

# TOP UPDATE



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Technology Opportunities Program

Connecting Americans to the World of Information

## March 21, 2002: Deadline for 2002 TOP Applications

**O**n December 6, 2001, the Technology Opportunities Program (TOP) announced the opening of the FY 2002 grant round competition. TOP has \$12.4 million available for new grants. Applicants can request a maximum of \$750,000, which must be matched with non-federal funds. The deadline for applications is March 21, 2002.

As in previous years, TOP seeks applications that demonstrate innovative uses of digital network technologies in underserved communities throughout the United States. Dr. Bernadette McGuire-Rivera, associate administrator of NTIA's Office of Telecommunications and Information Applications stressed both the practicality and creativity of TOP-supported projects. "TOP projects represent pragmatic, yet visionary, investments in our communities," she noted. "These investments in technology and in people can lead to dramatic improvements in services provided by non-profit organizations and local governments. But most important, the projects serve as national models, offering a wealth of valuable data and best practices that can be shared with others."

For this year's grant round, TOP continues to encourage applicants to take maximum advantage of ongoing advances in digital network technologies. "In undertaking TOP-supported projects," said Stephen J. Downs, TOP's director, "grantees become partners in pursuing the common goal of realizing the potential of telecommunications and information technology to better the lives of all Americans." The challenge for TOP applicants, Mr. Downs said, "is to be bold and imaginative, to test the limits of telecommunications technologies in real-life settings."

A copy of this year's *Application Kit*, which provides the information and standard forms you need to prepare a TOP application, is available on the TOP web site at [www.ntia.doc.gov/top](http://www.ntia.doc.gov/top). If you have difficulty accessing the site, please contact TOP at 202-482-2048. In addition, TOP Program Officers are available for technical assistance calls, and TOP has a FAQ, which addresses common questions, in the footer of its website.

## RENEW YOUR SUBSCRIPTION NOW!

*TOP Update*, which provides news about TOP and updates on TOP-funded projects, is distributed quarterly free-of-charge. We are in the process of updating our mailing list, and want to make sure that you wish to continue to receive *TOP Update*.

There are three ways to communicate to TOP that you want to remain on our mailing list: (1) go to the *TOP Update* page of our web site ([www.ntia.doc.gov/top/publicationmedia/top\\_update.htm](http://www.ntia.doc.gov/top/publicationmedia/top_update.htm)) and sign up; (2) fax TOP the back page of this newsletter, which has your address and subscriber ID code (fax: 202-501-5136); or (3) call TOP and leave us the subscriber ID code, which is on the upper right hand corner of the label (phone: 202-482-2048).

If we do not hear from you, this is the last *TOP Update* newsletter you will receive. Thank you for your interest.

## OK-FIRST Wins National Award

**O**K-FIRST, a 1996 TOP-funded project that delivers lifesaving information to local emergency managers, was selected as one of five winners of the prestigious *Innovations in American Government* award. The awards program, which is administered by Harvard's [Kennedy School of Government](http://www.kennedy.harvard.edu) and the Council for Excellence in Government and founded by the Ford Foundation, was established to identify and promote excellence and creativity in the public sector.

Established in 1996 by the Oklahoma Climatological Survey at the University of Oklahoma, OK-FIRST provides up-to-the-minute weather data via specialized computer technology. With access to this timely information, emergency management teams can close roads and bridges before they become dangerous, alert rescue crews about storm movements, and take other pro-active measures to ensure public safety during severe weather.

"While we cannot control the weather, OK-First demonstrates that innovative thinking can help government respond to it more quickly," said Stephen Goldsmith, Faculty Director of the *Innovations in American Government Program*. "It's important that we continue to harness this type of public-sector creativity to improve the lives of American citizens nationwide."

This year, the Innovations in Government National Selection Committee chose only five winners, instead of its usual 10, out of nearly 1,300 entries. Visit: <http://radar.metr.ou.edu/OK1/OK1.html>

## Annual Networks for People Focuses on Results

**T**his year's Networks for People conference focused on "Results" — an emphasis on sharing TOP's best practices and active promotion of public-private partnerships to ensure successful projects. The conference was held on December 6 and 7 in Washington, D.C., and attended by an overflow crowd of more than 600 people.



An overflow crowd of more than 600 people attended the Networks for People Conference in Washington, D.C.

A wide variety of TOP grantees participated, discussing their influence on the community. For example, representatives from rural communities such as Blacksburg Electronic Village and the Appalachian Teleworkforce Development Project talked about providing critical services online in rural settings. A panel on "healthy results" discussed how innovative uses of technology helps deliver health care services to remote areas, assisting patients with traumatic medical conditions, and making sure low income communities receive the health information they need.

*continued on page 4*

# News From the Field

## Economic Development in Appalachia

*Athens, Ohio.* Communities in the Appalachian countryside of Southeast Ohio have been devastated by the collapse of the mining industries that were once their mainstay. TOP funding (1999) helped put in place technology and people who are building new capacities in these once thriving mining towns. The **Appalachian Center for Economic Development** has built a flexible business network (ACENet) based on a successful model in northern Italy. Specialty food service businesses throughout the Appalachian region use the network to generate more business by communicating with and learning from each other.

The network includes an electronic mailing list, web pages, email, and online databases of vendors and customers. Businesses that make different kinds of food products, such as local bakeries and sausage-makers, use the network to share information on suppliers and distributors. One Appalachian salsa company used ACENet's vendor database as well as other components of the network (e.g., an online forum from which they learned about trade shows) to grow from a mom-and-pop shop with annual sales of \$60,000 to a seven-person operation that is expected to gross more than \$1.2 million in sales this year. According to the owner, "I appreciate the one-on-one attention I've received from ACENet staff. I expect to work closely with them in the near future as we continue to manage growth wisely. Their marketing and business finance expertise has been particularly useful."

In addition, ACENet is teaching entrepreneurship to high school students in fourteen schools in five counties, and setting up computer technology centers in the schools which make the Internet and business applications accessible to the public. Visit: [www.acenetworks.org](http://www.acenetworks.org)

## Parents and Physicians Endorse Telemedicine at Rochester Daycare Center

*Rochester, NY.* The Tele-medicine Daycare Project (University of Rochester, TOP 2000) is using telemedicine in inner-city daycare centers to address the challenging problem of infectious disease in the child care setting. The project seeks to reduce the time children are excluded from daycare because of illness, and the resulting time that parents have to miss work. It is also reducing the frequency with which parents need to bring their children to physicians' offices or emergency departments.

Since May 2001, approximately 52 children have been seen via telemedicine. The project director, Dr. Ken McConnochie, reports widespread acceptance of the telemedicine tool, with parental satisfaction interviews after encounters indicating overwhelming acceptance. The families experiencing telemedicine have indicated that they would choose a daycare center which offered telemedicine over one that did not, given the choice. The majority of pediatric and family practitioners using the system are also very supportive.



Dr. McConnochie is excited about using the system during the upcoming cold and flu season. "In the early summer months, the health delivery system isn't as taxed. Most illnesses aren't acute respiratory in nature, but are skin infections which are easy to diagnose with the telemedicine system," Dr. McConnochie states. "The fall will bring a new level of difficulty as doctors try to look at a squirming kid's ear canal through the video system." Visit: [www.urmc.rochester.edu/peds/div/tdc/](http://www.urmc.rochester.edu/peds/div/tdc/)

## TUFTS Takes Telemedicine to Prison

*Boston, MA.* The Massachusetts Correctional System discovered that 30-35% of their inmates are infected with hepatitis C, a very serious infection, with the majority of infected persons developing chronic liver disease. **Tufts University and Lemuel Shattuck Hospital** (TOP 1999) teamed up to identify and intervene quickly to contain this public health outbreak. Since more people are incarcerated for longer periods of time, prisons are being confronted with rising health care costs and caring for inmates with costly chronic diseases such as hepatitis C. In addition to the cost of health care, the cost of providing medical guards for transporting prisoners to and from medical centers has become a major cost. As it stands now, Massachusetts inmates with hepatitis C are required to make numerous trips to an outside facility for tests, such as a liver biopsy, and diagnosis. Then, after numerous lab visits, the patient will again be transported to the outside facility to review the results and discuss treatment possibilities. And, frequent visits for routine follow-up, lab work and consultations are required. Using basic telemedicine technology, the network between the correctional facility and Lemuel Shattuck Hospital demonstrates a more cost-effective means of providing health care to inmates, reducing patient travel time, thereby offering significant savings in time and money.

## Mayor of New Iberia, Louisiana, Improves Disaster Preparedness



*New Iberia, LA.* When the City of New Iberia, Louisiana, received a TOP grant (1999) to assist the city in dealing with emergencies and flooding from hurricanes, Mayor Ruth Fontenot realized that any such incident would require strict coordination among responding agencies. Taking the lead, she organized a mock disaster drill involving city and county police, fire companies, school administrators, and service agencies, such as the Red Cross. The drill was designed to see how the various agencies would react in an emergency, which in turn would lead to better planning to control the spread of hazardous materials, to targeting evacuations and school

closings, and to accelerate recovery from an emergency. The drill was a great success and new emergency procedures were developed. TOP funds went toward setting up a Geographic Information System (GIS) mapping database that enabled the mayor to anticipate various types of emergencies, such as flooding or chemical spills.

Little did Mayor Fontenot know that within months of the drill she would have a chance to see those new procedures used in a real emergency. A train derailed in the center of New Iberia, spilling hazardous materials in a crowded section of the city. She credits the procedures developed during the drill for the quick containment of the spilled substances, and for the timely and measured evacuations of the affected areas. No one was injured in the spill and property loss was kept to a minimum.

# LESSONS LEARNED

## Cal-Justice Uses Technology "To Protect and Serve ..."

As we all now know, in the first weeks after the terrorist attacks on September 11th, the Federal Bureau of Investigation (FBI) had agents investigating every possible lead to determine the identity of the terrorists and their affiliation. Simultaneously, the Governor of California was forming a multi-agency "anti-terrorism" task force to assist and contribute to this effort. It quickly became apparent that a valuable source of information to these investigations was the extensive repository of individual photographs that could be obtained electronically using the **California Department of Justice (C-DOJ) Cal-Photo** image system (TOP 1996). In fact, one of the suspected terrorists had a booking photograph (i.e., a "mug shot") in the Cal-Photo image system, which had been taken for an arrest offense but had not been reported to the FBI's National Crime Information Center (NCIC). The photo would not have been available to the FBI if they did not have access to the Cal-Photo system.

Now, all of the agencies that are investigating terrorist activities are eager to gain immediate access to the 32 million California Department of Motor Vehicles (DMV) driver license and identification photographs. The only agency that can retrieve a photograph from DMV is California's DOJ; therefore, DMV currently has to manually retrieve and scan photographs to send to the FBI.

In late September, staff from C-DOJ and DMV met to discuss how quickly the DMV portion of the Cal-Photo project could be inaugurated and photographs made available electronically. While it was an ambitious effort, the application is in place and ready for use by the California "anti-terrorism" task force. The FBI now has access to this rich repository of photographs. Information can be retrieved using an individual's driver's license number and displayed on the computer screen in seconds. The Cal-Photo project is a fine example of how law enforcement agencies can use technology to fulfill their ultimate goal - "to protect and serve."

# FACES OF TOP

## Dance Partners Goes Global on the Access Grid

*Minneapolis, MN.* The TOP-supported project *Dance Partners* (TOP 1999), a consortium of Ballet Arts Minnesota, the media-production company Beyond Broadcast, and artservices & co., uses a mix of teleconferencing and Internet-based tools to provide dance instruction to students at a distance. In November, Dance Partners took the concept of dance at a distance one step farther in an international collaboration called *Dancing Beyond Boundaries*.

*Dancing Beyond Boundaries* brought together artists, engineers, computer scientists, and video producers and premiered at the SuperComputing 2001 global conference in Denver, Colorado, November 12-15, 2001. The choreographers, dancers, animation artists, musicians, computer scientists, engineers, and producers were situated in different cities in North and South America as the piece was created, rehearsed, and premiered over the four days of the conference.

Minneapolis-based choreographers Danial Shapiro and Joanie Smith guided the shaping of the production with assistance from Florida-based classical guitarist Welson Tremura and dancers in both sites. The piece culminated with a premier on the last day of the conference, led by two Denver-based dancers in conjunction with "virtual" dancers participating in real time from Minneapolis and Gainesville, Florida. Musicians were in Brazil - in a totally different hemisphere. Conference attendees were able to see the Denver dancers in the flesh, but anyone with an Internet connection was able to watch not only the production, but also rehearsals, through a dedicated Web site at: [www.digitalworlds.ufl.edu/sc2001](http://www.digitalworlds.ufl.edu/sc2001).

*Dancing Beyond Boundaries* relied on the ultra-high bandwidth Internet2 network and other emerging technologies; the backbone was provided by the new

multipoint video-conferencing system called the *Access Grid*. The project was spearheaded and coordinated by the University of Florida's Digital Worlds Institute, a joint initiative between the university's Colleges of Engineering and Fine Arts.

Participating along with dancers from the University of Minnesota were Dance Partners' Margo Berg, Dannel Dever, Nancy Mason Hauser, and Rick Hauser. Also participating in the project were percussionists from Brazil's University of Campinas (Sao Paulo). Contributors included Florida's Northeast Regional Data Center, which provided network services, and the Partnership for Global Learning, which provided cultural linkages between North and South America. See the TOP project at [www.DancePartners.org/index.htm](http://www.DancePartners.org/index.htm)



# New Lessons Learned Report on Rural Applications

NTIA recently released the seventh in a series of reports that explores the experiences and lessons learned by TOP-funded projects. *Networking the Land: Rural America in the Information Age* features ten case studies on demonstrating how rural communities can use telecommunications and information technologies to develop local economies, manage natural resources, and improve access to education, health care, social services, and the arts. [Networking the Land](http://www.ntia.doc.gov/top/publications) is available online at [www.ntia.doc.gov/top/publications](http://www.ntia.doc.gov/top/publications) or by calling 202-482-2048 for a hard copy

## Annual Networks for People Focuses on Results

*continued from page 1*

TOP grantees considered how organizations can respond to community needs, including mapping neighborhood assets to better coordinate services. And finally, a plenary panel of industry experts and an author of a recently-released National Research Council study on "First Mile" broadband developments discussed ways to encourage broadband deployment, as well as the implications of the Council's findings for non-profit and public sector organizations. Industry panelists stressed the importance of developing a solid business plan for public-private partnerships, particularly in deploying a broadband technology project.

For more information on Networks for People 2001, including many of the presentations, visit the TOP web site. The conference also resulted in a new opportunity for collaboration: an NFP attendee from the University of South Carolina has set up a discussion board for TOP grantees and potential applicants: <http://swtech.sc.edu/forum/top.default.asp>

## Get TOP Updates Online

Join TOP's broadcast e-mail list to receive information on TOP grant competitions, TOP evaluation studies, and other special reports and special events. So, take a moment and join our e-mail list. Go to the footer at the bottom of TOP's web site, [www.ntia.doc.gov/top](http://www.ntia.doc.gov/top), and click on "Get Updates" and sign up. It only takes a few seconds!

And, remember – renew your subscription to TOP Update now. You can register online, fax us the back page of this newsletter with your subscriber ID code, or call us with your subscriber ID code. (See page 1 for details.) Thank you!



For more information or to send comments, contact the Editor, TOP Update, U.S. Department of Commerce, NTIA/TOP, 1401 Constitution Avenue, NW, Room 4092, Washington, DC 20230. To be added to the TOP mailing list or receive TOP publications, e-mail ([top@ntia.doc.gov](mailto:top@ntia.doc.gov)), write to the above address, fax (202-501-5136), or call (202-482-2048).

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