The Justice Technology Information Center (JTIC), a component of the National Institute of Justice’s National Law Enforcement and Corrections Technology Center (NLECTC) System, serves as an information resource for technology and equipment related to law enforcement, corrections and courts and as a primary point of contact for administration of a voluntary equipment standards and testing program for public safety equipment.

JTIC is part of the realignment of the NLECTC System, which includes the Justice Innovation Center for Small, Rural, Tribal, and Border Criminal Justice Agencies, which focuses on the unique law enforcement challenges faced by those types of agencies; the National Criminal Justice Technology Research, Test and Evaluation Center, which provides technology-related research and testing and operational evaluations of technologies; and the Forensic Technology Center of Excellence, which supports technology research, development, testing and evaluation efforts in forensic science. In addition, a Priority Criminal Justice Needs Initiative exists to assess and prioritize technology needs across the criminal justice community.

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

Android and iPhone apps are now available to access TechBeat. Keep current with research and development efforts for public safety technology and enjoy interactive features including video, audio and embedded images.

Android: http://www.justnet.org/androidapp/

iTunes: http://www.justnet.org/iphoneapp/

TechBeat March 2017
Dealing with active shooters. Coping with an “officer down” situation. Providing immediate first aid through tourniquets and other methods of casualty care. How can a law enforcement agency fit training in all those areas into limited hours while dealing with a budget stretched to its limits?

By using the resources available at a new VALOR for Blue Learning portal produced by the VALOR Program, that’s how.

The VALOR Program, created by the Office of Justice Programs’ Bureau of Justice Assistance (BJA), provides free law enforcement training (see sidebar, “More About the VALOR Officer Safety and Wellness Training and Technical Assistance Program”), and recently launched the portal (https://www.valorforblue.org/eLearning/) on its website, thus extending the reach of its training programs in the law enforcement community.

“We recognize that we can only reach so many people in the classroom environment and we wanted to broaden our reach, and when you add in the flexibility of being able to learn at a convenient time and location, it’s just a natural fit,” says Deborah Meader, BJA Policy Advisor.
The Officer Robert Wilson III Preventing Violence Against Law Enforcement Officers and Ensuring Officer Resilience and Survivability (VALOR) Initiative is designed to protect the safety, health and well-being of the nation’s law enforcement officers and agencies. The initiative provides up-to-date tactical-, skill-, and awareness-building education, technical assistance and resources to the nation’s law enforcement on officer safety and wellness that have a direct impact on their resilience and survival.

VALOR prides itself on being up to the minute through research and analysis of current events and emerging issues and trends in order to provide a holistic and comprehensive officer safety and wellness suite of programs. VALOR isn’t just one program but a complex, strategic suite of programs that each contribute an equally important facet of officer safety and wellness.

The VALOR Officer Safety and Wellness Training and Technical Assistance Program (VALOR Program) delivers current, dynamic "We’re trying to get the message out to departments that these are ready-made resources that you can use today,” she adds.

The new e-learning portal features training on topics to include active shooter, casualty care, ballistic-resistant vest wear, foot pursuits and more. Portal links lead to short web-based video vignettes on the specific topic that include an overview, specific scenes, lessons learned and resources for more information that include additional e-learning opportunities, podcasts and webinars. Modules also include promotional posters that a department could use, for example, to promote a month-long campaign to have all officers take the training module on a particular topic, and some modules include visor cards as a way to remind officers of the key takeaways. Some modules have an interactive component that includes a final quiz and a certificate of completion, while others simply convey awareness of a topic.
“From a department perspective, it’s a great way to share officer safety messages. We hope that we’re including pieces that will resonate with officers and help them remember the message,” Meader says. “Departments can sign up for our law enforcement-sensitive resources at VALOR for Blue, and we will push them information that will allow them to craft their own safety and wellness strategy around our products without their having to do anything other than sign up.”

The VALOR Program is also exploring the possibility of granting automatic access to law enforcement professionals already vetted for sensitive information through other avenues, such as the FBI or the U.S. Department of Homeland Security. The goal is to work toward single sign-on capability.

classroom and web-based trainings that focus on recognizing indicators of dangerous situations, applying de-escalation techniques, implementing casualty care and rescue tactics, emphasizing professional policing standards, and improving wellness and resilience.

Using podcasts, in-person instruction and online programs, VALOR for Blue provides free training aimed at helping prevent violence against law enforcement and enhancing officer safety, wellness and resiliency on a nationwide basis.

The Bureau of Justice Assistance created the VALOR Officer Safety Initiative in 2010 in response to an increase in felonious assaults, many of them fatal, against law enforcement officers. In the past seven years, the VALOR Program has trained more than 27,000 officers across the United States. Its no-cost training addresses current trends and contemporary issues faced by today’s frontline officers. The VALOR for Blue Web Portal offers links to resources and training on health and wellness and officer safety, and on current “hot topics” such as active shooters, assault and ambush awareness, and social media.
Although the VALOR Program offers many publicly accessible resources through the main VALOR for Blue Web Portal, access to the e-learning portal and other materials containing sensitive information (such as tactical strategies) is limited. In order to access the sensitive information, law enforcement agencies must submit a request from an official government law enforcement email address. This information will also include a rotating two-month Spotlight on Safety series on a specific topic. For April and May, the focus will be on professionalism, which ties in with National Police Week in Washington, D.C., from May 14 to May 20.

“The message is that officer safety is paramount to community safety. The more that officers feel safe, the more the community is safe. If their own wellness and resilience are strong, they’re better prepared to do their jobs and go on to the next calls, and they’re better able to serve and protect the community and keep themselves and citizens safe,” Meader says. “That’s the common circular message we try to share within all of our resources.”

For more information, visit www.valorforblue.org.
A Minnesota police department has a promising app designed to ease police contacts with people with autism or other emotional disabilities, and avoid misunderstanding of behaviors.

The app, Vulnerable Individuals Technology Assisted Location Services (VITALS), was developed as a partnership between the St. Paul Police Department, the Autism Society of Minnesota (AUSM) and Aware Services, LLC.

Autism spectrum disorder is a developmental disability that can cause social, communication and behavioral challenges. It is a spectrum condition that affects individuals differently and to varying degrees. Individuals may exhibit behaviors that can be misinterpreted as uncooperative or evasive.

The idea for the app came from St. Paul Officer Robert Zink.
“Too many cops don’t pick up on the cues of behavior on the spectrum, and if they are aware they can change their approach to a situation,” Zink says. “It will give police instant information to make an assessment from afar without initial police interaction.”

VITALS uses a mobile app and a small beacon that allows individuals to voluntarily disclose their disability to emergency responders who come within a 30 to 50 foot radius. The individual carries the beacon that can be detected by the app on the responder’s mobile phone.

When the beacon is detected, the responder can see a photo of the individual and information such as name, age, height, diagnosis, as well as behavior triggers (e.g., bright, flashing lights, being pushed or touched), suggested de-escalation techniques for that individual, and caregiver contact information.

Officers have done some preliminary testing of the app, which will undergo a pilot test using police officers and volunteer members of the autistic community once enough people sign up.

“We want 100 to 200 people to test it to get a geographic statistical usage and get significant contacts to demonstrate the app’s functionality,” Zink says. For the pilot, they want individuals who spend time in St. Paul without a caregiver at their side all the time and who would engage with police independently. He said the officers in the police department who have seen the app are positive about it, and officers from other departments in the state have expressed interest.
Jonah Weinberg, executive director of the Autism Society of Minnesota, explains why the app is significant.

“We kept hearing from adults and families with children on the spectrum that having a way to share their diagnosis in a discrete manner so they have a way to disclose their disability to police or first responders, would reduce their anxiety,” Weinberg says. “They often feel people are looking at them oddly, and then feel the need to explain themselves, and it spirals out of control.

“For example, when a police officer approaches an autistic driver’s car window, it causes anxiety. Being approached by a person of authority, the individual may seem like he is acting suspiciously, when he is really just feeling anxiety. I talked to parents of adult children who have anxiety about first responders, and the parents fear that a situation will go south because the person won’t be able to explain themselves sufficiently, and feel a situation can be resolved earlier if the responder knows about the individual’s disability.”

Weinberg notes that police and other first responders find it helpful to have as much information about a situation as possible, and AUSM has received a positive response from both police and firefighter organizations about the app. Other organizations representing people with disabilities have also expressed interest.

“This is a project developed with input from law enforcement, individuals with disabilities themselves and parents of children with disabilities. It is really a collaboration and we are pleased to see how other disability groups are embracing it as a tool that will be helpful to them,” Weinberg says.

For information, contact Jonah Weinberg of AUSM at jweinberg@ausm.org.
Pennsylvania has a system to directly contact motorists affected by emergencies on state highways and keep them informed on the status.

The 511PAConnect system was launched in December 2016 and is a joint effort between the Pennsylvania Emergency Management Agency (PEMA), the Pennsylvania Department of Transportation, and the Pennsylvania Turnpike Commission. Development was spurred by a powerful January 2016 winter storm that caused hundreds of motorists to be stuck on the Pennsylvania Turnpike for many hours.

When PennDOT and Turnpike staff identify a potential long-term closure on a limited access highway, they notify PEMA. Similar to an Amber Alert or weather alert, PEMA launches a Wireless Emergency Alert message that notifies motorists in the area of a problem and
directs them to the 511PAConnect website, where they can sign up for direct update alerts. Motorists will have the option of registering for automatic text message or automated phone call updates, which are generated by the Pennsylvania Turnpike or PennDOT. Motorists approaching but not yet trapped in a backup may receive a WEA message before they reach the affected area.

To register, motorists are asked to provide basic information about their vehicle, number of passengers, and phone number, and then will receive a communication update every 15 minutes, either explaining the situation and estimates on how long it will take until the road is open, or sometimes simply situational awareness messages such as reminding motorists to clear their cars of snow. Once the situation is resolved, the state will delete the motorist contact information from its system.

“This system allows us to communicate directly to motorists based on geolocation,” says Carl DeFebo, director of public relations and marketing for the PA Turnpike Commission.

Officials say the system allows for better communication with motorists during a roadway event and for control of the accuracy of information.

As of late February, the system had been used four times, according to Robert Taylor, acting chief information officer for the PA Turnpike Commission. The incidents include a weather-related traffic slowdown on the Turnpike on Jan. 23, 2017 near New Baltimore, PA, during which 208 motorists opted in to the 511PAConnect system to receive update alerts, the most so far.

“The system is in its infancy stages but has been successful,” says PEMA Director Richard D. Flinn, Jr.

“The goal is to get regular communication on incidents to motorists,” Taylor says. “It also allows us to reduce calls to our operating center asking about status of incidents, and leave lines open for emergency calls.”

511PAConnect supplements services such as 511PA, which has an app, website and phone number motorists can contact for road information.

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://justnet.org/subscribe.html, 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.

Primer on Cloud Technology

Global Justice Information Sharing Initiative

Public Safety Primer on Cloud Technology serves as a resource to educate the public safety community and provide answers to common questions agencies may have about cloud technology, the services the cloud can provide, and guidance for considering contracts with cloud vendors. Cloud services can include scalable storage, analytical capabilities and improved collaboration.

The document provides a glossary of definitions for terms used throughout the document and a list of recommended resources for further reading. It is intended to provide introductory guidance to agencies, not to be an exhaustive how-to guide.

This guidance is the result of a collaborative effort through the Global Justice Information Sharing Initiative, which is supported by the Bureau of Justice Assistance, Office of Justice Programs, U.S. Department of Justice.

To read the report, go to https://www.it.ojp.gov/GIST/1195/Public-Safety-Primer-on-Cloud-Technology.
Reports From the Forensic Technology Center of Excellence

Two recent reports are available from the National Institute of Justice’s Forensic Technology Center of Excellence:

Massively Parallel Sequencing: Application to Forensics. Massively parallel sequencing (MPS), also called next-generation sequencing, is a technology that holds promise for enhancing the capabilities of forensic DNA laboratories. However, several challenges confront the implementation of an MPS system in a crime laboratory.

This report provides forensic DNA scientists with a comprehensive resource that covers the fundamentals of current platforms and chemistries and summarizes a series of MPS-related webinars hosted by the FTCoE in conjunction with the University of North Texas Health Science Center’s Institute of Applied Genetics.

To read the report, go to https://rti.connectsolutions.com/mpsguidance/.

Federal Investment in Forensic Science Research and Development. This report provides a summary of agency interests, funding opportunities and published research needs to assist the interested forensic science researcher. This compilation lists government agencies and subagencies that offer funding opportunities for forensic science researchers, and subagencies and organizations that offer support for the forensic science research community.

Much of the information provided on agency websites had been incorporated into this report. Hyperlinks of government agencies websites, reports and funding opportunities offer the reader easy access to additional information.

To read the report, go to https://rti.connectsolutions.com/p16xm3610wr/.
Following are abstracts on public safety-related articles that have appeared in newspapers, magazines and websites.

**Connecticut Prison in Cheshire Launches Program to Help Young Males**

*The Middletown Press, (03/14/2017), Luther Turmelle*

A pilot program in the Cheshire Correctional Institution in Connecticut targets young men in an effort to keep them from becoming repeat offenders. Modeled on a program in Germany, the state Department of Correction's pilot program is for 70 male inmates between the ages of 18 and 25. Elements of the Cheshire prison program include using a selected group of older inmates, who are serving life sentences, to serve as mentors to their younger counterparts, and involving young inmates' families in the rehabilitation process.

http://www.middletownpress.com/article/MI/20170314/NEWS/170319862

**New Mental Health Court Hopes to Rescue Select Inmates**

*Chicago Tribune, (02/28/2017), Jerry Davich*

Lake County, Ind., will launch the state's fourth mental health court. The court will collaborate with local mental health facilities to keep individuals diagnosed with mental illness who commit nonviolent crimes out of correctional facilities. The program includes medications and mentorship in addition to probation. Similar programs in other counties have shown success in promoting long-term law-abiding behavior.


**Grants Help Police Crack Down on Speeding, Impaired Drivers**

*The Republican Journal, (03/08/2017), Ben Holbrook*

The Belfast Police Department in Maine will use grants to target impaired drivers and speeders on the roads. For speed enforcement, a $10,000 grant will cover costs associated with the increased patrols and the new radar equipment for the department. Additional funding will cover increased patrols to identify impaired drivers.

JUSTNET News. 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, 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.

Tech Topics. Browse for information on law enforcement, corrections and courts technologies.