

The Santa Fe Complex is a collaborative workspace that fosters applied complexity science through interdisciplinary education, outreach, and development of innovative technologies that address real-world problems, enable social cooperation and create economic opportunities. It blends virtual and physical spaces with state of-the-art resources to support high-tech, artistic, public sector and educational activities. The complex emphasizes problem-solving through complexity science and other advanced computational methods.

The complex has three strategic goals to guide its efforts:

- 1. Create virtual and physical spaces designed to encourage the application of advanced computational tools, including complexity science, to artistic creation, education, problem solving, group development, conflict resolution and policy development;
- 2. Provide the leadership, scientific expertise, infrastructure and technological tools needed to support their work;
- 3. Educate the general public and the scientific community about the use of complexity science and advanced computational tools to solve real world problems, enhance economic & artistic growth, and support social cooperation.

This effort begins by educating potential participants about complexity science. Based on discussions with local educators, SFC expects to offer the following for-credit and interest-based programs to local students:

- » 70 students a year in for credit classes high school, SFCC and CSF classes
- » 200 students through Project GUTS involvement
- » 300 statewide students reached through Supercomputing Challenge presentations
- » 100 creative professionals exposed to new techniques in applied complexity
- » 40 students directly involved in NSF Digital City.

These students will develop skills that provide them an opportunity to find high quality jobs in simulation, visualization, software design, web programming and design, computer animation, 3D modeling, data analysis, and city planning, among others. SFC plans to offer 20 apprenticeships that can move into journeyperson and master craftperson roles; typically, these positions earn:

- » Journeyperson \$45/hour
- » Mastercraftsperson \$90/hour
- » Project sales jobs \$150k/year.

The educational component extends to the broader community. SFC expects to offer 50 public lectures annually (reaching 600 community members) in applied complexity; seven public workshops; and six school visits reaching 300 students. SFC will also have a broad and beneficial impact on economic development. The complex will support:

- » Up to 35 for-profit projects per year with an average budget of \$150,000 for a total of five million dollars in annual in economic activity
- » A number of spinout/startup businesses per year derived from these projects
- » Establishing Santa Fe as the international leader for applied complexity, simulation and complex systems visualization.

For more information on SFC or to participate in its activities, contact:

Stephen Guerin 624 Agua Fria St Santa Fe, NM 87501 505-216-7585 stephen@santafecomplex.org