SimTable helps firefighters model and predict fire direction

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SimTable projects maps onto sand as part of an interactive 3-D model

In the past, firefighters modeled their response to a wildfire by moving matchbox cars and pieces of yarn on a tabletop filled with sand, using the sand to represent the landscape. Today, SimTable, an innovative company and technology housed at the Santa Fe Complex, is revolutionizing firefighter training. With SimTable, Google Earth and GIS data are projected onto the sand surface as part of an interactive, three-dimensional model. This allows firefighters to predict things like where a fire is most likely to spread or where traffic will backlog during an evacuation.

When partners Stephen Guerin and Chas Curtis sought to make their fire simulations more interactive, they approached Los Alamos National Laboratory expert Dr. Rohan Loveland through the New Mexico Small Business Assistance (NMSBA) Program. Dr. Loveland and LANL's Space and Remote Sensing Sciences Department developed algorithms for object-tracking machine vision. This has enabled the SimTable to see movement and objects through a camera and project images from the computer anywhere.

In 2009, SimTable received $100,000 from the LANS Venture Acceleration Fund to improve the user interface for its hardware and software, market and advertise the product, and seed firefighting academies with set ups customized for their curricula. "Venture Acceleration Fund support has allowed us to move research out of a lab environment and into the market for commercial validation," says Stephen Guerin.

The company also received expert coaching by participating in the Springboard program. Panelists urged the partners to look beyond the specific application of their technology to an ambient computing platform with greater market potential. "We're excited to receive not only the funding but also to benefit from the expertise of the entire Northern New Mexico Connect team," says Guerin.