



TECHNOLOGY ENHANCEMENTS TO IMPROVE SERVICE TO THE COMMUNITY AND ENHANCE SAFETY

Subcommittee: Commerce, Justice, Science and Related Agencies

Request: \$3,400,000 to acquire new forms of technology and system enhancements that will improve the real-time information access and enhance the collection and preservation of electronic evidence.

Community Value:

The purpose of this request is to upgrade several forms of technology within the Phoenix Police Department. The listed projects are intended to improve real-time information access for patrol officers and to further enhance systems associated with the collection and preservation of electronic evidence obtained in criminal investigations. These enhancements will improve safety, increase efficiency and benefit various aspects of the criminal justice system throughout the state.

Background:

In this modern age, technology has become an integral component in most law enforcement operations - from the timely dissemination of critical information to the police officer in the field to the collection and preservation of evidence obtained during criminal investigations. The technology specified in the following projects will further law enforcement's ability to increase safety levels and improve operational efficiency.

Two-Finger Rapid Subject Identification \$1,900,000

Police officers on the street who initiate the first point of contact with subjects need access to accurate and timely information to make informed decisions that affect their safety and the safety of the entire community.

The Police Department requests a number of wireless fingerprint devices that would be installed in patrol cars deployed throughout the city. This system would provide officers the ability to immediately identify known wanted persons via wireless two-finger rapid identification technology. Funding also would support initial network infrastructure costs, maintenance and wireless fees.

With these devices, fingerprints of subjects legally detained by police officers in the field can be immediately searched against the Arizona Automated Fingerprint Identification System (AZAFIS), a database containing fingerprints of approximately two million individuals who have had contact with law

enforcement in the state. Instead of transporting the individual to a police facility to obtain this information, results from this check would be returned to the officer in a matter of minutes thereby returning them to service more quickly.

If a fingerprint match is successful, any additional names or aliases associated with the print then can be searched against National Crime Information Center (NCIC) data to determine if the subject has outstanding warrants or a serious criminal record based on an alias name.



With the wireless fingerprint devices, police officers can quickly ascertain the true identities of the subjects they detain. The rapid, real-time access of this information will assist in determining if the detained person poses an immediate threat to the community or to the officer's safety. This technology also will provide officers with the necessary data to make more informed decisions when deciding to release, arrest or issue citations to subjects.

The two-finger rapid subject identification technology is one of the major aspects of the Arizona Information Sharing Plan drafted by the Arizona Criminal Justice Commission and is supported by law enforcement across the state for numerous reasons including officer safety. This technology has been proven to be accurate and less expensive compared to the traditional 10-fingerprint process.

Enhancements in the Collection and Preservation of Electronic Evidence

\$1,500,000

The collection and preservation of evidence obtained in criminal investigations lies at the heart of law enforcements' ability to solve crimes and successfully prosecute the offenders. In the last decade, technological advancements have provided the law enforcement community with sophisticated tools that have increased the precision and efficiency of various evidence collection techniques. These advancements have proven to be invaluable to the entire criminal justice process.

One example is forensic laser scanning technology. This innovation has revolutionized the preservation of crime scenes with detailed precision. The laser scanner works by quickly digitizing a crime scene in 3D using both panoramic photography and 3D laser scanning, which is the process of making millions of highly accurate measurements in just a few minutes.

The result is a visual that allows a crime scene to be viewed from any angle, establishes lines of sight and allows precise measurements of evidentiary items contained within the scene to be made long after the scene has been released. The 3D rendering also enables crime scenes to be visually reconstructed, which can be very compelling to a jury during the trial phase of the investigation.

An equally critical element in the criminal justice process is the preservation of electronic evidence collected in police investigations. Current electronic storage systems maintained by the Phoenix Police Department were acquired at a time prior to the types of evidence processing and crime scene investigative techniques employed today. As such, these storage systems are inadequate in managing the volume and the type of electronic evidence currently collected such as high-resolution crime scene photos, video surveillance as well as images and notes captured by the Crime Lab during evidence processing.

The Police Department requests a 3D laser scanning system. This device would expedite processing of major crime scenes to include homicides, officer-involved shootings and in-custody death investigations and render more precise measurements from the various reference points of the evidentiary items contained within those scenes. This technology also could be used to support a number of the department's homeland security objectives such as threat and vulnerability assessments.

To support the preservation of electronic evidence, the Police Department requests a state-of-the-art storage system. This equipment would provide adequate support for the volume and types of electronic evidence collected in criminal investigations conducted by the department. The system would include redundancy to ensure the stored evidence is available at all times regardless of system failures or maintenance issues and would be constructed to enable authorized prosecutors and courts to have access to the data thereby streamlining the entire process. Funding also would be used to support initial maintenance costs.



Visual rendering of a mock crime scene with laser scanning technology

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