



## CASE STUDY

### Proven Performance

“If we catch one murderer that would otherwise have gotten away, this solution has paid for itself.”

**Harry Giordano**  
Manager Special  
Projects, Pennsylvania  
Justice Network

## L-1's ABIS® System Helps Pennsylvania's Law Enforcement Solve Cases with Face Recognition

Pennsylvania's Justice Network (JNET) is the Commonwealth's primary public safety and criminal justice information broker. JNET provides an integrated, common on-line environment for over 32,000 authorized law enforcement practitioners to access criminal justice information. This critical data originates from contributing municipalities, sixty-seven counties and state and federal agencies across the nation.

### THE CHALLENGE

Pennsylvania police and witnesses reviewed mug shot books with thousands of photos which were limited to a single booking center. This process was time-consuming, susceptible to human error and limited in geographic scope.

Facial photos of criminals taken from ATMs, banks, and convenience store surveillance tapes were out of focus due to off-angle perspectives, poor lighting and low resolution. As such, they were of little value in matching against existing mug shot photos.

The Pennsylvania state-wide mug shot repository contains good quality facial images of arrestees and offenders but there was no way to use this database in a coordinated way to search for suspects using forensic facial images captured at crime scenes.

JNET wanted to solve more cases by using facial recognition capabilities to improve the image quality of crime scene photographs matched against their existing mug shot database.

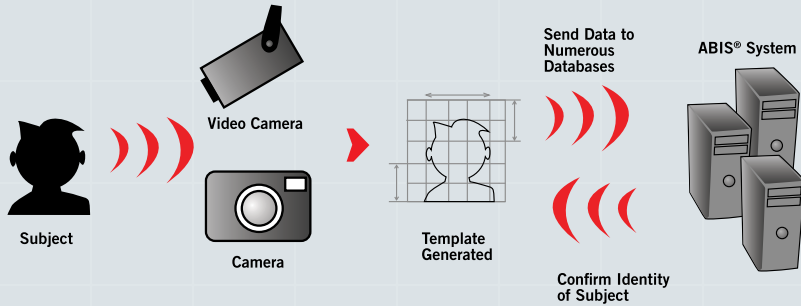
### THE SOLUTION

L-1's FaceExaminer and Automatic Biometric Identification System (ABIS® System) solutions were deployed by JNET as a suite of crime solving capabilities to improve the accuracy of real-time face recognition.

Once integrated into Pennsylvania operations, L-1's face recognition software led to proactive crime solving by matching image-enhanced crime scene photos against the state-wide mug shot database. This is done in two ways:

**Investigative Searches:** An enhanced crime scene photo is run against the database to determine if the suspect is currently in custody or has a previous criminal record. If a match is found, the investigator can take appropriate steps to advance the investigation.

**Watchlist Searches:** If no match was found in the Investigative Search, the photo used for the search is enrolled in a Watchlist database. All future arrestee mug shots are run against the Watchlist to determine if they might be a suspect in a previously unsolved crime. This is done at the time of booking; if there's a match the arrestee is detained until the original investigator verifies the match and determines the appropriate action to take.



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### RESULTS

L-1's ABIS® System face recognition solution has proved successful with JNET in several areas of crime solving and prevention.

#### Results of JNET and Facial Recognition

- Over 700 users have been trained and are authorized to access and use the L-1 solution.
- Use of the L-1 ABIS/FaceExaminer as an investigative tool has lead to arrests and convictions in:
  - Murder
  - Bank robbery
  - Check cashing fraud
  - Band fraud
  - ATM theft
  - Identity theft

### About ABIS® System Search Engine

ABIS® technology increases identifications through the use of multiple biometrics in a single platform. Unlike traditional AFIS systems, our multi-biometric identification platform manages finger, palm, face and iris data, and employs a standards-based open architecture so IT personnel can customize the capture, examination, search and verification processes for their specific needs. The result is a new platform that helps customers lower their risks and costs.

### About L-1 Identity Solutions

L-1 Identity Solutions, Inc. (NYSE: ID), together with its portfolio of companies, offers a comprehensive set of products and solutions for protecting and securing personal identities and assets. Leveraging the industry's most advanced multi-modal biometric platform for finger, face and iris recognition, our solutions provide a circle of trust around all aspects of an identity and the credentials assigned to it -- including proofing, enrollment, issuance and usage. With the trust and confidence in individual identities provided by L-1 Identity Solutions, government entities, law enforcement and border management agencies, and commercial enterprises can better guard the public against global terrorism, crime and identity theft fostered by fraudulent identity. L-1 Identity Solutions is headquartered in Stamford, CT. For more information, visit [www.l1id.com](http://www.l1id.com).

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