



Basis of Friction Ridge Skin



- No two individuals will share the same friction ridge formations.
- Friction ridge skin is permanent throughout the lifetime of an individual barring any severe disfigurement.

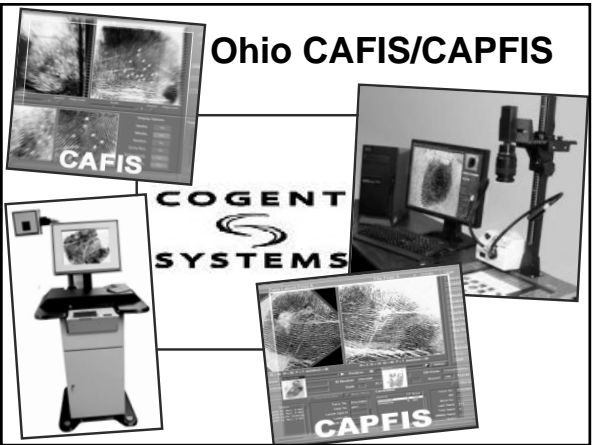
Definition of AFIS

A system developed to provide identification services to the nation's law enforcement community and to organizations where criminal background histories are a critical factor in consideration for employment.





AFIS is a computer based system that can store, process, analyze and retrieve millions of fingerprints.

Ohio CAFIS/CAPFIS



AFIS Contents


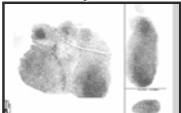
- Felony **arrests** for adults
- Felony **convictions** for juveniles

Does not contain cards for civilians who participate in background checks

AFIS Records

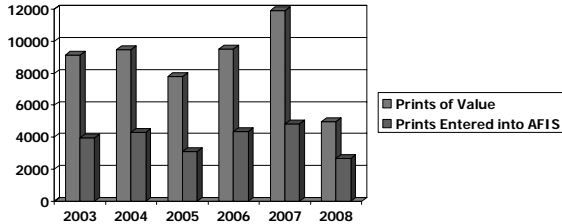
Database contains nearly 1.9 million fingerprint records, of which approximately 65,000 are juveniles, and only 250,000 palm print records

A record consists of demographic information on an individual as well as their ten-print and possibly their palm print images

Evaluation for AFIS Entry

- Evidence is examined for prints of value
- If cards are provided, a comparison will be performed; if the results are no identification, prints are evaluated for AFIS suitability



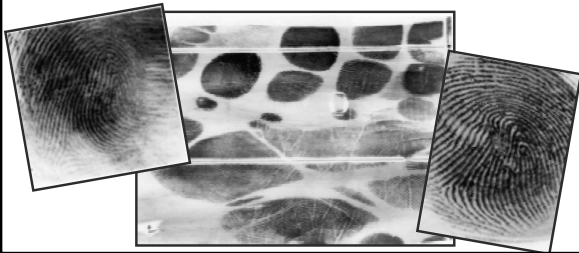
Suitable for AFIS?

The print is from a section of ridge skin that does not normally appear in the known standards (i.e. Extreme fingertip, 2nd or 3rd joint).



Suitable for AFIS?

Distortion can prevent an accurate search.



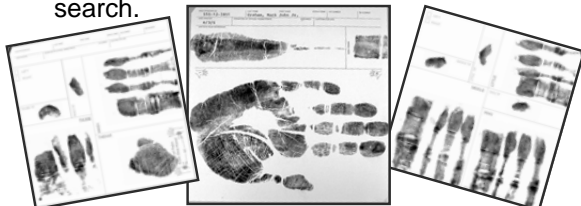
Suitable for AFIS?



The area of the print present in the latent creates too broad of a search (i.e. the delta)

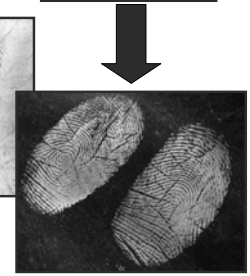
Suitable for AFIS?

Examiner would like to see better standards for subjects and victims that were already submitted before an AFIS search.



Entry into AFIS

- Images are digitized.



Launching Searches

- Examiner selects search criteria and launches search.



AFIS Searches



Source: Courtesy of Identicator Technology

Search Results

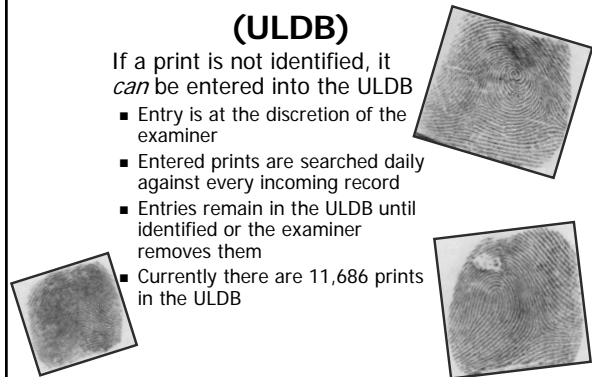
- Examiner manually compares each candidate provided with the latent print and determines whether or not an identification is present.
- Searched prints do not remain in AFIS indefinitely



Unsolved Latent Print Database (ULDB)

If a print is not identified, it *can* be entered into the ULDB

- Entry is at the discretion of the examiner
- Entered prints are searched daily against every incoming record
- Entries remain in the ULDB until identified or the examiner removes them
- Currently there are 11,686 prints in the ULDB



Unsolved Latent Print Database (ULDB)

Possible matches are provided as a candidate list to the examiner for further comparison

Identifications made as a result of this search will not be released until the original evidence is resubmitted to the laboratory for a re-examination.



Integrated Automated Fingerprint Identification System (IAFIS)

- A national fingerprint and criminal history system maintained by the Federal Bureau of Investigation (FBI), Criminal Justice Information Services (CJIS) Division
- Contains criminal records for approximately 55 million individuals
- Became operational in 1999



Latent Print Reports

To: Police Department BCL&I Laboratory Number: 08-39999
Chief Smith Date: August 07, 2008
1234 Lake Erie Cleveland, OH 44444 Agency Case Number: 08-00000

Offense: Theft
Subject(s): Unknown
Victim(s): John Doe

Submitted on July 30, 2008 by Det. Jones:

1. One brown envelope containing latent lifts
2. One brown envelope containing fingerprint card(s) of John Doe

Findings

An examination of item #1 revealed five (5) partial latent fingerprints with sufficient ridge detail for fingerprint comparisons.

The fingerprint card bearing the name of John Doe was compared with five (5) fingerprints. The comparison did not reveal any identifications.

An Ohio Automated Fingerprint Identification System (AFIS) search was performed for three (3) fingerprints. Of these fingerprints, two (2) were also searched in the Integrated Automated Fingerprint Identification System (IAFIS). No individuals were identified as a result of this search.

Of the remaining sufficient partial prints, one (1) fingerprint was suitable for an AFIS search; however, it was not searched at this time. In addition, one (1) fingerprint was not suitable for an AFIS search.

Images of two (2) fingerprints have been entered into Ohio's Unsolved Latent Print Database. The images will remain in the system and be routinely compared with all Ohio criminal records.

The latent lifts are being returned to your department for retention. If future comparisons become necessary, item #1 must be resubmitted along with fingerprint card(s) of subject(s) and victim(s).