

KING COUNTY REGIONAL



Automated
Fingerprint
Identification
System



2015 Annual Report



MISSION

The Regional AFIS Program promotes public safety and contributes to crime reduction by providing expert fingerprint identification services to criminal justice agencies throughout King County.

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The AFIS Program would like to thank the individuals who contributed to this report, including program staff, the AFIS Advisory Committee, and those who shared their experiences and success stories.

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MESSAGE FROM THE AAC CHAIR



Carrie Jones
AFIS Advisory Committee Chair
Budget Supervisor
Seattle Police Department

On behalf of the AFIS Advisory Committee, I am privileged to share with you the King County Regional AFIS Program's 2015 annual report. AFIS operates according to the highest levels of integrity and efficiency while providing fingerprint identification to all police departments and jails throughout the county. The program's dedication to identifying people and assisting with crime solving demonstrates operational excellence while exemplifying a truly cost-effective, regionalized service.

The AFIS Program continues to complete projects that deliver value to the law enforcement community. In 2015, significant progress was achieved with Mobile Identification; over 75 percent of devices have been distributed. Also, a new Livescan vendor was selected, with installations slated for 2016. Operational efficiencies were realized, including lights-out technology that helped meet planned reductions in staffing. The site selection process for a new King County processing lab continued with completion of a fit test on a prospective building.

AFIS is continually looking for opportunities to serve, which led to starting a Processing Unit Pilot to test the feasibility of a dedicated field processing unit. Results have exceeded initial benchmarks and the length of the pilot has been extended with a potential to expand.

The AFIS Program is a success because of dedicated employees and their high levels of professional service; thank you for your hard work and commitment. Also, on behalf of the Committee, we are grateful for the confidence that law enforcement agencies within King County continue to demonstrate in this regional program.

I invite you to review this annual report to learn more about the direction AFIS is headed and its accomplishments. The report is also available online at www.kingcounty.gov/afis.

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Police Department

A special thanks to our outgoing members Robin Fenton, Mike Johnson, Candice Livingston, Eric Olsen, Amy Tsai, Mike Washburn, and Randy Yamanaka.

PROGRAM OVERVIEW

Operations

What is the King County Regional AFIS Program?

AFIS is a searchable database of finger and palm print records used to verify people's identities and crime scene prints.

King County's Regional Automated Fingerprint Identification System (AFIS) is a levy-funded, countywide program that provides the staff and technology to support criminal fingerprint identification services in all 39 cities and the unincorporated areas within King County. The first levy was approved in 1986 and has been renewed by voters five times.

What are the primary purposes of the program?

- 1) To quickly identify arrested individuals, preventing the wrongful release of those using false names.
- 2) To identify crime scene fingerprints and palmprints that aid in investigations and to provide evidence in court.

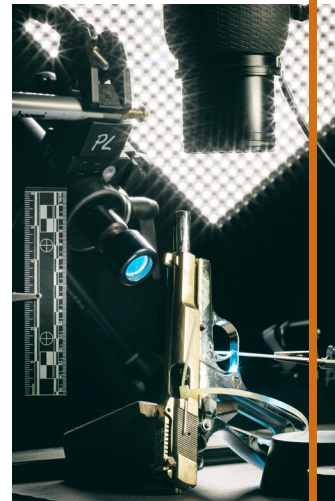
What are the benefits of AFIS?

Since AFIS is a regional program it provides centralized technology and expert forensic staff through economy of scale. This regional approach:

- Provides a network of over 40 Livescan devices to capture high quality fingerprints and transmit them electronically to AFIS for fast identification
- Allows for more accessible technology with an overall lower cost
- Builds a larger and higher quality database, resulting in more identifications
- Contributes to information sharing between agencies
- Pools staffing to allow for 24/7 coverage and invests in subject matter experts
- Supports task forces, special initiatives, and major crime investigations

2015 Review

In its third year of a six year levy, the AFIS Program had a very busy year. Many projects are well underway and milestones outlined in the levy plan were achieved such as completion of the Mobile ID project and implementation of operational efficiencies. More details are highlighted in the pages to follow.



"As an independent forensic consulting company our forensic identification experts work with numerous federal, state and local law enforcement agencies. I can confidently state that the King County Regional AFIS Program serves as a model for the rest of the country on so many levels of quality and performance. Their team of experts provides a level of professional identification services seldom seen on a county or regional basis. The citizens of King County are certainly reaping the benefits of the financial support which has been provided."

Ron Smith, President
Ron Smith and Associates, Inc.

Finances

Under state law, local police agencies are individually responsible for arrest identification. However, biometric technology is an expensive investment that police agencies typically cannot absorb independently. Through this property tax levy, AFIS services are borne regionally at a lower cost. This enhances the criminal identification services available to individual police agencies and leverages resources for maximum benefit.

The current six-year levy was approved by voters in November 2012 and runs from 2013-2018. The AFIS levy was initially authorized to raise, on average, \$19.8 million per year and may increase between one and three percent each year. In 2015, the levy raised \$19,437,584 while the levy rate decreased to \$.05069 per \$1,000 of assessed value, or \$17.74 for a home valued at \$350,000.

Cost to Homeowner (Based on a \$350,000 home)

Year	Assessed Levy Rate ¹	Annual Cost ²
2013	\$.05920	\$20.72
2014	\$.05588	\$19.56
2015	\$.05069	\$17.74

¹Rate determined by County Assessor's Office after preparation of budget.

²Home Value set at \$350,000 for comparison purposes. This number multiplied by assessed levy rate divided by 1,000 equals the cost to taxpayers.

The AFIS levy provides funding for 90 employees under the King County Sheriff's Office (KCSO) and 38.5 under the Seattle Police Department (SPD). These numbers include staff that support forensic science as well as program administration and project management. The levy also provides fingerprint equipment and technology to local law enforcement agencies to support efficient identification services.

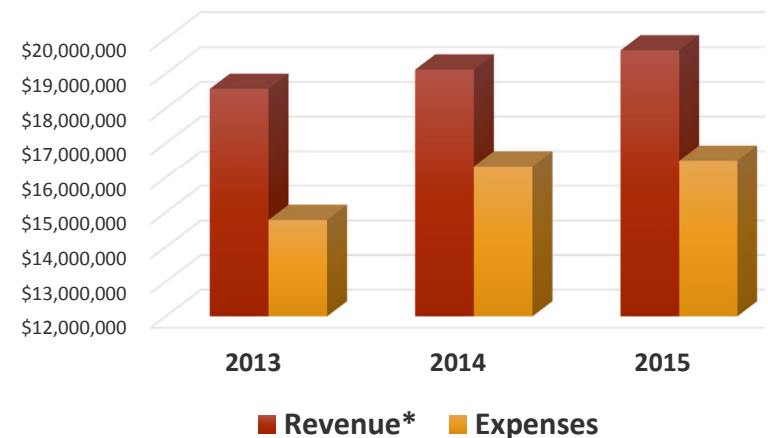
In addition to operating costs, the 2013-2018 levy plan includes over \$13 million in capital investments. These include the replacement of aging Livescan devices used by local police agencies, implementation of a Mobile ID program that allows police officers to verify the identity of suspects in the field, and the replacement of the aging King County latent print processing lab to meet current needs.

2015 Revenue and Expenditures

Revenue	
Property (Levy) Taxes	\$19,437,584
Investment Interest	\$92,691
Other (e.g. excise tax and timber sales)	\$136,632
Total	\$19,666,907
Expenditures*	
Salaries & Benefits	\$13,366,294
Intragovernmental Overhead	\$2,093,374
Supplies & Services	\$908,105
Capital Equipment	\$130,198
Total	\$16,497,971

*In previous years City of Seattle expenditures were shown on a separate line.

Revenue and Expenditures for Current Levy



*Revenues collected beyond annual expenditures are held in the AFIS fund balance. This fund balance will be used in coming years for capital expenditures such as Mobile ID devices, Livescan replacements, and the processing lab relocation.

PROGRAM HIGHLIGHTS

Processing Unit Pilot

For the last year, the AFIS Program tested the feasibility of a dedicated field processing unit. In the past, staff response to scenes was generally limited to complicated scenes, crimes with high dollar loss, or vehicles which could be impounded and scheduled for processing at a later time.

Under the pilot, the unit reduced constraints and shortened response times by more than 80 percent. The unit responded to three times the number of crime scenes and doubled the number of recovered and searchable prints.

The focus of the unit is to process property crimes in south King County. The group consists of two processors and a working supervisor, who also oversees the processing lab. The members of the

pilot have the ability to work a scene together or respond individually to simultaneous requests. By pursuing efficiencies in operations, AFIS was able to staff the unit with existing resources.

North and east King County agencies were surveyed and many seem interested in a similar project in their areas. The pilot will be evaluated in 2016 for potential expansion.



Processors are having more interaction with the victims because they are arriving shortly after the crimes occur. Victims can provide the processors insight on what items and surfaces may have been touched or moved by the suspect.

**Average number of
callouts per day**

5.2

Great Prints

In August, the Processing Unit was called to recover prints from a stolen motorcycle. Since they were able to process the motorcycle within a couple of hours at its found location, higher quality prints were lifted, resulting in an identification. Tukwila Police Department then served a search warrant based on this identification. When officers were serving the warrant they were fired upon by two subjects who fled. Although police are not certain if he is one of the gunmen, the person whose prints were found on the motorcycle was arrested and is now in jail.

	Before Pilot	With Pilot
Average response time	90 minutes	14 minutes
Percentage of latents with value	35%	70%
Average lifts/case	3.6	7.0
Crime scenes responded to	298 (in 2014)	1,056 (in 2015)



Mobile Identification

Mobile ID consists of handheld fingerprint capture devices paired with software allowing officers in the field to search two fingerprints against the AFIS database to receive results within minutes. The process allows the officer to quickly confirm a person's identity and make critical decisions, such as whether to detain or release the subject. The prints are searched through King County's AFIS and in both the state database through the Western Identification Network (WIN) and the FBI's Repository for Individuals of Special Concern (RISC). Fingerprints are not saved on the device or stored in the AFIS database. Mobile ID promotes public safety by increasing the amount of time the officer is on the street.

The project implementation was successfully completed in 2015. Mobile ID devices continue to be deployed throughout the county as additional agencies sign their Interlocal Agreements, which outline the use of the devices and actions required by both parties. Over 200 of the 260 devices purchased have been issued with over 850 officers/deputies trained to use them.

King County Processing Lab

The current levy includes replacing the processing lab to improve safety and efficiency, ensuring consistent and timely service to customers.

In 2015, the lab replacement team worked with King County Real Estate Services and a broker on potential site locations for the new lab. Some sites were visited, including one owned by the county.

Credit Card Thief Nabbed

In October, a suspect attempted to use a stolen credit card at a local mall and was stopped by loss prevention officers. A Mobile ID device was used by Bellevue police officers, identifying the suspect and his \$2 million arrest warrant out of Snohomish County.

Name Game

The Tukwila Police Department detained a suspect who refused to give the correct name. Using Mobile ID, the suspect was identified and had a \$10,000 outstanding warrant out of Seattle Police Department for Possession of Stolen Property.

Mobile ID records searched through AFIS

4,680

A consultant completed a suitability assessment of the county-owned building and the Facilities Management Division submitted a proviso response to the King County Council outlining the lab project. Once a site is finalized a request for proposal for building design and construction will be initiated. The goal is to have the project completed by the end of 2018.



"Mobile ID has greatly assisted us in identifying suspects here in Auburn. We regularly use Mobile IDs to identify suspects who might otherwise get away with using false names, such as prolific identity thieves. The Mobile ID system also makes us more efficient by allowing us to quickly identify a suspect in the field."

Officer Boldman
Auburn Police Department



Livescans

Livescan devices are used to electronically capture and transmit fingerprint images to the AFIS database for identification. The information is immediately available for local search and transmittal to the state and federal identification systems. Livescans provide an important function to the program and are located throughout the county as shown in the map to the right.

In August, a contract to purchase new Livescan devices was signed with the vendor, Biometrics4All. The project is currently in the design phase with the vendor. AFIS staff conducted site visits to prepare for new machine deployments, which will occur in 2016. A total of 48 new Livescans will be deployed and will incorporate additional biometrics, such as mugshots and tattoos, with the arrest record.



Livescan records
searched through AFIS

80,274

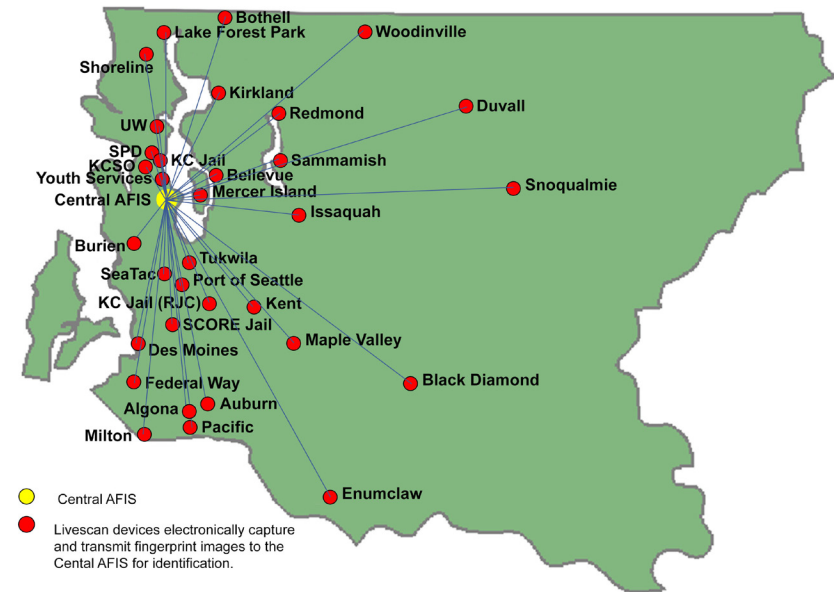
Efficiencies

In July, a “lights-out” setting was activated for some AFIS searches. The term “lights-out” refers to an AFIS workflow that is automated, with no human intervention. Incoming records are processed through AFIS and potential matches are given a “confidence” score. The system is set so that when there is only one match above the threshold, the record processes automatically. The current setting allows 60 percent of incoming records to process without intervention. This

occurs on arrest and applicant records. There is no automated comparison of crime scene fingerprints.

Throughout 2015, AFIS staff worked with the Prosecutor’s Office to establish DNA collection in the courtroom for out-of-custody defendants with qualifying convictions. This change increased compliance while requiring fewer resources.

AFIS Connections (Livescan) in Your Area



Another process improvement effort with the Youth Services Center decreased the need for AFIS staff hours by more than 60 percent.

Where possible, staff levels have been reduced in response to decreases in workload, and coverage levels have been adjusted to more efficiently meet demand.

PROGRAM SERVICES

Program & Project Management

AFIS program management oversees daily operations, acquisitions, budget, and the use and maintenance of fingerprint technology throughout the county. The project team ensures compliance with state and national industry standards, administers the completion of program initiatives, and responds to issues in the ever-changing biometric and forensic disciplines.



Customer Support & Training

The AFIS Program provides technical instruction and helpdesk support for all of its users in King County. Staff organize fingerprint related training for officers and examiners, facilitate communication among stakeholders throughout the county, and coordinate AFIS staff participation in community events.



Photography

The KCSO and SPD Photo Units provide digital and film photography as well as processing and print production for forensic, crime scene, and public relation purposes. They train officers and examiners on crime scene and evidence photography. The AFIS levy does not fund these units, but it provides supplemental funding due to the volume of latent photography work performed for the program.



Community Involvement

AFIS employees enjoy the opportunity to share program information with the public. Staff present at school science fairs, festivals, forensic and science classes, and career conferences. These outreach opportunities allow staff to provide details about their jobs, the AFIS Program, and facts about the forensic world.

Citizens Academies and National Night Out events also provide an avenue for information to be shared with the public. Last year AFIS participated in several of these events throughout the county.



Arrest Identification



"I just wanted to thank you for helping my client prove in court that he is not a multi-state convicted felon. I know I am a bit of a jaded defense attorney, but I am used to the government never believing my clients and it can be very frustrating for someone to be in the position that my client was in. I think you were incredibly helpful, and I just don't see that very often in my profession. So I wanted to say thanks."

Jay W. Wilkinson
Attorney



At correctional facilities and police agencies, Livescan devices are used to electronically capture and transmit fingerprint images to the AFIS database for identification 24 hours a day, seven days a week. Anyone using a false name is reported to the arresting officer or detention facility immediately. This process ensures that people arrested are positively identified prior to release from custody, preventing individuals from evading warrants and hiding criminal records, or being held wrongfully for others' warrants.

AFIS staff provide arrest information to update state and federal rapsheets. Arrest data is reported quickly and accurately so that courts, law enforcement, and licensing agencies have access to the most current criminal history record information possible. These records are used for criminal and background investigations, warrant checks, and sentencing determinations.

AFIS staff who work in King County correctional facilities also capture booking photos, collect DNA samples, and create photo montages ("line-ups"), which detectives use to help victims identify suspects. Additional services provided by AFIS staff include working with victims of identity theft, identifying deceased individuals for the Medical Examiner's Office, identifying injured or unconscious hospital patients, and assisting with sex offender registrations.

Deceased Identified

In August, a King County Sheriff's Office detective requested assistance identifying prints from the King County Medical Examiner's Office for an individual who was shot five times and dumped in a park in SeaTac. A Tenprint Examiner ran the prints through the local AFIS, state and FBI databases, but did not receive any hits. Databases in border states were also checked. The examiner then sent the prints to Immigration and Customs Enforcement where they hit. The examiner was able to provide the detective with a name and address of the deceased.



True Identity Discovered

An elderly man in a nursing home called the Social Security Administration (SSA) to report he hadn't received social security checks in a couple of months. When questioned about his name and date of birth he gave one for an individual that had been deceased since 2008. The SSA Special Investigations visited the man and took his fingerprints. In addition, a Department of Licensing photo for the man looked nothing like the person he claimed to be. An SSA investigator asked a Tenprint Examiner to run the man's fingerprints through AFIS, which resulted in a hit and included booking photos. The man had multiple aliases, dates of birth, and social security numbers and was previously deported. He had assumed a deceased individual's identity and the examiner's positive ID proved that the man was not who he said he was.



Individuals identified
as giving false names
upon arrest

668

Number of these
individuals that had
no-bail warrants

37

*"Fingerprints cannot lie, but liars can
make fingerprints."*

-Paraphrase of an Old Proverb

Crime Scene Identification

Prints recovered from crime scenes are known as latent prints. Latent Print Examiners use various techniques to reveal prints left on evidence to identify potential suspects. When there are no known suspects, latent prints are searched against millions of prints in the AFIS database. AFIS produces a list of potential matches based on ridge detail within the print. Examiners then compare the latents to prints on file to determine who left the impressions. They also respond to major crime scenes to collect latent prints and testify in court regarding conclusions. Both the King County and SPD laboratories are accredited through ANSI-ASQ National Accreditation Board.



Related functions include the intake and return of crime scene evidence, case file retention and dissemination, statistical data tracking, and providing reports to law enforcement.

The program not only provides AFIS workstations to King County and SPD, but also to the Bellevue Police Department for use by its examiners.

**Suspect crime scene
fingerprints identified***

5,092

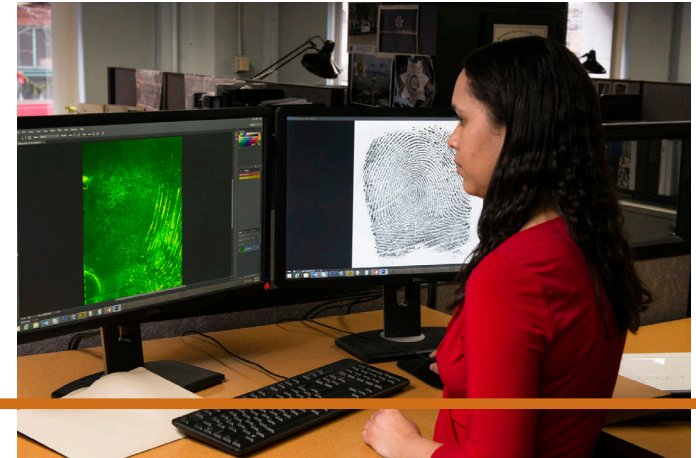
**Suspect crime scene
palmprints identified***

1,159

*These statistics include only the suspect prints that were identified and do not include identifications to victims and officers.

Auto Theft ID Provides Link to Homicide

In April, Latent Print Examiners recovered fingerprints from a stolen vehicle. An examiner reviewed the prints and identified two suspects. The identification cracked the case open, allowing the King County Sheriff's Office detective to arrest and charge both suspects with multiple counts of Carjacking and Possession of Stolen Property. The suspects were also linked to additional carjackings, shootings, and a homicide in other King County jurisdictions.



"Without the work of the Latent Print Examiners many, if not all, of these cases may have gone unsolved and additional crimes may have been committed by the suspects. Excellent work by all!"

Detective J.K. Pavlovich
KCSO Major Crimes Unit

Challenging Identification of Deceased

In July, a badly decomposed body was found at a SeaTac apartment complex. Latent Print Examiners assisted the King County Medical Examiner in recovering prints. An identification was made and verified to a woman from Utah. Had it not been for the fingerprint identification, the woman may not have been identified for some time since she was from out of the area. Although greatly saddened, her family was comforted by finally knowing what happened to their missing loved one.



Making a Difference

Teamwork Helps Solve Crime

In January, two suspects, one masked and gloved, entered a Seattle gas station. One suspect vaulted the check-out stand and stabbed the attendant with a knife while the other removed the locked cash drawer.

The attack was captured on the store surveillance system, which was later recovered. A Seattle Police Department CSI Detective and a Latent Print Examiner processed the scene, which was covered in blood. The examiner located a single fingerprint in the dust on the cash register display.

The print was extremely fragile so a photographer digitally captured an image of the fingerprint. The examiner searched the image in AFIS and provided detectives with a potential suspect. The suspect was arrested and confessed, but said he didn't know the identity of his partner as they had just met the day of the robbery.

The known suspect took detectives to several Seattle locations where he and the unidentified suspect had traveled. A videographer located surveillance video that showed the suspects

together in a motel parking lot and the unidentified suspect carrying the cash drawer. The second suspect was located and arrested, but denied involvement. Because wounds from the attack had left the victim blind in both eyes he could not make a visual identification.

During interviews with both suspects, detectives presented the evidence, which was so damaging that the suspects provided detailed confessions. They were charged in King County Superior Court and are looking at lengthy prison sentences.



Burglary Crew Identified

SPD Major Crimes Task Force detectives heard through sources that two suspects had been terrorizing the north end of Seattle and Queen Anne with burglaries and car prowls. Once the suspects were in custody, a search warrant was served on their vehicle resulting in over 150 pieces of stolen jewelry and numerous other stolen items being recovered. An examiner recovered prints from the vehicle and items within it, then identified the prints to four different individuals. These identifications connected to other burglaries and confirmed which individuals were part of a burglary crew that had been working with the two known suspects. The group is suspected of committing at least 20 burglaries and the case has been sent to the courts.

Quick Work Saves Mariners Memorabilia

An SPD Latent Print Examiner assisted in a burglary investigation at Safeco Field. A person broke into display cases, stealing rare Seattle Mariners memorabilia. The examiner processed items from the scene and identified an individual. In less than 12 hours the memorabilia was recovered and the suspect was arrested, keeping part of Seattle's sports history from being lost forever.



"King County AFIS and its mobile response teams have been a tremendous asset to the Normandy Park Police Department. We have utilized them on several occasions and their hard work and professionalism has been outstanding. As a small department, we rely on our local partners to help us provide the highest level of customer service we can. Utilizing a program that our citizens have already paid for through their taxes is an absolute win-win for us. Thank you to AFIS for providing this service to assist us in the fight against property crimes in Normandy Park."

Chief Chris Gaddis
Normandy Park Police Department



**Requests for crime
scene assistance**

1,242

**Items of evidence
processed**

14,396



HISTORY OF FINGERPRINT IDENTIFICATION



1800's

- 1858** - Sir William Herschel, British Administrator in the District of India, used fingerprints for identification.
- 1892** - Sir Francis Galton, British Anthropologist, classified and documented print types.
- 1892** - Juan Vucetich, Argentine Police Official, solved murder with fingerprint.
- 1896** - Sir Edward Henry, Inspector General of Police in Bengal India, developed the first system of classifying fingerprints, "Henry Classification System".

BC

BC - In ancient Babylonia fingerprints found on clay tablets may have been used to verify transactions.



1900's

- 1901** - Scotland Yard formed the first fingerprint bureau.
- 1902** - New York began the first systematic use of fingerprints in the United States; it was for civil service applicants.
- 1904** - American law enforcement became interested in fingerprinting after seeing a demonstration at the World's Fair in St. Louis.
- 1905** - The Department of Justice created a Bureau of Criminal Identification to provide a centralized fingerprint card repository.
- 1911** - Fingerprints were first accepted by U.S. courts as a reliable means of identification.
- 1915** - The International Association for Identification (IAI) was formed.
- 1917** - The first palmprint case to go to trial.
- 1924** - The Identification Division of the FBI was formed, using fingerprints as the basis for criminal records.
- 1977** - The IAI established the first certification program for fingerprint experts.
- 1980** - The first computer database of fingerprints was developed and is known today as AFIS (Automated Fingerprint Identification System).



2015

- The IAI celebrated its 100th anniversary.
- The largest criminal fingerprint repository in America is the FBI's Next Generation Identification, which also contains palmprints, photographs, and other biometrics.
- The King County Regional AFIS database has more than 1 million fingerprint records and over 580,000 palmprints. Mobile ID technology is also able to search this database.



Fingerprints have been used to identify people and help solve crimes for over 100 years. The history of fingerprint identification has laid the foundation for the existence of programs like King County Regional AFIS.



King County Regional AFIS

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