

States Adopt Technology

From mapping wildlife to health care management, technology helps states

State governments' adoption of new technologies has varied not only from state to state but also among jurisdictions within the same state. While a revenue agency may be completely wired, allowing seamless sharing of data across invisible jurisdictional boundaries, citizens are still required to wait in line for hours to secure an automobile registration issued by a separate agency. While a city may offer wireless kiosks in its public library, the county in which the city is located may still record probation and parole information on 3-inch by 5-inch index cards.

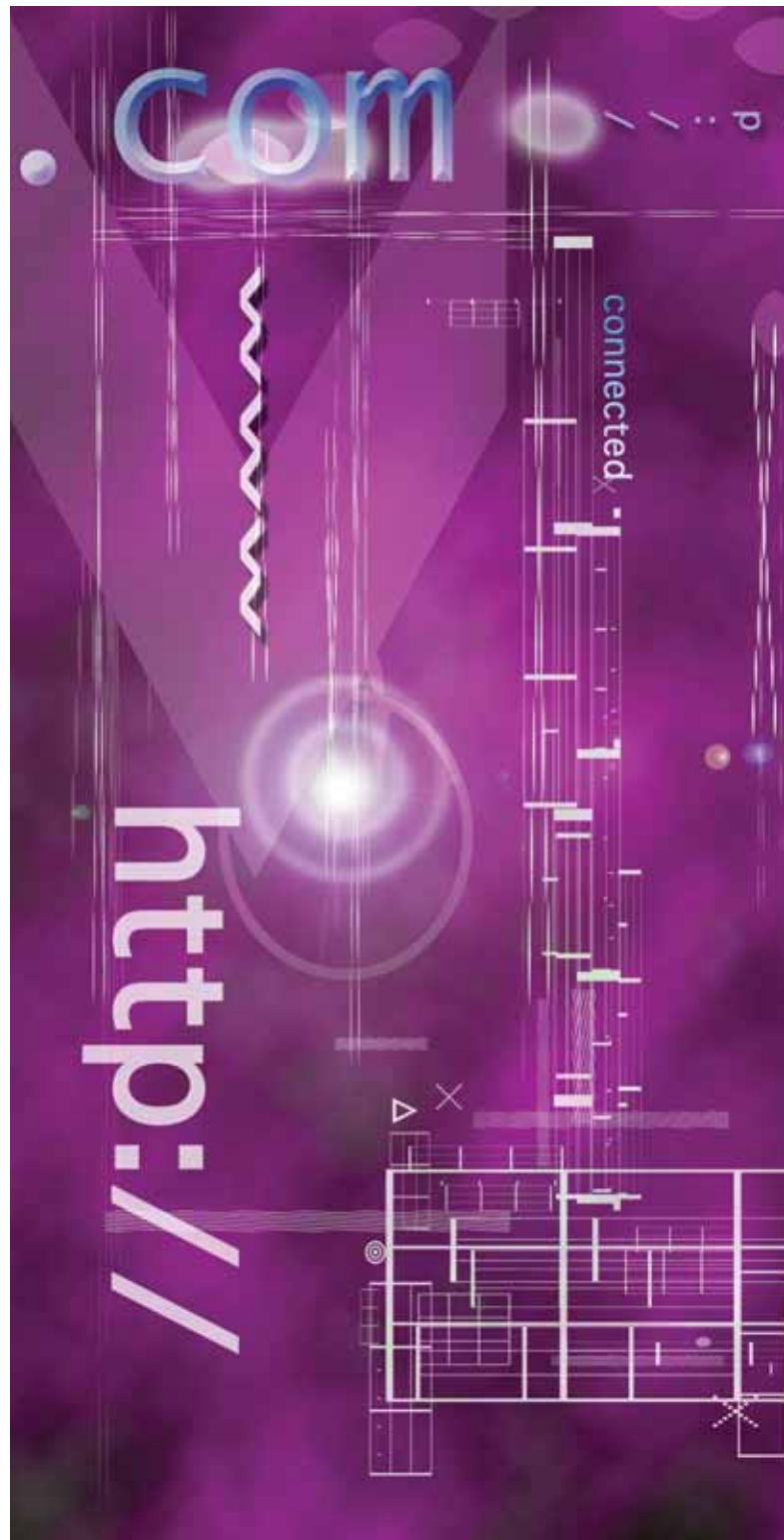
This month, CSG's Policy Group examines technology and its impact on states, governance and policy.

Health Information Technology

Health information technology including electronic prescribing and paperless medical records has tremendous potential to reduce medical errors and improve quality.

Concerns about patient privacy, high costs and uncertainty surrounding the efficiency and benefits of upgrading current administrative practices have delayed many technological updates. In the face of this reluctance, policy-makers at the state and federal levels are planning to require the health care industry to adopt new technology.

In May, President Bush's Health Information Technology Initiative established the goal of improving health care information technology and ensuring that most Americans have electronic health records within 10 years. A national, interoperable health information infrastructure is in development that would allow secure and fast access to information needed for patient care, while still protecting patient privacy. The Department of Health and Human Services' Centers for Medicare & Medicaid Services



With support from policy-makers, applying technology could be an innovative step to a more efficient health care system.

awarded a \$100,000 grant to the American Academy of Family Physicians to support the pilot project that standardized electronic health record software in several health care facilities. The new Medicare Modernization Act, passed in December 2003, provides guidelines and incentives for HIT that many analysts believe will spur further adoption of electronic prescribing and use of electronic medical records.

Several state programs have also developed methods of electronic recordkeeping. The Delaware Health Information Network is a statewide network for health information and electronic data interchange. It has reduced costs, stimulated competition based on quality, improved access to patient records and best practices, and provided information about available resources to health care providers.

Gov. Jeb Bush of Florida recently established the Governor's Health Information Infrastructure Advisory Board. The board will help to promote and implement the adoption of electronic health records and the Florida health information infrastructure.

Rhode Island's Quality Institute, a unique public-private partnership, has helped to create a statewide electronic prescribing program connecting physician offices with pharmacies.

Despite the high start-up costs and the concerns for privacy, statewide databases and electronic prescribing are expected to lower health costs and improve patient care by increasing accuracy and access to a patient's medical history. With support from policy-makers, applying technology could be an innovative step to a more efficient health care system.

—Sarah Donta is a health policy project assistant with CSG.

GIS Guides Natural Resources Management

Ongoing advances in computer technology have greatly expanded the quantity and quality of information available to state natural resources management agencies, thereby facilitating improved planning and decision-making. The evolution of Geographic Information Systems is an example. GIS is a term used to describe the data, hardware, and software systems used to analyze and spatially display information. Pioneered in the 1980s by firms like Environmental Systems Research Institute, GIS usage significantly expanded in the following decade with the advent of desktop-PC applications, such as ESRI's ArcView.

In particular, GIS has proven to be an extremely useful tool in state efforts to manage fish, wildlife and other ecological resources.

For example, 35 state natural resource management agencies have adopted the Natural Heritage Network's methodology to inventory and document rare plants, animals and types of ecological communities. Most of these agencies, 25 as of July 1, 2004, have converted from paper maps to the GIS-based data management system developed by NatureServe—a private, nonprofit conservation organization. Several more agencies are either considering or currently in the process of making the switch.

Information regarding where particular types of rare species or natural areas are located or are likely to be found is a tremendously

valuable planning tool for guiding efforts to conserve state biological diversity and making informed land use decisions.

Another major GIS-driven initiative is the National Gap Analysis Program (www.gap.uidaho.edu). Its mission "is to provide regional assessments of the conservation status of native vertebrate species and natural land cover types and to facilitate the application of this information to land management activities." The program is a cooperative public-private effort consisting of state-level projects coordinated by the U.S. Geological Survey.

Maps and the ability to accurately show information relative to where things actually occur "on the ground" have always been useful for informing the public, as well as for guiding agency management decisions. GIS has substantially enhanced this capability through the use of relational databases, digital imagery and computerized cartographic tools, to provide more accurate, readily modified and easily produced maps. Mapping projects that would have taken an agency many months to complete in the past are now completed in a few days.

As GIS technologies continue to be refined, natural resource management agencies will undoubtedly find new and creative applications for using spatial data to help preserve and protect their states' ecological resources.

—Ron Scott is an environmental policy analyst with CSG.

Mapping projects that would have taken an agency many months to complete in the past are now completed in a few days.

