



## *Background and Mission.*

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The Center for Advanced Spatial Technologies (CAST) was established at the University of Arkansas in September of 1991. CAST is an element of the J. William Fulbright College of Arts and Sciences but has a campus-wide role with the active involvement of the Fulbright College Departments of Anthropology, Biological Sciences, Geography, and Geology; the Dale Bumpers College of Agriculture, Food and Life Sciences Departments of Agronomy, Rural Sociology, and Entomology; the College of Architecture Department of Landscape Architecture; and the College of Engineering Departments of Civil Engineering and Industrial Engineering. A Board of Associate Directors, composed of representatives of various colleges, provides guidance to CAST. Dr. Thomas Graff represents Fulbright College, Dr. Don Scott represents Agriculture, and Professor Karen Hanna represents Architecture.

The National Center for Resource Innovations-Southwest (NCRI-SW) has been an integral part of CAST since September of 1991. NCRI-SW was established in 1990 as the result of a federal grant through the Cooperative State Research Services (CSRS), U.S. Department of Agriculture, to the Dale Bumpers College of Agriculture, Food and Life Sciences. NCRI-SW is one of six regional centers located throughout the United States whose mission is to transfer GIS technology to state, county, and local governments. The association of NCRI-SW with CAST has been beneficial to both. The NCRI-SW mission has formed extensive ties with state, county, and local government agencies (an important segment of potential GIS users) and the resources available through CAST greatly enhance the NCRI teaching and public service programs. The benefits to NCRI-SW include access to technical expertise from a number of fields, more coordinated support for expanded communications networks both among campus departments and in the state and region, and formal agreements to share in the acquisition, accessing, and cataloging of new digital data for use in research.

CAST focuses on research, undergraduate and graduate education, spatial data distribution, technology transfer, professional education in Geographic Information Systems (GIS), global positioning systems (GPS), digital photogrammetry, remote sensing and interoperability. Many of CAST's research efforts involve new approaches to spatial data and the development of new methodologies for analysis of these data, providing products to a variety of audiences. Cooperative programs developed by CAST bring together the benefits of academic research and development, the resources of state agencies, federal agencies, and the private sector to provide the state and region with effective spatial technologies, trained practitioners, and low-cost digital data.

### ***Corporate Sponsors.***

**Oracle Corporation.** In January of this year, Oracle Corporation announced its designation of CAST as its first Center of Excellence for Spatial Data Management. Oracle is the world's largest developer of database management software, with annual revenues of more than \$14 billion. CAST is also a member of Oracle's Academic Alliance Program and a founding member of Oracle's Spatial Research Laboratory. Oracle Corporation is providing CAST software and technical support totaling \$1.8 million. A press

conference announcing Oracle's support was held on January 16, 1998, and was attended by Steve Hagan, Vice President, New England Development Center, Oracle Corporation; Steve Cooperman, Executive Director, Spatial Data Management Programs, Oracle Corporation, Jack Pellicci Vice President, Global Public Sector, Oracle Corporation; J. C. Dean, SUN Microsystems, Sharon Priest, Arkansas Secretary of State; Michael Hipp, Director, DIS; Chancellor White, Dean Bernard Madison, and many other UAF officials; and dignitaries from many other state, county, and local governments. Articles ran in several newspapers.



Fred Limp, CAST's Director, meets with Oracle staff and presents an overview of CAST's projects and capabilities.

**Intergraph Corporation.** The Intergraph Corporation, a Fortune 500 firm and the world's leading vendor of geographic information systems software, selected CAST as one of only four National Centers of Excellence in the Mapping and GeoSciences. As a result, CAST has to date received more than \$5 million in hardware, software, and support services. As an outgrowth of this cooperative effort, short-courses in Intergraph MGE Foundations-Windows NT and in Introduction to GeoMedia are now offered by CAST.

**Trimble Navigation Ltd.** Trimble Navigation Ltd. is the world's largest manufacturer of GPS hardware. Trimble selected the CAST as one of two U.S. Centers of Excellence in Navigation and GPS. As a result

of the selection, CAST has to date received more than \$250,000 in Trimble hardware and software. Professional short-courses in the use of the most current Trimble equipment and software are offered each year.