

# APPLICATION AND STATUS OF THE *FARSITE* FIRE AREA SIMULATOR

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## INTRODUCTION

Fire growth simulation is the modeling of fire spread and behavior across landscapes with heterogeneous fuels, weather, and topography. *FARSITE* is a computer program designed to simulate fire growth using existing models of fire behavior found in BEHAVE (Andrews 1986) and in the Canadian Forest Fire Behaviour Prediction System (Forestry Canada Fire Danger Group 1992). There are numerous uses for fire growth simulation, including planning for potential wildland fires, prioritizing and locating fuel treatments, tactical support on active fires, and fire incident reconstruction. Because *FARSITE* can generate spatial maps of fire behavior, it is useful for producing detailed analyses of fire behavior and fire effects on geographic information systems (GIS). This modeling capability however, requires digital maps of terrain and fuels in GIS formats, which is the main limitation for users wanting to do simulations. Nevertheless, *FARSITE* is widely used by State, Private, and Federal agencies in the U.S. who recognize the value of having GIS-based data on fuels and vegetation for a variety of applications. A national, interagency training course has been developed for *FARSITE* application and operation. Other special purpose workshops are also taught. This paper summarizes the uses, capabilities and data requirements for *FARSITE* and identifies some new features that are planned for a future release.

