

Georgia's Technology Jewels

Tod Newcombe | October 31, 1995

Nov 95 Level of Govt: State. Function: ? Problem/Situation: Georgia wants to improve delivery of services by expanding its use of technology. Solution: Their efforts have begun to pay off and have elevated the status of the state to a technology innovator. Jurisdiction: Georgia, Florida. Vendors: Scientific Atlanta Inc., BellSouth, IBM, America Online, Prodigy.

By Tod Newcombe Contributing Editor In 1987, J. B. Matthews was hired by the Board of Regents of the University System of Georgia to be the first full-time staff member dedicated to managing information technology. One of Matthews' first priorities was to do something about the aging computer network that served the university system. "It was an old-style network," recalled Matthews, "aimed primarily at sharing the use of a mainframe computer located at the University of Georgia." On his desk was a proposal from a staff member to drop the hierarchical network in favor of a peer-to-peer system that linked computers to each other. The proposal was based on a new trend that was beginning to emerge, known as the Internet. Matthews quickly determined that the proposal was on the right track. A modest amount of funding was channeled toward the project, and by 1991, the state was able to connect all of its 34 higher educational institutions to each other. Soon the universities and colleges were supporting common administrative functions statewide, as well as communicating via electronic mail. They were sharing library resources as well as global resources over the emerging Internet. In fact, Georgia was one of the first states in the country to link all of its public universities and colleges to the Internet on a systemwide basis. Today, that system - known as PeachNet - is one of the jewels in Georgia's technology crown.

EMPIRE STATE OF THE SOUTH With its economy and population growing at a fast clip (the state grew by one million people between 1980 and 1990) and as the host of the summer Olympics in 1996, Georgia has become what its motto always proclaimed it to be: "Empire state of the South." Indicative of its position as one of the more economically vibrant states in the south, Georgia's government is taking an aggressive stance toward delivering services to both citizens and businesses. This includes expanding the use of technology to enhance service delivery and using public-private partnerships to meet that goal. One year ago, Gov. Zell Miller, with the backing of the state Legislature, created the Office of Information Technology Policy and a 12-member council that governs the office and recommends IT policy for the executive branch. Five members of the council are from the private sector, including Dr. H. Allen Ecker, chief technology officer for Scientific Atlanta Inc., a global communications firm. According to Ecker, the council's mission is to help the state maximize its use of technology for promoting economic development as well as delivering services. Recently, the state took a major step in this direction when it acted on the recommendation of the council and appointed Mike Hale, the former head of information technology for Florida, as its first chief information officer. Breaking from the traditional state government mold of

doing everything by itself, Georgia has begun relying on the private sector to support its use of technology. "Public-private partnerships benefit state agencies by fostering exchanges of both information and experience," said Ecker. They can also provide states with valuable assistance and give IT projects credibility in the eyes of state legislatures, according to a leading government official. With Ecker from Scientific Atlanta and Clyde Manning from BellSouth sitting on the council, Georgia stands a good chance of gaining valuable experience from a host of prominent communications firms in the Atlanta area. In fact, the crown jewels in Georgia's technology infrastructure are all communications-related. Besides PeachNet, there is the Georgia Statewide Academic and Medical System, a two-way video system for distance learning and telemedicine and GeorgiaNet, a state authority that markets and sells public information in an electronic format.

PEACHNET Since 1991, PeachNet has expanded its connections beyond the 34 institutions that comprise the University System of Georgia to include public libraries, private educational institutions, all Board of Regents sites, a number of public high schools and a host of state agencies. While the total number of sites probably doesn't exceed 85, Matthews is quick to point out that individual usage of PeachNet is heavy. The University of Georgia alone has tens of thousands of users. The Board of Regents operates PeachNet on a \$2 million budget. Data communications run on the TCP/IP protocol and are delivered via dedicated T1 lines and 56Kb leased lines. Students, educators and researchers can use PeachNet for e-mail services, access to online library catalogs and databases within the university system and, via the Internet, around the world. The system also supports a number of administrative functions. As PeachNet grows, its mission has begun to change from that of a technology service to an academic resource that can augment what's happening in classrooms, research and independent study. According to Matthews, technology has evolved so much in recent years that it's causing people to think differently about how to educate now and in the future. "Educators are beginning to think about overcoming boundaries related to geography and time," he said. To push the educational envelope using PeachNet, the Chancellor for the Board of Regents recently launched several technology initiatives. Slated for completion this fall are the first components of what will become a statewide electronic library. With a capital budget of \$10 million (of which \$4 million will go toward expanding PeachNet's bandwidth capacity), the statewide library will allow a student, patron or faculty member anywhere in the state to access library resources using a common interface. Another initiative already under way will provide a number of electronic services for students, including e-mail, improved access to PeachNet, and such things as electronic registration and electronic transcription transfer. A third initiative will provide teachers with high-tech training, including distance learning instruction and electronic media development. Besides the benefits PeachNet gives students and educators, Matthews said the system is helping to even out educational and economic opportunities statewide. "PeachNet can help people around the state to achieve a higher level of parity in regards to education and access to information resources."

GSAMS Throughout the country, state governments are attempting to expand educational horizons through distance learning. Classrooms miles apart can share teaching knowledge and other resources over two-way video connections that bring students and teachers together with video cameras, audio equipment and banks of monitors. But no state has done it quite like Georgia. The Georgia Statewide Academic and Medical System (GSAMS) is considered the world's largest public two-way video network, with 220 schools and hospitals linked together. The system, which so far has cost approximately \$50 million, began its first two-way transmissions in 1992. GSAMS' goal, like PeachNet's, is to equalize educational and medical opportunities throughout the state. To reach that goal, the state set some key cost and functionality objectives to ensure rapid implementation. In an interview earlier this year, George Christenberry, deputy commissioner of the Telecommunications Division for the Department of Administrative Services, explained what those objectives were: "The network had to provide a reasonably priced service and, at the same time, use technology that can go anywhere in the state," he said. "In other words," he added, "Georgia wanted a low-cost system that could be used anywhere in the state, but wouldn't take five years to build." The state has pretty much achieved its objectives by building GSAMS as a public-private partnership involving the state and leading telecommunications and video technology firms. Through some well-crafted negotiations and planning, GSAMS established low cost connections into the most rural parts of the state, using full T1 lines for telemedicine procedures and fractional T1 lines for educational instruction. The state subsidizes line access for schools and hospitals and has paid for the full cost of equipping a site with audio and video hardware and software. In 1994, with only half the number of sites available today, GSAMS handled more than 4,000 multi-point video conferences. With the ability to double in size, GSAMS is well on its way toward equalizing citizen access to better education and healthcare. Now, high school and college students in more remote parts of the state can take foreign language, art, journalism, mathematics and other advanced learning classes that have always been available in suburban and urban school districts.

GEORGIANET IBM didn't become the world's largest provider of computer products and services because it was a technology innovator. Instead, the company was just so much better than all the other vendors at adapting someone else's innovation and marketing it successfully. That might be the philosophy behind GeorgiaNet, the state authority in charge of making public information available to the private sector in an electronic format. For example, in January, GeorgiaNet launched its online legislative information service, which provides subscribers access to the full text of bills in the Georgia State Legislature, including the bills' status and other vital legislative information. As Bob Speers, director of marketing for GeorgiaNet, pointed out, the service was by no means the first in the country. In fact, GeorgiaNet looked closely at two other similar services - TechNet in New Mexico and INK in Kansas - before developing its own. But GeorgiaNet offers what few, if any, government online subscription services have: an easy-to-use, "point and click" graphical interface, state-of-the-art search and retrieval tools for fast and accurate searches and easy

downloading capabilities to word processing systems. In fact, the service is more like something from Prodigy or America Online, rather than from a government agency. GeorgiaNet's objective is not only to do a good job at delivering services electronically, but to become the single source for providing Georgia's public information conveniently in an electronic format. "Examples exist of what other states have done well, but usually it's up to each individual agency," said Speers. "Some states have as many as 20 agencies providing information online, each one unique. The concept at GeorgiaNet is that one group of technology experts will help all the agencies bring their information online." Begun in 1990, GeorgiaNet has generated the bulk of its revenue from selling data from the Department of Motor Vehicles to insurance agencies. In 1994 the authority generated \$18 million in revenue, of which 93 percent was returned to state agencies. Today, however, the emphasis is on online services. Besides the legislative database, GeorgiaNet also has a database of 500,000 incorporated businesses in the state - databases that contain the state code as well as rules and regulations and, most recently, a database that contains crucial real estate information. GeorgiaNet subscribers pay an annual fee of \$75 and 45 cents for every minute of access. Premium charges apply in some cases. Future plans call for adding four more databases (required by law) and persuading other agencies to provide information online via GeorgiaNet. After the 1996 Summer Olympics, GeorgiaNet will take over a 200-kiosk network that is currently being installed by Georgia's Department of Transportation under a grant from the federal government. The kiosks will initially provide spectators and Atlantans with travel information during the Olympics (see "Atlanta D.O.T in Full-Time Training for Olympic Games," October 95), GeorgiaNet plans to put some to-be-named interactive government services on the kiosks. Ask why GeorgiaNet is so busy these days and Speers has a simple answer: "Because the demand for information exceeds the supply," he said. "Our future plans are to get all these databases online as fast as we can."

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