TechBeat is the bimonthly 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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The National Law Enforcement and Corrections Technology Center wants to know your technology needs and requirements as a law enforcement or corrections professional. Use the form at https://www.justnet.org/tech_need_form.html to describe tools that would enhance the safety and effectiveness of your job. This information from practitioners is used to inform the National Institute of Justice (NIJ) research, development, testing and evaluation process and to make recommendations on prioritizing NIJ’s investments across its various technology portfolios.

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The National Law Enforcement and Corrections Technology Center (NLECTC) System is critical to the National Institute of Justice’s mission to help 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.

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ANDROID AND IPHONE APPS AVAILABLE

Android and iPhone apps are now available to access TechBeat.
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iTunes: http://www.justnet.org/iphoneapp/
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A multiple-camera video system installed on Palo Alto police cruisers provides officers with a broad view of activity surrounding the vehicle.

All of the police department's 26 cars are equipped with the system, which has five separate cameras that provide high-definition video and high fidelity audio, according to Lt. Zach Perron, police public affairs manager. The department finished outfitting its entire fleet in November 2014.
One camera faces out the front windshield like a traditional dashboard camera, while another one faces out the back. Two cameras are mounted on the sides of the car and are built into the light bar if the car has one.

“Those four exterior view cameras provide a 270-degree view around the police car,” Perron says. “The fifth camera keeps an eye on the back seat prisoner. There’s no system of which I’m aware that provides any higher amount of coverage than this one.”

The officer wears a microphone that looks like a pager on his belt, which transmits audio back to the car even if the officer is out of view.

“It’s great. Our old system from 2006 only had two cameras, the front windshield and a backseat camera, but the audio on that one was basically the line of site of the patrol car, so once you got a block away it was no good,” Perron says. “The audio on this new system is fantastic, so you can be around the corner, have trees in the way, and the quality of the audio is good, so when what is happening is not on camera, you can still hear what the officer is saying and what the member of the public is saying.”

Palo Alto is in the San Francisco Bay area. The department has 90 officers serving a population of about 66,000. The majority of offenses involve property crime such as burglary.

The purpose of the camera system is to help preserve an independent, objective record of what the officer encounters. The recordings are used as evidence in court, and can also be used to increase accountability by monitoring officer activity.

“The audio and video protects our personnel against frivolous complaints and protects the public against impropriety from an officer,” Perron says.

All five cameras automatically record video as soon as the car is turned on, and can capture up to 40 hours of video. Audio is activated when the officer pushes an event record button, such as during a traffic stop or other event. However, often the system will automatically go into event mode without the officer pushing a button, because it is preset to activate when the red lights on top of the car are on, or when the car goes
over 80 miles per hour. Event mode will also be triggered if the police car is involved in an accident, or if either back door of the vehicle is opened for a prisoner.

“Anytime the ignition is on, the system is on and recording five channels of video to the buffer,” Perron says. “So if we need to, we can go back and carve out a piece of video from the past 40 hours.”

For example, a business owner reported that his establishment had been burglarized overnight. Police were able to determine that a patrol car had passed by the business in the early morning hours and video from a side view camera showed a suspect vehicle in the parking lot, which helped with the investigation.

Police were able to determine that a patrol car had passed by the business in the early morning hours and video from a side view camera showed a suspect vehicle in the parking lot.
Event incident records are stored separately.

“Once we push record it keeps that event recording and stores it separately, apart from the 40-hour buffer. It moves to a separate pool of data. The 40-hour buffer is to keep anything that might have happened that we did not know was happening at the time,” Perron explains.

The officer uses a touch screen to choose which camera view to display on his monitor. Also, the system provides automatic wireless uploads of data.

“Officers don’t have to push a button, they just drive their car into the station and it uploads data to a secure encrypted server,” Perron says. “It knows the car is in the station because it is picking up a local wireless access point in the garage. With an older dashboard camera system, the data might have to be written to a DVD, and the officer has to transfer the data from the car to the station server. This system eliminates that step.”

The system also has the capability to live stream video from the car to a command station, which Perron says would help with situational awareness and officer safety during an incident. The department is waiting to use that feature until a use policy is worked out.

As for system cost, Perron says the $305,000 contract the agency signed covered 28 car systems and nine body-worn cameras, which the agency is currently field-testing.
One disadvantage of the new system for some agencies may be the large amount of data storage required.

“You need to purchase servers that can accommodate the massive amount of data. You need to have the infrastructure to retain that data according to state standards,” Perron explains. “We retain the event recordings for two years and potentially longer if it is evidence in a criminal case.”

Also, with any camera system, a policy needs to be in place governing usage.

“We’ve been using dashcam video since 2006 so our policy did not change that much with a new system, but an agency going from nothing to this has to ensure management and union are on the same page as to mandatory recording policy,” he says.

“We’ve been so happy with this system. With the old system, the quality of audio was shoddy when you got a distance away from the car, and the video quality, while excellent by 2006 standards, was not up to contemporary standards. With the new system, the video is HD quality, crystal clear and the audio is a big improvement.”

For more information, contact Lt. Zach Perron at Zachary.Perron@CityofPaloAlto.org. For information about the National Institute of Justice Sensor, Surveillance and Biometric technologies program, contact Mark Greene at Mark.Greene2@usdoj.gov.
In the midst of the discussion about next year’s budget, puzzled looks start to cross the faces of the volunteer committee members. Is that…do I smell smoke? You smell it too? Is there a fire? What should we do, is anyone else in the building, do we need to save anything?


And so should faith-based organizations (FBOs).
In May 2012, then-Secretary of Homeland Security Janet Napolitano tasked the Faith-based Security and Communications Advisory Committee of the Homeland Security Advisory Council with exploring “current and potential security information sharing opportunities and methods between [the U.S. Department of Homeland Security] DHS and FBOs...to better support local security officers and organizations efforts to keep FBOs communities safe, secure, and resilient while providing recommendations to the HSAC for consideration.”

The guide’s stated purpose is to provide houses of worship with information regarding emergency operations planning for a spectrum of threats and hazards, discussing actions that may be taken before, during and after an incident to reduce its impact, and is designed to be scalable for use by FBOs of varying sizes. Efforts did not end with its publication, however, as the DHS Center for Faith-based and Neighborhood Partnerships, a Center associated with the White House Office of Faith-based and Neighborhood Partnerships, continued on with efforts that included a recently launched website, http://www.dhs.gov/dhs-center-faith-based-neighborhood-partnerships. The site not only provides a link to the guide, it also includes other training and technical assistance materials that make the guide’s contents even more accessible and user-friendly, particularly to smaller congregations.

Marcus Coleman, special assistant to Center Director Rev. David Myers, acknowledges that although the guide is intended for the average person to pick up and use to aid in the development of their emergency operations plan, “However, we understand if you’re a pastor or a volunteer, and these concepts are new to you, you might need some additional help.”

And Myers himself expands on that point, saying, “I was a pastor for about 10 years, and as I read through the guide, I thought that someone who has no experience in emergency management would find it hard to relate to. Often with small congregations of 200 or less, clergy is the only staff person.

“Because the language in the document is somewhat technical in nature, we tested that idea out with a number of clergy leaders from different groups and they were appreciative of that perspective. We wanted to make it more accessible to clergy without burdening them.”

With that perspective in mind, the Center made intensive presentations to FBOs in six different cities, collecting feedback that would help inform the development of the technical assistance and training materials.
“For some larger FBOs that had already worked on emergency operations planning, the guide served as an affirmation of the importance, or the ‘why’ of the work. We then engaged them in a conversation about the ‘how’ and what we can provide to make it more tangible,” Coleman says. “We did intensive 60- to 90-minute workshops that offered a very high overview, and talked about the kind of materials that would be useful complements.”

Workshop participants said it would be helpful to have a template and online training that walks FBOs through the process. They also requested access to best practices materials developed by other entities, and the Center complied. (For example, several FBOs have produced versions of the guide tailored to the needs and expectations of their own organization.)

In addition to compiling feedback to inform materials development, the presentations also served to bring together FBO leaders and their local first responders from police and fire departments. Coleman says the discussions helped the FBO leaders arrive at reasonable expectations of how they should engage with local first responders, and “gave them a chance to ask some of the tougher questions.”

“Bringing the groups together is even more important than delivering the content,” Myers says. “There are two distinctly different worlds that typically respond to disasters: first responders and communities of faith. It’s in their DNA to help and to try to bring order to chaos. However, sometimes on the local level their efforts are not as integrated as they might be. DHS set up the Center in 2006 to help build a bridge that would connect with first responders and faith-based groups. These ‘Howdy Doody’ meetings were important to help establish that bridge.”

Although the workshop series has ended, the Center continues to provide assistance to FBOs and local first responders on request. For more information, send an email to partnerships@fema.dhs.gov.
A free app is available that allows citizens to record crime or other emergencies and automatically upload video to law enforcement agencies who participate, allowing responding officers to possibly assess the seriousness of the situation before arrival on the scene.

The ICE BlackBox app, developed in partnership with the National Sheriffs’ Association (NSA), can be used by members of neighborhood watch groups or anyone else to alert law enforcement to trouble affecting themselves or others.
Audio/video information recorded and sent via the app is automatically uploaded to a secure cloud-based server and cannot be deleted. Using GPS, it pinpoints the location of the person reporting trouble. With a click of a button, the app will dial 911. Users can choose whether to share information with other community members, law enforcement or a list of personal contacts.

The Pinal County Sheriff’s Office in Arizona is one law enforcement agency that piloted the app for a few months using test scenarios with neighborhood watch groups, and in 2015 began encouraging citizens to use it.

Pinal County Sheriff Paul Babeu says the app can improve community communication and provides another tool to report suspicious or criminal activity.

“In testing, we have found it empowers the block watch because not only are they equipped with additional technology in the event of a crime committed, they can immediately upload and send us video and photographs, and it helps their communication,” Babeu says.
"We are beginning to promote this to citizens that don’t belong to a neighborhood watch. It is a matter of promoting this technology and for individuals to be more comfortable with it,” he adds. “I think as citizens become more familiar with it and more comfortable with this technology, this is where the future is going. Whether it is a citizen recording a crime or a potential threat, we believe the future of 911 calls will evolve in this direction. We are at a point in technology evolution where citizens have reasonable expectations that law enforcement should operate with technology at the same level as everyone else in society.

“We are making the transition that in an instant the information could be uploaded to the emergency call center and then pushed out to deputies. The whole idea is it would greatly aid the initial responding units. This app could really help the responding officer with a visual with sound. We can capture a description of a suspect or vehicle, or some kind of emergency event. Deputies can see the information without it being filtered through someone else.”

The county’s emergency 911 center receives more than 700,000 calls a year, dispatching about 103,000 calls annually to sheriff deputies and detectives, according to Babeu. The sheriff’s office serves a population of about 420,000 and has 214 deputies to cover 5,300 square miles.

“My initial concern about the app was that people were going to abuse it, and my concern now is that...
people are slow to use it,” Babeu says. “We need a paradigm shift in how people are calling 911 and we need to convey the information.

“As it is used more widely and accepted, I believe it will greatly enhance officer safety and improve service to the public.”

The app also has a feature to report animal abuse. John Thompson, deputy executive director with the NSA, noted that the app is customizable and a community could choose just to use that portion of it.

“This is a game changer as far as I’m concerned,” Thompson says. “It will take time to get people to use it and get portals into law enforcement agencies, but the technology to allow an officer to see what he is responding to is a great tool for police and citizens.”

The app is available in Android and Apple versions. Ed Horcasitas and Chris Norton, who both designed and developed the app, said as of early February 2015, the app had been downloaded 12,607 times.

Horcasitas says he conceived the idea for the app several years ago and later worked with the NSA to produce the app in its current form.

For more information, contact John Thompson of the National Sheriffs’ Association at jthompson@sheriffs.org, Pinal County Sheriff Paul Babeu at paul.babeu@pinalcountyaz.gov, or visit iceblackbox.com.

Available as a free app in both Apple and Android versions, Safety Savvy offers school safety-related information in areas including safe travel to and from school, classroom safety, bullying awareness, peer relations and extracurricular activities, as well as online safety information on developing family rules, protecting passwords and usernames, setting limits, preventing cyberbullying and more. Although it is a product of the Texas Center for the Missing (TCM), a Houston-based missing persons organization, Safety Savvy has universal appeal.

“It’s a lot of information, but we wanted to cover a multitude of areas that might have an impact on keeping somebody safe,” says Beth Alberts, chief executive officer of TCM.
“Most of the content is not specific to Texas, although there is a form that can be used to report a missing person to us. If someone outside the state uses that form, we’re on call 24/7 and we will help them in whatever way we can, including referring them to a partner agency or the National Center for Missing and Exploited Children.”

In addition to the reporting form, the app includes a function to call 911 as well as information on preventing child abuse and abduction, travel safety and safety for seniors.

“I kept looking at it and wondering if there was anything we could cut, but it’s all such good information. I’ve been in the missing persons field for almost 14 years and I’ve seen what helps,” Alberts says.

TCM staff pulled from educational materials and their experience in working with law enforcement, families and victims to develop the content for Safety Savvy, which was funded through a substantial donation made at a local fundraising event in 2013. A staff member suggested that developing an app would be a good use of the money, and in addition to spending the next year developing the content from training materials and staff experience, TCM also found a partner in a local development team that agreed to produce the app at a reasonable cost. Launch took place just before the holidays in 2014.

That staff experience also has led to a change in recent years in how TCM addresses the subject of abduction prevention in its trainings and materials.

“We used to teach parents to watch their children on the street, because the majority of children were snatched going to and from school. In recent years, however, the trend has been more that they are lured online, so we’ve switched from a primary emphasis on street safety to online safety,” Alberts says.
That switch in emphasis in abduction prevention training also led to an increased emphasis on cyberbullying prevention and Internet safety in general, because, she says, “cyberbullying is so pervasive and so difficult to fight and prevent.”

Toward that end, TCM staff members reach out to schools in the local geographic area to schedule safety training sessions, and staff work to develop ongoing partnerships with schools and with law enforcement. Alberts says TCM staff “like to think that our prevention and education efforts will decrease the law enforcement caseload. We take our relationship with law enforcement seriously and we want to prevent harm from coming to victims and families from being traumatized.”

The Texas Center for the Missing was formed in March 2000 after the disappearance of 17-year-old Gabriel Lester, who was reported missing from his private high school. After his remains were located four months later, his mother, Doreen Wise, founded TCM. You can download the Safety Savvy app through the TCM website at http://centerforthemissing.org/. For more success stories like this and other school safety resources, visit the National Institute of Justice’s SchoolSafetyInfo.org website.
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, as well as other agencies. 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, JUSTNET News, an online, weekly 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, www.justnet.org. Subscribers to JUSTNET News receive the news summary directly via email. To subscribe to JUSTNET News, go to https://www.justnet.org/app/puborder/subscribe/subscribe.aspx, email 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.

Training on Juvenile Interview and Interrogation Techniques

The International Association of Chiefs of Police (IACP), in collaboration with the Office of Juvenile Justice and Delinquency Prevention, has launched a new online, no-cost training course for law enforcement on techniques for interviewing juveniles. The Intermediate Juvenile Interview and Interrogation Techniques course builds on the material from IACP's Introduction to Juvenile Interview and Interrogation Techniques online training series.

The course highlights:

- Best practices and procedures in juvenile interview and interrogation tactics for law enforcement.
- Age-appropriate methods for interacting with youth.
- Tips for interviewing/interrogating diverse youth populations.
- Strategies to ensure true and admissible youth confessions.

This training is targeted to law enforcement professionals who interview or interrogate youth. The techniques presented focus on juvenile suspects and witnesses, ages 10 to 17, and do not cover child forensic interviewing. Only individuals legally authorized to interrogate youth will be granted access into the interrogation portion of the course.

To register, visit: http://elearning-courses.net/iacp/. For information on the system requirements to take the course, visit the IACP getting started page at http://elearning-courses.net/iacp/acct/faq.cfm.
Report on Crimes Against the Elderly

Bureau of Justice Statistics

Rates of nonfatal violent crime against the elderly increased 27 percent between 2003 and 2013, according to a report from the Bureau of Justice Statistics. The report, *Crimes Against the Elderly, 2003-2013*, shows the rate increased from 3.4 to 4.4 victimizations per 1,000 persons age 65 or older. Property crime declined 50 percent during the same period. Nonfatal violent crime includes rape or sexual assault, robbery, aggravated assault and simple assault. From 2003 to 2013, the elderly were victims in approximately 2 percent of all violent crimes. The majority (93 percent) of crimes against the elderly were property crimes, including household burglary, motor vehicle theft and other theft.

To read the report, go to http://www.bjs.gov/index.cfm?ty=pbdetail&iid=5136.

New Forensics-Related Reports Released

Forensic Technology Center of Excellence

The Forensic Technology Center of Excellence has released four new reports related to the National Institute of Justice’s forensics mission and the FTCoE’s support of that mission. All four reports are available for download at the links in the titles below:

- Final Report to NIJ: American Society of Crime Laboratory Directors (ASCLD) Data Collection on Forensic Service Providers focuses on determining the full scope of forensic science services provided in the United States beyond those offered in publicly funded, accredited crime laboratories.

- NIJ R&D Portfolio Management & Technology Transition Support summarizes the process, results to date, and continued planning related to the FTCoE’s management of technology transition support for NIJ’s R&D portfolio.

- Organizing and Transferring SANE/SAFE/SART Knowledge and Best Practices presents the results of a comprehensive federal effort to organize and transfer knowledge and best practices of sexual assault nurse examiners, sexual assault forensic examiners, and collaborative sexual assault response teams (SANE/SAFE/SART).

- Strengthening Forensic Science Services through the DNA Capacity Enhancement & Backlog Reduction Program and Paul Coverdell Forensic Science Improvement Grants reports on a September 2014 meeting with crime laboratory directors from various regions of the United States to gather information on strengthening the DNA Capacity Enhancement and Backlog Reduction (DNA) and Paul Coverdell Forensic Science Improvement Grants (Coverdell) programs.
Following are abstracts on public safety-related articles that have appeared in newspapers, magazines and websites.

**New Jersey Opens Regional Real Time Crime Center**

GCN, (02/11/2015), Kathleen Hickey

An area of New Jersey that includes Newark now has a regional information sharing center for law enforcement agencies. The Corr-Stat Real Time Crime Center in Newark represents more than 80 cities along the Route 21 Corridor of Northeast New Jersey. The center’s mission is to develop a network that will gather, receive, analyze and distribute real-time tactical intelligence and support to law enforcement agencies operating within the Corr-Stat Region.


**Chatham County Courts to Get $2.9 million Upgrade**

Savannah Morning News, (02/16/2015), Jan Skutch

A new case management system is planned for the court system in Chatham County, Ga. The Odyssey Case Management Software System will cost almost $2.9 million and when completed, will provide the courts with a common language database and enhanced security.


**New Scan Technology Harnessed for Autopsies**

DailyLobo.com, (02/10/2015), Lauren Topper

Researchers at the University of New Mexico are trying to aid in forensic analysis by fine-tuning clinical techniques, such as MRI and CT scans, to work on human corpses. Imaging the bodies could either act as a map for autopsies by providing insight into the cause of death and streamlining the examination, or in some cases the imaging possibly could replace autopsies altogether. The research is funded by the National Institute of Justice.

[http://www.dailylobo.com/article/2015/02/10-autopsies](http://www.dailylobo.com/article/2015/02/10-autopsies)

**Law Enforcement Agencies Unite for Campaign to Reduce Gun Thefts**

WFTV, (02/09/2015)

Law enforcement agencies in Orange County, Fla. have begun a campaign focused on responsible gun ownership in an effort to prevent gun theft. The Sheriff’s Office reported that 499 guns were stolen across Orange County last year. The campaign will feature public service announcements, billboards and a gun buyback program.

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, protective gloves and more.

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

Social Media. Access our Facebook, Twitter and YouTube feeds for the latest news and updates.

Do More With Less. Highlights creative programs and resources to help agencies meet challenges as budgets shrink and demands on departments grow.

Tech Topics. Browse for information on specific topics such as biometrics, cybercrime, forensics and corrections.

Public Safety Technology in the News. Click here for recent public safety-related articles from the news media.