products removed from National Forest System lands consistent with the purposes of this Act? [Sec. 203(b)(6) and Sec. 204(e)(3)] Who will be responsible for this monitoring item?



→ Please records with colored office grade case

Plot date: Aug 29, 2001; 15307P\F0\A201652001\_aerial\_photos\_c.cpr

**FIRE PREVENTION AND COUNTY PLANNING**  
**HB 2389 - Title III**

**PROJECT**

Jackson County proposes to obtain digital orthophotos of that portion of the County which is forested. In addition to the aerial photos, building outlines and five foot contours will be digitized. From the five foot contours, aspect and slope information can be generated by County staff. The aerial photographs will be obtained during the fall of 2001. This would enable it's use during the 2002 fire season. These will be converted into digital orthophotos by a consultant and made available to the County within 120 days of the date of the flight.

**BACKGROUND**

The future of wildland fire management will be influenced substantially by the use of information management technology. Wildfire planning and analysis, suppression, fire prevention/education, and vegetation management techniques will continue to evolve and change through information management technologies. The geographic information system (GIS) will be one of the primary technologies that influence these changes. GIS technology will continue to provide powerful planning and analysis capabilities and become increasingly more important at the field operations level.

GIS technology is a powerful tool for wildfire management analysis and planning. GIS stores spatial information (data) in a digital mapping environment. A digital basemap can be overlaid with data or other layers of information onto a map in order to view spatial information and relationships. Information about features on maps can be viewed in databases behind the map when needed. GIS allows fire managers to better view and understand physical features and the relationships that influence fire behavior. Factors, such as steepness of slopes, aspects, and vegetation, can be viewed and overlaid to determine where intense fires may occur. This information can be displayed and compared with high value resources such as critical wildlife habitat, improvements, endangered plants, cultural resources, sensitive soils near drainages, and housing development. The likelihood of a wildfire igniting can be determined by locating historical fire locations and identifying potential ignition sources (e.g., powerlines, roads, industrial areas, housing areas). When areas of high potential ignition are overlaid near flammable vegetation and important values, essential fire management actions can be identified. GIS can also display and analyze aerial photos. Digital information can be overlaid on aerial photographs to provide fire managers with more familiar views of landscapes and associated data. A GIS can provide a quick, comparative view of *hazards* (highly flammable areas), *risks* (areas where accidental or intentional ignitions may occur), and *values* (natural or developed values that must be protected).

**EDUCATION**

As the public is exposed visually to wildfire modeling on digital maps or photographs, they will better understand the dynamics of wildfire. GIS and aerial photographs can be used to demonstrate the importance of employing fire-safe practices around homes. When residents can observe wildfire modeling in their local area they are more likely to react. Technology will have a dramatic effect on education and training.

## BENEFITS

As severe wildfires continue to increase each year in North America because of continuing fuel accumulation, it will become increasingly important to use fire as a management option. The use of GIS will be an essential tool for planning and implementing land management programs such as fuel modification and ecosystem restoration.

The primary focus of obtaining this digital information is to reduce the risk of wildfire in Jackson County. This can be accomplished by identifying existing structures that are in fire-prone areas. Once identified, homeowners can be provided with education about techniques in home siting, home construction, and home landscaping that will increase their protection from wildfires.

County planners can use this digital information to reduce the impact of construction and development on resources located near federal lands. This project would improve the maintenance of existing infrastructure, implement stewardship objectives that enhance forest ecosystems, and restore and improve land health and water quality.

Evaluating information spatially provides innumerable benefits. Examples include, "How many buildings are on slopes greater than 25%?", "What is the average distance of structures from a County or State road?" "Where are the nearest ponds, and what are their capacities?", "How many structures are located in the area with a high level of ground fuels?".

## OREGON DEPARTMENT OF FORESTRY

DAN THORPE: I was pleased to hear that the County is considering upgrading their GIS capabilities particularly in the area of data, by purchasing ortho aerial photos. A county wide set will allow our Department to collaborate with Jackson County to achieve analysis that is currently lacking. For instance, we can include fuels evaluation on top of other GIS layers such as slope, aspect, etc. for our fire protection responsibilities. Your idea of outlining houses/structures, although labor intensive, will be an additional help in our suppression activities as well as when there is an uncontrolled fire.

The concept also fits well into the area of public education and awareness. As I discussed with you, I can envision an opportunity at a gathering such as the County Fair or neighborhood meetings where homeowners could look at their house in reference to all the other variables that influence fire risk, and then perhaps take appropriate steps to mitigate that risk. We are continually looking for new ways to have a positive influence on our clients and this seems like an exceptional opportunity.

Dan Thorpe, Unit Forester  
Oregon Dept. of Forestry

## COST

The cost to obtain the digital aerial photos, building outlines, five foot contours, slope, and aspect information for 1200 sections is approximately \$351,000.