

Accessible Data Transfer

The USGS has been so successful in marketing the availability of its natural science products and services on the Internet that its networks are now saturated. Outside customers have had to be routed over the internal network to meet their expectations for around-the-clock, rapid access, and speedy data delivery – which makes USGS data and computer systems vulnerable to security breaches. Without new investments in systems technology, the USGS network shortly will become oversaturated, as more and more customers want and need the data we provide. The USGS network is fast approaching a time when it will be unable to support the work of the bureau and our customers, making it difficult to respond to the needs of local communities, decision-makers, and others.

In FY 2001, the proposed increase of \$2.0 million will enable the USGS to increase

capacity, improve reliability and speed for delivery of data and World Wide Web pages, and provide real-time data to customers by upgrading data transmission lines connecting three major regional USGS centers in Reston, VA, Denver, CO, and Menlo Park, CA, and the EROS Data Center in Sioux Falls, SD.

The model for this network enhancement is the OhioView project begun in FY 1998. A goal of OhioView is to deliver up-to-date satellite and other geospatial data to stakeholders in the State of Ohio, using the most advanced computer network available. The USGS negotiated with NASA and the Great Plains Consortium of States to gain temporary access to networks such as the experimental, prototype Internet2. This computer network can deliver up-to-date satellite data covering the entire state of Ohio in 15 minutes – hundreds of times faster than the network the USGS

currently uses. USGS is proposing to use the lessons learned in this project to extend OhioView capabilities throughout the Nation using operational networks rather than the temporary, experimental network used in OhioView. Through partnerships the USGS will increase its ability to provide integrated data and information over the Internet to customers.

In the OhioView pilot project, the USGS learned valuable lessons about delivering natural science data via the Internet. The next phase will increase capacity between major USGS offices, which form the primary link between the USGS and customers, through the Internet. As the trend toward outsourcing to commercial vendors continues, the USGS will use commercial sources to purchase and lease connectivity between these major sites, rather than government building Internet connectivity.

Science Support	(Dollars in Thousands) +\$ 2,000
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As the nation's largest water, earth and biological science and civilian mapping agency, the USGS works in cooperation with more than 2000 organizations across the country to provide reliable, impartial, scientific information to resource managers, planners, and other customers. This information is gathered in every state by USGS scientists to minimize the loss of life and property from natural disasters, contribute to sound economic and physical development of the nation's natural resources, and enhance the quality of life by monitoring water, biological, energy, and mineral resources.