Benefits of a Regional or Local Automated Biometric Identification System

The accuracy and efficiency of Automated Biometric Identification Systems (ABIS) within local and regional law enforcement agencies are critical in keeping communities safe. While every law enforcement agency has access to their state’s ABIS, in many cases, the needs of local agencies are more granular than what is generally available within the state systems. However, when a local or regional ABIS is adopted, law enforcement agencies can utilize both systems to maximize search results and more effectively solve crimes.
Why a local system?

For decades, local law enforcement agencies without an ABIS of their own have relied on biometric records stored at the state level when searching latents against known prints. Although a state ABIS is larger in scope, it doesn’t necessarily yield search results appropriate for local or municipal needs. Some state systems do not accept records of misdemeanor crimes and other low-level charges; records that may be helpful when searching for a missing piece of evidence or evaluating suspects of crime. In comparison, agencies operating a local ABIS can set their own policies regarding Class C misdemeanor retention. This increases the chances of identifying criminals who are repeat offenders.

A local ABIS also allows agencies to track crimes more efficiently. According to a 2014 study, criminals tend to commit crimes near their homes. As such, searching a database covering 100s of miles really isn’t necessary. Regionalized systems allow law enforcement to search with a refined level of detail against a refined pool of candidates. This refinement is shown to increase accuracy, speed and hit rate. Additionally, a local system can ease the burden of excessive processing time. As a state ABIS covers more area geographically, it only stands to reason that their record pools are in the millions. The time wasted waiting for search results takes away from critical investigation time.

LOCAL/REGIONAL ABIS BENEFITS

<table>
<thead>
<tr>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include misdemeanor/low-level charges</td>
</tr>
<tr>
<td>Identify repeat offenders</td>
</tr>
<tr>
<td>Track crime patterns more quickly at a local level</td>
</tr>
<tr>
<td>Improve processing times when database has thousands vs. millions of records</td>
</tr>
<tr>
<td>Integrate the biometric modalities your agency needs when you need it</td>
</tr>
<tr>
<td>Upgrade according to your agency’s needs and as budgets allow</td>
</tr>
</tbody>
</table>

Local Level Control

When a local or regional system is adopted, the local agency and other participating agencies in the area are able to customize the system to meet their specific needs. This includes customizing livescan transaction fields that populate their ABIS with information local agencies care about most. The decision to add or not add additional biometric modalities, for example, is also in the local agencies’ control. If the state chooses to integrate additional modalities at a later date, the local system will be primed to populate that database, but if not, the additional modality information can still benefit local investigations while being maintained according to local laws.

Due to the smaller size, local and regional ABIS can be upgraded much faster and for much less money compared to a state ABIS. Long procurement cycles and the sheer size and cost associated with upgrading or replacing a state ABIS tends to slow technology progression. As a result, state systems may outlive their intended useful life.

> “With a local system, we are able to control our upgrade cycle to ensure we are progressing as technology improves. When we updated our local system in 2016, we updated a system that was already more advanced than the version the state was operating.”

explained Dave Tivin, ABIS Administrator and Latent Examiner at West Chester PD in Ohio.

Improving Results
A long-time user of a local ABIS system, the Miami Valley Crime Lab in Ohio has seen the benefits of adopting its own local system.

“We are getting hits in our local database that we know have been missed in the larger state database,” states Jenn Yoak. “This allows us to solve crimes at a higher rate of efficiency while also increasing the number of suspect identifications.”

Adopting a local ABIS can significantly improve a law enforcement agency’s ability to identify suspects and solve crimes. Consider the age old example of searching for a needle in a haystack. Finding that needle is much more difficult in a haystack than one hidden in a straw hat. While biometric algorithms continue to improve in accuracy each year, the quality of prints pulled from the scene of a crime can never be guaranteed and a system searching amongst 10 million fingerprint records vs one searching only 500,000 is far more likely to present the right match in the candidate pool regardless of system age or nuances in algorithm accuracy.

Learn More
Contact us to learn how Gemalto Cogent ABIS technology is enabling local agencies to manage their own records and improve biometric evidence tracking and comparison. With an entire platform of biometric technology solutions including Livescan Booking and Mobile identification, Gemalto is positively impacting law enforcement results at a local and regional level.

GOOD TO KNOW
Some state systems do not accept records of misdemeanor crimes and other low-level charges; records that may be helpful when searching for a missing piece of evidence or evaluating suspects of a crime. In comparison, agencies operating a local ABIS can set their own policies regarding Class C misdemeanor retention.

Searching for a needle in a haystack

A State ABIS can have millions of records while a local ABIS at the county or city level may only have several hundred thousand records to compare against, thus improving results and transaction times.
About Gemalto

Gemalto is the world leader in digital security with 2017 revenues of €3 billion.

In the civil identity sector, Gemalto provides secure documents, robust identity solutions and services that address government programs for ID management and road safety, eGovernment/mGovernment infrastructures for trusted eServices, and border and visa management requirements.

In particular, Gemalto is contributing to over 30 electronic passport programs worldwide. Gemalto also addresses public safety and law enforcement challenges, offering best-in-class forensic solutions.

The company’s products and solutions are deployed in over 200 active programs worldwide, with specific expertise in secure document issuance, biometrics, document readers, authentication, ID management and data protection.

Gemalto collaborates with its clients to report and share best practices.