TECHBeat

Dedicated to Reporting Developments in Technology for Law Enforcement, Corrections, and Forensic Sciences

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Police Department

SMARTPHONES AND LAW ENFORCEMENT

NLECTC

National Law Enforcement and Corrections Technology Center

A Program of the National Institute of Justice **NIJ**

ABOUT TECHBEAT

TechBeat is the quarterly newsmagazine of the National Law Enforcement and Corrections Technology Center System. Our goal is to keep you up to date on technologies for the public safety community and research efforts in government and private industry.

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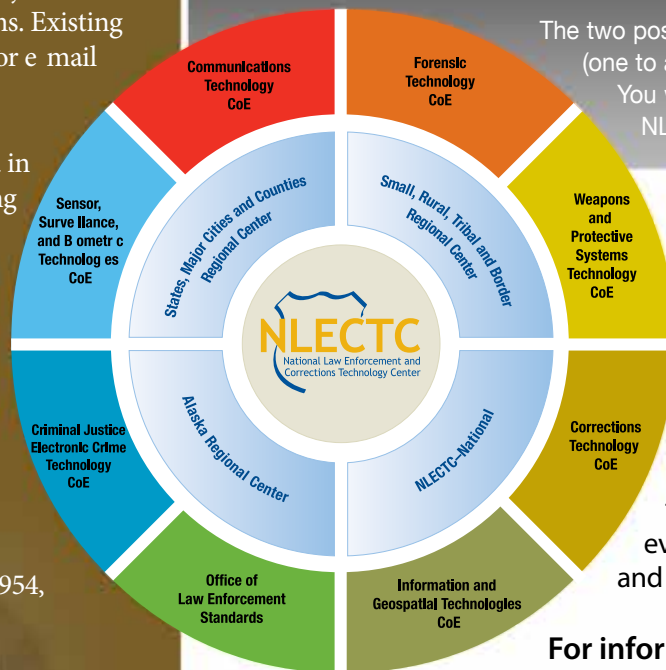
Take the Tools of the Trade Home with You

Hang it on your wall

There is nothing more valuable than the right tool for the right job. Or is there? How about a limited edition poster showcasing "tools of the trade" for law enforcement professionals? Renowned artist Dick Kramer has partnered with NLECTC to bring you hand-crafted limited edition posters that you can collect and display. These works of art are only available through NLECTC, your no-cost technology partner.

The first poster in the series of four depicts police officers suiting up and poised and ready for the challenges of the day. Every detail of their uniforms and equipment is spot on. Even their facial features and gestures are extremely realistic. Mr. Kramer has spent a career chronicling military and law enforcement men and women at work. The second poster features NIJ s Aviation Technology Program.

The two posters are available now. Go to JUSTNET.org or call (800) 248-2742 to order yours today (one to a customer, please). While on JUSTNET visit our Facebook page and sign up as a fan. You will receive updates regarding this project and other important news and information from NLECTC and NIJ.

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The NLECTC System

The National Law Enforcement and Corrections Technology Center (NLECTC) System is critical to the National Institute of Justice's mission to assist state, local, tribal and federal law enforcement, corrections and other criminal justice agencies address technology needs and challenges.

The NLECTC System is an integrated network of centers and Centers of Excellence that offer free criminal justice technology outreach, demonstration, testing and evaluation assistance to law enforcement, corrections, courts, crime laboratories and other criminal justice agencies.

For information, visit www.justnet.org or contact (800) 248-2742.

NCJRS
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For information, visit www.ncjrs.gov.

DHS SAVER PROGRAM

FEMA News Photo

Emergency responder agencies seeking help in deciding what equipment to buy have an online resource that provides information on hundreds of products: the U.S. Department of Homeland Security (DHS) SAVER Program.

The SAVER, or System Assessment and Validation for Emergency Responders Program, began in 2004 under the Federal Emergency Management Agency (FEMA). Responsibility for SAVER was transferred to the Science and Technology Directorate of DHS in January 2009, according to SAVER Program Manager John Pennella, who has been with the program since its inception.

The program's basic premise has remained the same: to provide federal, state, local and tribal emergency responders with information they can use to make knowledgeable equipment purchase decisions. The program tests and evaluates an extensive range of commercial off-the-shelf equipment that falls under DHS Authorized Equipment List categories, including:

- Chemical, Biological, Radiological, Nuclear and Explosive (CBRNE) operational and search and rescue equipment.
- Personal protective equipment.
- Physical security enhancement equipment.
- Detection.
- Information technology.

- Medical.
- Interoperable communications equipment.
- Decontamination.
- CBRNE logistical support equipment.
- Explosive device mitigation and remediation equipment.
- Inspection and screening systems.
- Intervention equipment.
- Terrorism incident prevention equipment.

In any given year, the SAVER Program evaluates between 30 and 40 products, according to Pennella. Since its inception, the program has evaluated more than 400 products and published more than 800 equipment information documents. A few examples of the myriad types of equipment for which information is available include in-car camera systems, law enforcement protective helmets, small bomb disposal robots, thermal imaging cameras, hydraulic rescue tools and facial recognition technology. In 2010, the program had 29 projects.

Evaluation Process

The agency does not have enough resources to evaluate all products, so must prioritize projects based on current trend information and input from emergency responders.

"We work in cooperation with FEMA to determine what projects in any one year we will look at and assess," Pennella explains. "We use information from the FEMA grant program about what the state and local folks are looking at buying. Second, we consider what responders have historically purchased and need information on, and third, whether there is a policy in place that will move the state and local folks to buy a certain type of equipment."

"We also have a first responder group in S&T that is focused on first responder equipment and equipment development," he adds. "We work with them to help us and we also run our own focus groups. We take all the information in together and determine the priority list."

Depending on the type of equipment, the evaluation process takes between six to nine months.

"When we do an assessment, we get a focus group together of responders familiar with the type of equipment we are assessing," Pennella says. "They help us understand what criteria they are interested in knowing. We ask them what they would need to know to make an informed decision if they were buying it."

Evaluation criteria include affordability, including initial cost and cost to maintain; capability; usability; maintainability; and deployability. The focus group also provides information on scenarios the equipment will be used in, for example, a HAZMAT incident, and suggests the equipment they would like to have tested. SAVER market surveys provide information on current manufacturers of specific types of equipment.

Agency partners, called technical agents, set up and carry out the evaluations and write a variety of documents, including summaries, product lists and assessment reports.

"The technical agents are the pointy end of the stick," Pennella explains. "We sponsor them and provide overall direction and focus and work with FEMA. The technical agents actually execute the program. They gather the responders, work with the responders to determine the criteria and scenarios, purchase the equipment, write the test plan and procedures and run the test. They facilitate the responders who are the evaluators during the process."

SAVER Program technical agents include:

- Center for Domestic Preparedness.
- Eastern Kentucky University.
- National Urban Security Technology Laboratory, formerly Environmental Measurements Laboratory.
- Nevada National Security Site, operated by National Security Technologies, LLC, for the Department of Energy.
- Science Applications International Corporation.
- Space and Naval Warfare Systems Center Atlantic.
- Texas A&M Engineering/The Texas A&M University System.
- U.S. Army Natick Soldier Research Development and Engineering Center.

All SAVER-related documents are available through the Responder Knowledge Base website, https://www.rkb.us/saver. Users must be affiliated with an emergency responder organization, for example, law enforcement, fire service, EMS, emergency managers, urban search and rescue, SWAT, hazardous disposal, bomb disposal and some public works agencies, such as those involved in critical infrastructure.

Each month, approximately 2,250 publications are either downloaded or requested from the SAVER site, according to Pennella.

"Our goal is to provide knowledge products to the responder community that will help them make informed procurement decisions," he says. "Our focus is to provide these knowledge products that enable the responders to better select, procure, use and maintain their responder equipment. If we meet that objective, we are successful."

For more information, visit SAVER on the Responder Knowledge Base (RKB) website at https://www.rkb.us/saver, e-mail SAVER@dhs.gov, or call the RKB helpline at (877) 336-2752.

SAVER Photo

slide show online

SAVER and Emergency Responders

When Joe Lynch was fire chief and emergency manager for the city of Irondale, Ala., he used the SAVER Program to help decide which portable lighting units to purchase. Now retired, he serves as an instructor at the Center for Domestic Preparedness and has participated in SAVER focus groups and evaluations.

"It's like a consumer reports organization for portable public safety responder equipment," Lynch says. "It's like a pre-purchase feedback of the equipment. It makes it a more efficient and effective process."

Lynch noted that the program is also useful for administrators or program managers because it provides an added perspective that can aid in their decision process and prevent them from making a costly mistake.

"Reading what a cross-section of responders has written concerning priority features and performance can influence or change the purchaser's thoughts," Lynch says.

"When public safety agencies make decisions, we might be making a decision on equipment we purchase only once during our career," he explains.

"It's very costly to make a mistake on what we select for our equipment. Looking at an assessment gives us more confidence in making our purchases. Also, it vets the manufacturer's claims. When you look at a public safety equipment catalog, manufacturers make claims and you make decisions based on those claims. If those claims are incorrect, the only option you may have is litigation, and no one wants that."

David Williams spent 27 years with the FBI as a special agent bomb technician and as a special agent forensic explosives examiner. Now retired, he has participated in a SAVER focus group on rigging kits for moving improvised explosive devices (IEDs) and provided expert advice during the evaluation of IED disruptors.

"Projects like the SAVER Program are needed to evaluate equipment before it's field employed," Williams says. "None of the stuff is cheap and money is awfully hard to come by for these departments.

"The SAVER Program appeared to be very efficient as to the actual product testing. The method of recording was very thorough."

FEMA News Photo
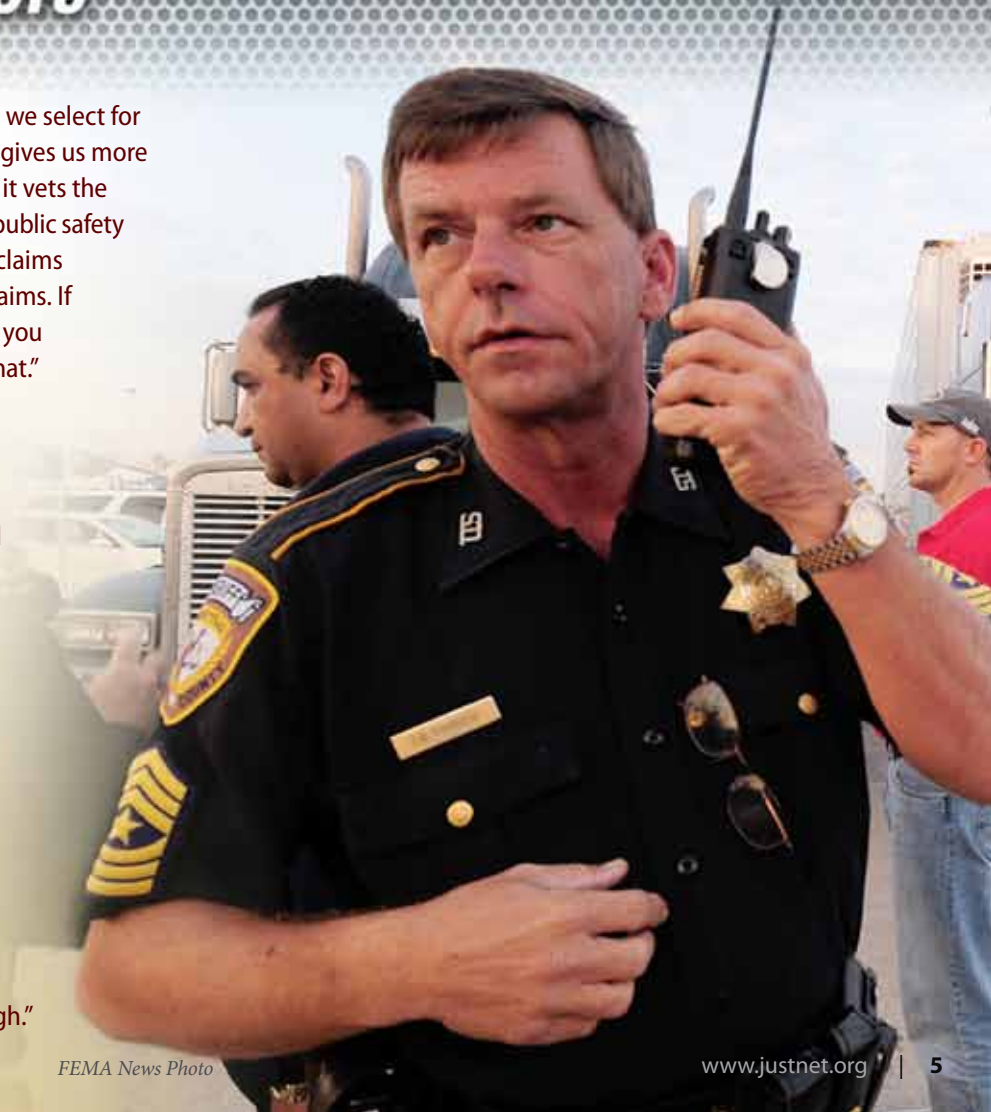
SMARTPHONES
and LAW ENFORCEMENT

Law enforcement agencies are finding sophisticated uses for smartphones, those ubiquitous handheld devices that combine voice services with advanced computing ability.

The Baltimore Police Department, with 4,000 civilian and sworn personnel, is the eighth largest municipal police force in the United States. In 2010, following a pilot study, the department began distributing Blackberry® Curves™ equipped with the PocketCop application to about 2,080 sworn officers, who use them to access criminal justice databases, take photos at a crime scene, and increase efficiency and information sharing, according to Gayle Guilford, director of MIS for the department.

PocketCop provides secure access for queries to the National Crime Information Center (NCIC), motor vehicle and warrant information and other databases. It has alarm capability and wireless messaging. If an officer makes a traffic stop and through database queries discovers the individual is a wanted criminal, an alert is issued to other officers and the communications center without the suspect knowing. The officer has the information at his fingertips rather than having to wait for communications dispatchers to provide it or having to go back to the patrol car to search using its computer equipment.

"The majority of the officers like having the access and the ease of use and having information at hand and not relying and waiting for the dispatchers for descriptions and other information," Guilford says.

The device also contains an in-house Baltimore Police Department application called Priority Warrants, which allows officers to know daily the most wanted individuals in their sector of the city.

The impetus behind equipping officers with smartphones came from Police Commissioner Frederick Bealefeld III, who wanted to untether officers from their patrol cares.

"He wanted to get the officers out of the police car and back in the community and still provide them with the tools needed to do their jobs, provide some safety, and allow them to be involved in the community," Guilford says. "The car can be a barrier to interfacing with citizens."

The devices also contain Global Positioning System (GPS) capability that allows commanders to track the location of officers at all times. Guilford says this feature is an invaluable tool for crowd control and for deploying manpower in an emergency. Also, the historical data provides command staff information to review and determine future deployment strategies.

The department conducted a 90-day pilot study in 2009 with 80 smartphones. "That pilot was very useful because it clearly identified major issues we had to address before roll out to 2,000 officers," Guilford says.

Guilford highlighted several considerations departments need to be aware of before deciding to purchase smart phones for their officers:

- An agency will need to obtain certification for the project from the state NCIC agency so that it follows the security guidelines under FBI Criminal Justice Information Services oversight.

- Battery life will probably need to be enhanced. The Blackberry Curve battery has limited life that won't last thorough an officer's entire shift if he is performing all the applications, so purchase of an extended battery may be necessary. "We chose one that gives 140 percent more time than the battery that comes with the device. The extended battery is fatter so you have to replace the backing, and then the ruggedized covering and holster will need to be bigger as well," Guilford explains. After scouring the Internet, Guilford's department found what it needed on a hunting site.

- Memory will probably need to be enhanced to enable officers to take photos and videos during an investigation. "We added 8 gigabytes of additional memory so officers can take photos relevant to an investigation versus waiting for someone to show up at a scene with a camera," Guilford says.

- Involve the police union early in the process to ensure officers understand the purpose of the GPS application. Officers might be concerned about being tracked throughout their shift and need to understand that the purpose of the GPS function is not a "Big Brother" effort.

- Test the geography to identify dead zones. "They need to clearly identify their dead zones and it's important to know how large they are. All devices have dead zones but it helps to clearly identify them so you can set the proper expectations," Guilford says.

- Identify which police units need the devices and which ones don't. All assignments don't necessarily need mobile access.

- Ensure the department has enough technical staff to manage the need to service the devices, and replace them and remotely wipe the devices clean of all data if they are lost or stolen. "You have to have staff on the IT side to help manage the devices and provide maintenance," she says.

- Rewrite police department general orders to include guidelines on the use of the devices.

- Draft a user agreement so officers clearly understand their responsibilities. "They should view the side partner device just like they view their gun — as a necessary equipment to do their job," Guilford says.

Guilford says use of the devices has definitely improved efficiency. "Officers say they get a full half-hour back during the day because they are not waiting for descriptions and other information from the dispatchers."

Without getting specific, Guilford says the department is eager to determine future uses of the technology. "We are looking at enhancements as far as processing capabilities of the Blackberry because each iteration has more processing capability than before."

For more information, contact Gayle Guilford of the Baltimore Police Department at gayle.guilford@baltimorepolice.org or (410) 637-8959. For information in general about law enforcement use of smartphones, see the June 2010 fact sheet, Considerations, Uses and Limitations of PDAs and Smartphones for Law Enforcement Operations, *published by the National Law Enforcement and Corrections Technology Center System, a program of the National Institute of Justice, at http://www.prod.justnet.org/Pages/RecordView. aspx?itemid=2489.*

Smartphone Application Allows Emergency Dispatchers to See Campus Incidents

The University of Maryland is testing a smartphone application that allows police to view whatever citizens are seeing when they report an emergency situation.

A team in the university's computer science department has developed a proprietary way of streaming video and audio from a smartphone directly to campus police dispatchers, according to Major Jay Gruber.

"When it streams and the dispatcher acknowledges the signal, it geolocates where the video is streaming from within 10 feet," Gruber explains. "So if a person sees a crime in progress or a traffic crash that requires a police response, they just press on the app and point their smartphone at the incident, which streams back to the dispatcher what they are seeing and hearing. Video pops up on the screen and populates a map to show where the person is streaming the video from."

The application has two way audio so the person reporting the incident can speak to the dispatcher.

Police hope to have the system, dubbed M URGENCY, implemented by the fall of 2011 with policies in place for how to dispatch, interface with the person who is calling and get additional information from them. Future plans include providing the onsite video and audio to police car laptops.

"It is an extremely simple interface," Gruber says. "When police click on the video box, it shows their location and then we can slide the video into an incident box, which will be very helpful for the next phase of the testing, which is our University of Maryland police vehicle laptops with cameras and GPS. We'll be able to see where the police officers are and click on an image and slide it into the box so the responding officer can see what is happening prior to getting to the site. The dispatcher will have an image of what the officer can see as well. It's a great system because we can share information needed for situational awareness."

For more information, contact Major Jay Gruber of the University of Maryland Department of Public Safety at jgruber@umpd.umd.edu or (301) 405 7045.

Popular VIDEO Educates on SCHOOL SAFETY

The Ohio School Resource Officers Association, the Boise (Idaho) Police Department and every Pennsylvania school district are just a few of the organizations that account for the countless downloads and more than 3,000 copies distributed of "It Can Happen Here," an admired school safety documentary video.

The video was filmed in high definition and produced by the Office of Justice Programs' National Institute of Justice (NIJ) safe school technology portfolio in cooperation with the Weapons and Protective Systems Technology Center of Excellence (WPSTC), which is part of NIJ's National Law Enforcement and Corrections Technology Center System. No money was spent to market or advertise "It Can Happen Here"; all requests for the video were generated through the Center's extensive national and international law enforcement and educational network.

According to Drs. Timothy Brungart and John Leathers, co-producers of "It Can Happen Here," the documentary is designed to put a face on school safety by informing and encouraging stakeholders in school safety to prepare for emergencies. The video is also being used by the Royal Canadian Mounted Police and members of Pennsylvania State University's (PSU's) International Law Enforcement Forum, which includes the United Kingdom Association of Chief Police Officers.

The video, released in spring 2010, focuses on the Columbine and Platte Canyon school shootings in Colorado and the valuable lessons that communities can learn from these tragedies. Produced by the WPSTC at PSU, its host agency, the 60-minute video includes interviews with victims' parents, school administrators and local law enforcement. It emphasizes the Colorado School Safety Resource Center's efforts to lead the nation in school safety preparation by implementing school safety plans, SWAT team drills, student exercises and other mitigation efforts. It also examines shootings at the West Nickel Mines Amish school, other U.S. schools and schools in other countries.

The video discusses technology solutions that can help law enforcement, including less-lethal technologies, metal detectors and enhanced use of surveillance cameras. In addition, it includes an interview with the senior Israeli police and public security attaché for North America about successful school safety strategies used in that country's ongoing struggle with terrorism. "It Can Happen Here" also offers a list of resources such as websites, reference materials and contacts for help with writing and implementing school safety plans.

"This video is a starting place for communities to start discussing as to what they would do if a similar event happened where they live, work and play," says Michael O'Shea, NIJ's safe schools technology program manager.

After PSU President Graham Spanier saw the video, he sent a copy along with a personal letter to each of the 501 Pennsylvania public school superintendents, all 23 PSU campuses, and the members of the Pennsylvania House and Senate Education Committees. His endorsement spawned other orders throughout the state, from agencies such as Non-Public Schools and Student Support Services and from other individuals and law enforcement agencies who viewed one of the copies sent out to the public schools.

The positive feedback on the video started even before Spanier's letter was sent, from members of NIJ's School Safety Technology Working Group (TWG), which advocated increased education as a top priority for NIJ's School Safety Program for several years.

"They identified the need for education as a high-priority focus. Education can take a lot of different forms, but we thought a video would be more effective than a manual," says Brungart. "We felt it would offer more and better opportunities to disseminate the message."

"We wanted to take advantage of some of the contacts that were developed by the TWG members and use the actual voices of real people to not only educate viewers, but also to instill a sense of urgency into the audience," he adds.

The WPSTC team obtained contacts from the TWG members and began working with schools that had taken an active role in planning for school safety. Subsequently, they made several trips to Colorado to speak to officers, parents and school administrators who were involved in the Columbine and Platte Canyon incidents, and also worked with the Pennsylvania State Police and two of the officers who were among the first responders at the West Nickel Mines Amish school shooting.

"When we approached the TWG members about putting a face on school safety and we wanted someone to talk about contraband detection, video surveillance, SWAT tactics and so on, they invited us to come and visit their schools,"

Brungart says. "One of them heads the school safety program in Alabama, another is the coordinator of internal security at a school district in Kentucky. From there we went on to schools in Chicago and in Oregon, and finally to Denver."

"We had a firm agreement that everyone who participated could do a prescreening and anything they wanted to be removed would be taken out," Brungart explains. "This helped everyone to feel more comfortable. Once they saw we were trying to let them tell their stories, to talk about what they think is important, then they really opened up."

The resulting video reaches out to viewers through the "faces" that the WPSTC team put on the tragedies and it also provides practical and invaluable information.

"Its purpose was to allow others to provide advice based on their experiences and to act as a springboard for discussion for those involved in school safety nationally and internationally. We also provide resources to generate a school safety plan if one doesn't exist or to help schools make improvements to an existing plan," Brungart says.

The video points out that preparation counts; schools, police, firefighters and other school safety stakeholders must take collaborative actions and continuously train together to respond to specific types of threats; and technologies can enhance school safety programs, but only in situations where specific needs, objectives and operational details are well defined, and they should never be used as a substitute for personal interactions.

video preview online
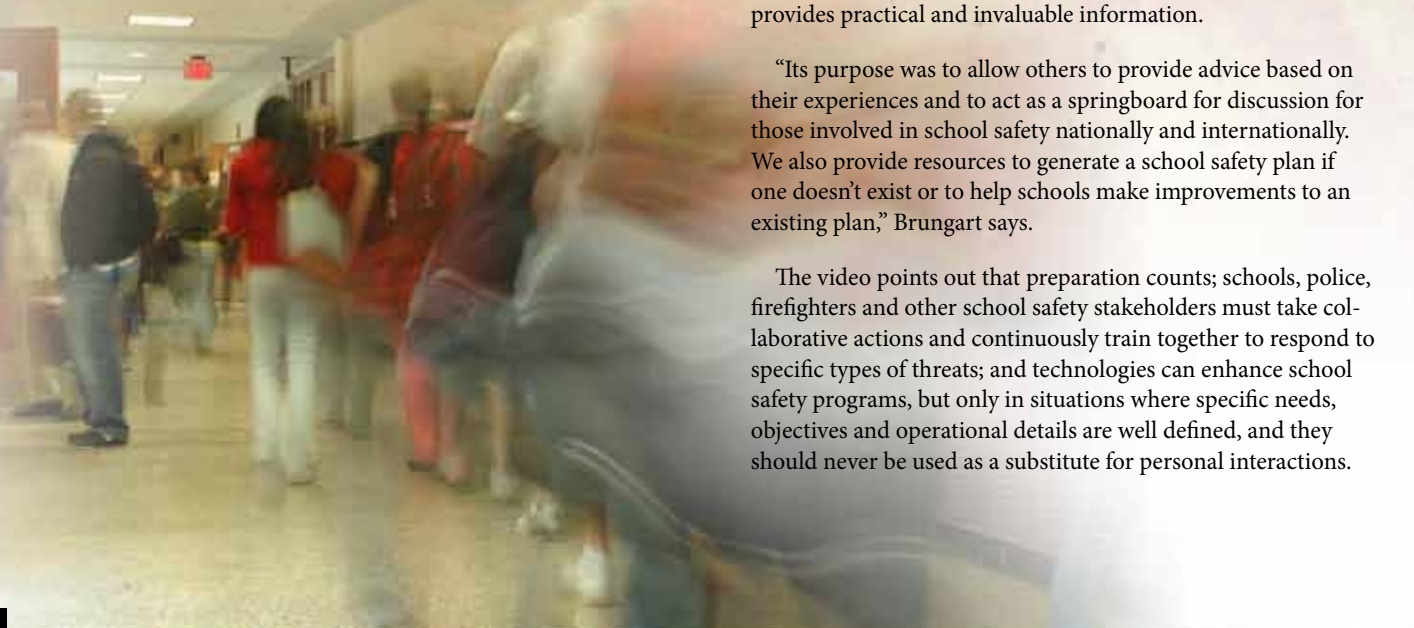
"It Can Happen Here" is available at www.youtube.com/justnetorg, or contact NIJ Program Manager Michael O'Shea for a copy at michael.oshea@usdoj.gov or (202) 305-7954.

PLANNING Helps Agencies EMBRACE TECHNOLOGY

For any law enforcement agency, evaluating, choosing, implementing and managing new technology can be tough. To be successful, the process requires careful planning and analysis, especially for small agencies with limited resources, such as the Grover Beach Police Department in California.

Grover Beach, with a population of 13,500, sits on the central coast of California, halfway between San Francisco and Los Angeles in San Luis Obispo County. The police department has 19 sworn officers, a dispatch center with seven dispatchers, and two civilians who provide administrative and property evidence support.

"As a small city, we are always trying to look at new ways of doing things that reduce the workload or benefit the agency and the community," says Grover Beach Police Chief Jim Copsey.

Copsey shared his department's technology experiences at the Office of Justice Programs' National Institute of Justice (NIJ) spring 2010 Rural Law Enforcement Technology Institute, which he said provided an excellent forum for sharing information and increasing awareness. The institute is hosted by the Small, Rural, Tribal and Border Regional Center, part of NIJ's National Law Enforcement and Corrections Technology Center System.

Copsey notes that new technology can be tempting, but may not always answer a department's needs.

"Technology seems to be the buzzword with a lot of agencies," Copsey says. "As a small agency, it is not always possible to keep up with all the technology that comes out, so we have to look at ways of managing technology from a standpoint of whether it is beneficial for us, because most officers want

the new latest tool to try and help them do their jobs, but it doesn't always end up being the greatest tool, and then they stop using it or the city buys it and it doesn't work right and it wastes money and time."

"We are constantly dealing with advances in technology and how to deal with it in a way that is good for us. Just because it's good for another agency doesn't mean it's good for us. It's probably an issue for a lot of agencies," he adds.

For example, Copsey says the department decided initially not to purchase in-car video cameras because it lacked the staff and the storage space to monitor the videotapes. When

the cameras evolved to a digital format, one of the department's criteria before purchase was that downloading material be automatic and require little time or effort from the officer. Another question was how to maintain the integrity of the information. These are some of the issues that needed to be examined prior to the implementation of this technology.

Copsey has an evolving list of considerations when contemplating new technology:

- Assemble a management team. Ensure the team includes whoever is going to actually use the technology, whether a patrol officer, dispatcher or records support person.

- Research all the issues and ask many questions.

- Conduct a needs assessment to determine if the department truly requires the technology.

- Review all the needs and try and consider the projected outcome.

- Evaluate how the technology will integrate with other technologies the department is currently using or planning to use.

- Weigh upfront and ongoing costs.

- Review funding for purchase. Be creative in researching grants and other funding alternatives.

- Evaluate long-term impact. Determine if there is a larger impact down the road besides obtaining the product. (Maintenance, staffing, replacement of technology if it breaks.) The review process may not supply all the answers and departments may need to make long-term assumptions that it will be able to adapt to the impact in the future.

- Evaluate long-term costs. Determine the ongoing costs and replacement strategy. Determine what the costs will be should the new equipment fail or breakdown. If an agency becomes reliant on the new technology, what will the strategy be should the equipment fail.

"Basic management practices really come into play when looking at technology and it's really adapting management practices to each project," Copsey says. "With each project you may add something else to the list, such as training or a review process."

Departments especially need to be open to the possibility that a certain technology may not be the right choice once a thorough assessment is done.

"We realize that technology is a tool but it has to serve a purpose," he says. "We go in with an open mind that maybe this technology is not right for our agency. Will it help us work better, be more productive, more accountable or help us manage information better? We also in the review process look at what we are doing now, what we should and should not be doing, and what we should be doing next in order to evaluate this product."

"Some systems may not turn out as you thought," Copsey adds. "You have to be open to that aspect. If what you've implemented creates more work and costs you more money, then you have to be open to stop doing what you are doing, backtrack, and switch direction if the technology is not benefitting your original goal."

One of the department's more recent technology activities was the purchase of Taser Cams, which record audio and video during the user of a Taser®. Copsey says the department had to consider how the downloading process would be implemented to maintain the integrity of the data and how to establish a policy for using the technology.

Other projects the department is evaluating include body-worn video cameras and license plate readers (LPRs). Copsey noted that LPRs carry a large upfront cost, ranging from $15,000 to $20,000 per vehicle. Some LPR systems are built into in-car cameras, so the department must consider whether LPR can be integrated with existing technology or if the department would need to purchase and entire new camera system.

"For small departments, technology can play an important role in improving what we do and how we serve our communities. But we must not forget to evaluate all aspects of the new technology or equipment before implementation," he says.

For more information, contact Grover Beach Police Chief Jim Copsey at (805) 473-4500 or jcopsey@gbpd.org. For information on future Rural Law Enforcement Technology Institutes, contact Dave Mather, executive director of the Small, Rural, Tribal and Border Regional Center, at dmather@srtbrc.org, or Mike O'Shea of NIJ at (202) 305-7954 or michael.oshea@usdoj.gov.

COURSE OFFERS INTENSE TRAINING
for Latent Print Examiners

The latent print examiner faces his questioner, palms sweating. He licks his lips, knowing some hard questions are coming his way. Questions that will challenge his analysis, that will try to rattle him into admitting he's not sure of his results.

On this day, the "questioner" is an expert examiner and the "examiner" is a student in the Latent Print Examiner Training Program funded by the Office of Justice Programs' National Institute of Justice (NIJ) and hosted by the National Forensic Science Technology Center (NFSTC). On another day, the trial and the testimony will be real, and the no-longer-student examiner will face the same kind of questioning from a defense attorney.

"It was extremely nerve-wracking. Every one of us had the jitters," says Chris Gary, a latent print examiner with the Greenville County (S.C.) Department of Public Safety. "If I had to pick one of the 10 sessions in the training, I would say the mock testimony was the most difficult and the most rewarding. If I can be adequate in front of the expert, I hope I can then do as well with a defense attorney."

Over a span of eight months from October 2009 through June 2010, Gary and 14 other students made five two-week trips to the NFSTC facility in Largo, Fla., for the mock testimony session and other training classes related to latent print examination. In between sessions, the students worked on extracurricular assignments and networked online with each other and with their instructors using the NFSTC Online Learning System.

Instructor Mike Jordahl of Ron Smith and Associates, the agency that contracted with NFSTC to develop and present the curriculum, says the course is geared toward a beginning examiner trainee and it provides intense immersion in a number of different areas. Prior to NIJ's funding this type of immersion training, examiner trainees had to search for single-unit courses offered at various agencies. Following that route, it could take them years to achieve the same level of knowledge.

Jordahl says that the Latent Print Examiner Training gets new examiners "off on the right foot and gives them all the classes they need to get started in the field. It's a whole lot better to have all your training at the beginning and then be able to apply that training to your work experience. The students learn correct procedures right from the beginning."

Both Gary and Shelly Progovitz, a forensic science technician with the Charles County (Md.) Sheriff's Office, found themselves needing to move into latent print examination due to pending retirements within their departments. Progovitz, a crime scene technician, has returned to her agency and worked with the soon-to-retire examiners in preparation for moving into the field permanently.

"There were so many different techniques I learned that I'll be able to apply in my work," she says. "The most interesting

was learning about palm print techniques, and how to properly position partial palm prints based on ridge flow and use that to 'search smart' to decrease the amount of time in the analysis phase."

"Right now, with all the funding issues that local police departments face, they really need these trainings that are sponsored by NIJ for their beginning examiners. It's a great opportunity," Jordahl says, adding that he recently retired from the Rapid City (S.D.) Police Department and his former employers received the benefit of having their new examiner selected to attend the training.

Local police departments can use this training to stretch their funding because NFSTC, the host agency for NIJ's Forensic Technology Center of Excellence, offers it at no cost to students and their agencies. Food and lodging expenses are also paid. Potential trainees do need to apply and pass a visual acuity examination before being accepted into the program.

"The visual acuity assessment is completed online by the training candidate under the supervision of a proctor," explains Eileen Fynan, instructional services manager at NFSTC. "This assessment is designed to measure ability to identify very specific criteria such as fine detail, including gradients, pattern similarities and differences. The results are evaluated by an independent panel of pattern evidence examiners and are used in part to determine acceptance into the training program. All candidate names and agency information are replaced with a unique code for evaluation purposes."

The students selected received training from nine different instructors over the course of nine months, 10 sessions and 472 hours of training. At the end of the program, all 15 trainees achieved scores of 80 percent or better on individual course assessments and on the comprehensive overall program assessment. In a three-part mock International Association for Identification exam, students achieve average grades of 85.4 percent on the written assessment, 98.4 percent on pattern recognition and 76.8 percent on comparisons.

The classroom instruction that helped students achieve those outstanding scores was not the only benefit derived from the class, according to Gary.

"It was extremely nerve-wracking. Every one of us had the jitters. If I had to pick one of the 10 sessions in the training, I would say the mock testimony was the most difficult and the most rewarding."

—Chris Gary, Latent Print Examiner,
Greenville County (S.C.) Department of Public Safety.

"Not only did we learn the foundation of the science and get hands-on experience with fingerprints, but because we were together in the classroom for 10 weeks, we built a strong network we can use for the rest of our careers," he says.

The next session of Latent Print Training will start in fall 2011. Register on the Really Simply Syndication feed at the NFSTC website (http://www.nfstc.org) to receive announcements about this and other training opportunities.

Early Intervention System
SECURES DATA
Boosts Efficiency

In today's hacker-filled world, securing data is a concern for everyone — including law enforcement agencies. Thanks to a grant from the U.S. Department of Justice's Office of Community Oriented Policing Services, the police department in Virginia Beach, Va., has implemented use of an Early Intervention System (EIS) that stores data securely, eliminates duplicative efforts, reduces paperwork and streamlines the review process.

Capt. Theresa Orr, night command duty officer in this city of 450,000 year-round residents, presented on the city's beta testing and implementation of psAdvance at the Fall 2010 Technology Institute for Law Enforcement, which is hosted by the National Law Enforcement and Corrections Technology Center System and funded by the Office of Justice Programs' National Institute of Justice.

psAdvance, a Web-based program accessible to authorized employees via the city's intranet, tracks the police department's personnel evaluations, training notices, missed training alerts and court unavailability. All employees can see their own records and all supervisors can see the records of all their subordinates. The system includes seven preformatted data entry functions:

- Journals.
- Performance Note (PN) Commendations.
- Performance Note (PN) Counseling.
- Referrals.
- Interventions.
- Mobile Video Recorder Reviews.
- Appraisals.

"It pulls from an existing online data system for personnel records, and from another stand-alone system that records court appearances and missed court dates," Orr says. "From still other systems, it pulls arrests, offense reports and field interviews, then allows all of this information to be seen in one place. It totally eliminates duplicate data entry. The seven data entry functions preformatted into the system were previously captured only on paper. psAdvance also allows for electronic attachments, such as video recorded by an officer's taser."

Virginia Beach followed the 2003 introduction of psAdvance with the 2009 addition of BlueTeam. This second phase, also a Web-enabled application, supports officers by enabling entry of use-of-force reports, pursuits and administrative investigations in the field. These reports are then routed electronically through a chain-of-command, and supervisors must review and approve entries within specified timeframes. BlueTeam allows a law enforcement agency to set parameters of concern; Virginia Beach elected to focus on use-of-force incidents, but another agency might have a concern about employee absenteeism or vehicle accidents, or it might want to focus on multiple factors.

"Citizen complaints can be investigated much more quickly with less need for re-interviews because the information is already there, and BlueTeam provides for secure communications and a permanent record," Orr says, noting that the two-part system increased the city's electronic storage needs but greatly reduced paper processing, storage and retrieval. Virginia Beach continues to work with the system's developer, Management Science Associates, Inc., to refine and tweak various aspects.

"We were able to expand the value of the grant by acting as beta testers for the developer, which now offers the core component commercially. We're still testing revisions and helping to improve the product," Orr says.

Those revisions and improvements continue the process of "eliminating a lot of paper and a lot of duplicate work. If a supervisor is out, the backup doesn't have to hunt for a piece of paper, because the system electronically tracks everything. If supervisors gets busy and don't get to approvals, the system automatically reminds them that reviews are due. If someone is on vacation, it automatically notifies the backup."

Although the system produces many benefits, Orr says there was some initial resistance, as there is any time any agency — law enforcement or other — implements a change.

"We caution everybody at every stage not to eliminate the human factor," she says. "It's up to management to look at the big picture and put it into context. You can't compare a community policing officer to a motorcycle traffic officer. The system allows you to tighten filters to compare apples to apples, or rather, motorcycle officers to motorcycle officers. When personnel began to look at the global context of the program, a lot of individual fears and misperceptions were alleviated."

For more information on Virginia Beach's Early Intervention System, contact Capt. Theresa Orr at (757) 478-4703 or e-mail TOrr@vbgov.com.

TECHshorts
Technology News Summary

TECHshorts is a sampling of the technology projects, programs and initiatives being conducted by the Office of Justice Programs' National Institute of Justice (NIJ) and the National Law Enforcement and Corrections Technology Center (NLECTC) System. If you would like additional information concerning any of the following TECHshorts, please refer to the specific point-of-contact information that is included at the end of each entry.

In addition to TECHshorts, an online, biweekly technology news summary containing articles relating to technology developments in public safety that have appeared in newspapers, newsmagazines and trade and professional journals is available through the NLECTC System's website, JUSTNET, at http://www.justnet.org. This service, the Law Enforcement and Corrections Technology News Summary, also is available through an electronic e-mail list, JUSTNETNews. Every other week, subscribers to JUSTNETNews receive the news summary directly via e-mail. To subscribe to JUSTNETNews, e-mail your request to asknlectc@justnet.org or call (800) 248-2742.

Note: The mentioning of specific manufacturers or products in TECHshorts does not constitute the endorsement of the U.S. Department of Justice, NIJ or the NLECTC System.

Support to California Sex Offender Task Force
Corrections Technology Center of Excellence
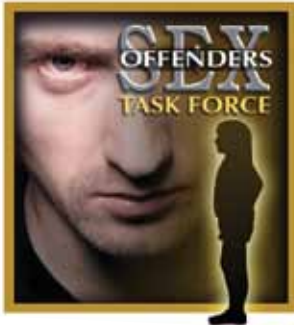
From July to September 2010, the NLECTC System (through services now part of the Corrections Technology Center of Excellence), provided subject-matter expertise to the Sex Offender Supervision and GPS Monitoring Task Force convened by the California Department of Correction and Rehabilitation (CDCR). The state formed the task force due not only to several high-profile cases involving paroled sex offenders, but also because California, with approximately 85,000 registered sex offenders, deals with more cases than any other state in the nation. The task force met weekly for three months, reviewing policies, practices and recommendations with a goal of improving public safety relative to parolee sex offender supervision.
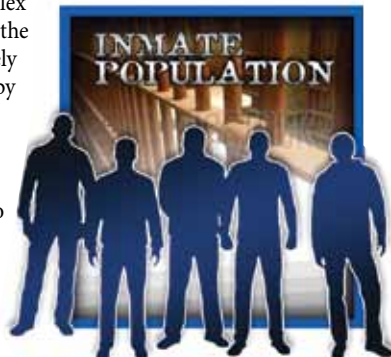
The group ultimately decided on nine recommendations, which are detailed in an October 2010 report.

To read the report and learn more about the efforts of the task force, go to http://www.cdcr. ca.gov/News/docs/Sex_Offender_and_GPSTask_ Force_Report.pdf. At NIJ, contact Program Manager Jack Harne at (202) 616-2911 or jack. harne@usdoj.gov.

Orleans Parish Prison Ten-Year Inmate Population Projection
Corrections Technology Center of Excellence

The National Institute of Justice, through its Corrections Technology Center of Excellence, helped fund a 2010 project to analyze trends and provide a 10-year population projection for the Orleans Parish Prison, located in New Orleans, La. The resulting report, *Orleans Parish Prison Ten-Year Inmate Population Projection,* can be obtained from the National Criminal Justice Reference Service in electronic format only. The report documents trends and estimates their long-term effects on the projected population size; analysis indicated a declining population and a need for a smaller facility. The city of New Orleans and Orleans Parish requested assistance with this analysis to help them make informed decisions about building a new complex to replace the one severely damaged by Hurricane Katrina.

"Our role was to contract with an expert in the field of jail projection studies, Dr. James Austin, who was able to commit to doing the work in the tight turnaround time of 60 to 90 days required by the project," says Joe Russo, director of the Corrections Technology CoE.

"The model we used was already built and ready to go," Austin says. "We got great cooperation from the sheriff's department and the police department. They had the data we needed, which is important in doing this type of analysis."

The complete report can be downloaded from http://www.ncjrs.gov/pdffiles1/nij/grants/233722. pdf. At NIJ, contact Program Manager Jack Harne at (202) 616-2911 or jack.harne@usdoj.gov.

Forensic DNA Education for Law Enforcement Decision Makers
Forensic Technology Center of Excellence

The National Forensic Science Technology Center (NFSTC), the host agency for the Forensic Technology Center of Excellence, is offering "Forensic DNA Education for Law Enforcement Decision Makers," an online training tool on policy and practice issues regarding the use of DNA to investigate crimes.

NFSTC developed "Forensic DNA Education for Law Enforcement Decision Makers" in part to address the rising demand for DNA testing due to an increased awareness of the potential for DNA evidence to help solve cases, and to help alleviate backlogs in crime laboratories and the impact backlogs and demand for DNA have on the criminal justice system. Targeting senior-level law enforcement decision makers, this tool focuses on the policy and practice issues associated with the effective use of DNA analysis and provides the knowledge to:

- Streamline investigative processes.
- Implement best practices for handling "cold hits."
- Identify the probative value of evidence and prioritize DNA evidence.
- More effectively leverage limited resources.
- Interact more efficiently with crime laboratories to set expectations and manage caseloads.
- Understand the time and resources required from the lab to test different categories of evidence.

Content for "Forensic DNA Education for Law Enforcement Decision Makers" was developed by an expert panel convened by NFSTC and based on nominations from the following organizations:

- International Association of Chiefs of Police.
- National Sheriffs' Association.
- National Association of Attorneys General.
- National Governors Association.
- National Conference of State Legislators.
- American Society of Crime Laboratory Directors.

The tool can be accessed at http://projects.nfstc. org/fse/index.html. For information on other NIJ training programs, please visit NIJ's training webpage, http://www.nij.gov/training/welcome.htm.

TECHBeat

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JUSTNETNews. JUSTNETNews includes article abstracts on law enforcement, corrections and forensics technologies that have appeared in major newspapers, magazines and periodicals and on national and international wire services and websites.

Testing Results. Up-to-date listing of public safety equipment evaluated through NIJ's testing program. Includes ballistic- and stab-resistant armor, patrol vehicles and tires, protection gloves, handcuffs and more.

Publications. Publications from NIJ and NLECTC that you can view or download to your system, including printer friendly versions of *TechBeat* articles and features.

Calendar of Events. Calendar of Events lists upcoming meetings, seminars and training.

Links. Various links take you to other important law enforcement and corrections websites.