# San Francisco Police Department

# **Forensic Services Division**

### Automated Biometric Identification System

### **Request for Information**

### Table of Contents

- I. Purpose of the Request for Information
- II. Introduction
- III. Current Automated Fingerprint Identification System Description
- IV. Current Automated Fingerprint Identification System Performance
- V. Information Being Requested
- VI. Instructions for Responding to the Request for Information
- Appendix A: SFPD Organization Chart
- Appendix B: Generic LiveScan Workflow Diagram
- Appendix C: San Francisco LiveScan Workflow

Appendix D: Integrated ABIS Workflow Diagram

## I. Purpose of the Request for Information

The purpose of this Request for Information (RFI) is to gather information about how best to approach replacing the current Automated Fingerprint Identification System (AFIS) with an Automated Biometric Identification System (ABIS) which includes a robust mobile (hand-held) identification capability for the San Francisco Police Department Forensic Services Division (FSD).

To acquire an ABIS that best meets the needs of stakeholders, FSD is seeking information from system integrators and/or ABIS vendors who have the capability and experience to bring this large-scale mission critical project to successful completion.

Using information gathered from responses to this RFI, FSD may issue a Request for Proposal (RFP) to bidders interested in providing an ABIS. Nothing in this document shall be construed as obligating FSD to issue an RFP. No contract will be awarded based on responses to this RFI.



# II. Introduction

The Forensic Service Division (FSD) is a division within the Investigation Bureau of the San Francisco Police Department (**see Appendix A**). FSD is requesting information on replacing the current AFIS which is used, in conjunction with other systems, to process tenprint identification, latent and palm print identification transactions. FSD is also requesting information on additional biometrics to be used in a multimodal (iris, palm, facial recognition, etc.) system.

Integrate-ability with many other San Francisco criminal justice system applications via the new Justice Information Tracking System (JUSTIS) centralized hub is envisioned. The JUSTIS centralized hub is designed to connect the Sheriff, Police, District Attorney, Public Defender, Adult Probation, and Juvenile Probation case management systems to allow sharing of criminal justice information. Integrate-ability with other local, state, federal and international systems is also envisioned (**see Appendix D**).

## **III.** Current AFIS Description

The San Francisco Police Department has operated its own stand-alone AFIS since the mid-1980's. The original system, an Advanced Computer Operating System (ACOS) based AFIS from NEC has been upgraded several times. In 2000, the AFIS was migrated to the NEC AFIS21 platform. In addition, several Positive ID (PID) devices were added in order to provide an automated pre-booking / intake identification capability at the city's district police stations and county jail. In 2001 the system was upgraded to a UNIX/NT platform. In 2002, an automated palmprint matching capability was added to the system. Today the department operates multiple AFIS21 Global Workstations.

### **IV. Current AFIS Performance**

Dete	Mala	No	%
Date	Male	Increase	Increase
12/26/04	340,342		
12/25/05	348,488	8,146	2.39%
12/31/06	356,786	8,298	2.38%
11/25/07	365,259	8,473	2.37%

#### DATABASE GROWTH RATES

		No	%
Date	Female	Increase	Increase
12/26/04	87,337		
12/25/05	90,080	2,743	3.14%
12/31/06	92,916	2,836	3.15%
11/25/07	95,529	2,613	2.81%



Date	Unknown	No Increase	% Increase
12/26/04	142		
12/25/05	161	19	13.38%
12/31/06	230	69	42.86%
11/25/07	267	37	16.09%

	Male, Female & Unknown		
		No	%
Date	Total	Increase	Increase
12/26/04	427,821		
12/25/05	438,729	10,908	2.55%
12/31/06	449,932	11,203	2.55%
11/25/07	461,055	11,123	2.47%

#### DATABASE GROWTH RATES

	Daily TP Average	Daily LT Average		Daily TP Average	Daily LT Average
January-04	118.5	17.3	January-06	0.0	0.0
February-04	119.9	17.3	February-06	109.3	14.2
March-04	126.8	17.3	March-06	110.0	12.0
April-04	120.0	19.5	April-06	106.0	12.0
May-04	117.7	17.8	May-06	106.0	15.0
June-04	112.4	15.7	June-06	105.7	15.5
July-04	107.5	14.0	July-06	106.9	13.6
August-04	113.8	27.1	August-06	108.9	16.0
September-04	126.9	18.7	September-06	111.0	15.0
October-04	120.1	14.0	October-06	107.8	13.7
November-04	107.5	17.8	November-06	111.3	13.8
December-04	0.0	0.0	December-06	106.9	15.0
2004 Averages	117.4	17.9	2006 Averages	108.2	14.2

	Daily TP	Daily LT Average		Daily TP	Daily LT Average
	Average	Average		Average	
January-05	116.5	19.6	January-07	97.0	13.3
February-05	0.0	0.0	February-07	113.0	18.6
March-05	121.0	20.7	March-07	110.0	16.9
April-05	124.5	16.5	April-07	113.3	15.8
May-05	0.0	0.0	May-07	116.1	17.5
June-05	115.7	13.0	June-07	118.0	15.4
July-05	102.8	14.8	July-07	108.0	16.0



August-05	112.4	13.3	August-07	109.0	12.0
September-05	112.4	13.3	September-07	114.0	17.0
October-05	104.7	13.3	October-07	114.0	14.0
November-05	106.1	17.5	November-07	0.0	0.0
December-05	0.0	0.0	December-07	0.0	0.0
2005 Averages	112.9	15.8	2007 Averages	111.2	15.7

## V. Information Being Requested

The San Francisco Police Department Forensic Services Division (FSD) seeks bids for an ABIS that will replace the AFIS installed at the FSD. The proposed ABIS must be capable of storing, registering, and searching fingerprint and palm print minutiae data and images, identifying fingerprints obtained from persons arrested (tenprint), as well as fingerprint and/or palm print images located at crime scenes (latents). Additionally, the proposed ABIS should be electronically interfaced with and capable of searching tenprints and latent fingerprint images in

the:

- State of California's CAL-ID
- Western Identification Network (WIN) AFIS
- FBI Integrated Automated Fingerprint Identification System (IAFIS)
- DHS CAFIS
- other AFIS databases

The proposed AFIS database must be created by either combining the electronic data contained within the FSD AFIS databases or by converting both inked and livescan fingerprint cards, currently retained by the FSD to electronic data and grayscale images.

The proposed AFIS must be capable of storing and utilizing grayscale images and demographic data as defined in the current American National Standards Institute and the National Institute of Standards and Technology (ANSI/NIST) Data Format for the Interchange of Fingerprint Information.

Specifically, at minimum, the proposed AFIS must be capable of receiving, searching, storing, and forwarding the following ANSI/NIST Logical Fingerprir



Record Types:

Type-1, Transaction Information Record Type-2, User-Defined Descriptive Text Record Type-4, High-resolution Grayscale Fingerprint Image Record Type-9, Minutiae Data Record Type-13, Variable Resolution Latent Image Record Type-14, Variable Resolution Tenprint Image Record Type-15, Variable Resolution Palm print Image Record

The Contractor must supply an on-line AFIS which includes hardware and software, all communications components, all operational software, start-up, documentation, training, backup and recovery, and all maintenance to meet the operational requirements of the City and County of San Francisco.

Please provide a narrative that explains your ideas for ABIS as well as network considerations and requirements (bandwidth, security, etc.). Your narrative should discuss approaches regarding a multi-vendor solution; models of ownership and operation of the system; system implementation including transition plans; open interfaces, integratability and interoperability; system and user administration and security; accuracy versus cost ratios; high availability and disaster recovery; and an ideal identification workflow. Please include an estimate of the effort for digital and paper conversion processes, and how you would envision handling conversion.

Your narrative may also include ideas regarding the storing and searching of:

- Various/multiple Fingers
- Slaps/Plain Impressions
- Composite/Virtual Card
- Multiple Target Records Per Person
- Palm Prints
- Multimodal Biometrics

Please include your opinion on the use of:

- Pattern and/or Topological Classification
- Level Three Detail
- Latent Print Image Enhancement

Vendors are invited to submit a list of customer sites.

## VI. Instructions for Responding to the RFI

Diverse insights are critical for the replacement of the AFIS. All integrators and/or ABIS vendors who have the capability and experience to bring this large-scale mission critical project to successful completion are encouraged to submit responses to this RFI.



Vendors must transmit their response by close of business on **March 31, 2008** via electronic mail to:

Office Gerald Schmidt, ABIS Manager San Francisco Police Department Hall of Justice - 850 Bryant Street, Room 442 San Francisco, Ca. 94131 Office 415-553-1506 Direct 415-553-9026 Cell 415-595-1475 Email gerald.schmidt@sfgov.org.

The electronic copy should be in machine-readable format (typically ASCII, MS Word, WordPerfect, or Adobe PDF format).

Any questions regarding the RFI must be in writing and directed only to the FSD contact listed above. A conference will be held to answer questions and provide further clarification on **Thursday, February 28, 2008** beginning at 10:00 AM at:

San Francisco Police Department Hall of Justice - 850 Bryant Street, Room 551 San Francisco, Ca. 94131

Attendance at the conference is not mandatory.

Written questions must be submitted prior to close of business on **Friday**, **February 29**, **2008**. Each question submitted by a vendor and the subsequent FSD answer will be available for all vendors to review. FSD requests that providers responding to this RFI designate a single contact within the organization for receipt of all subsequent information regarding this RFI.

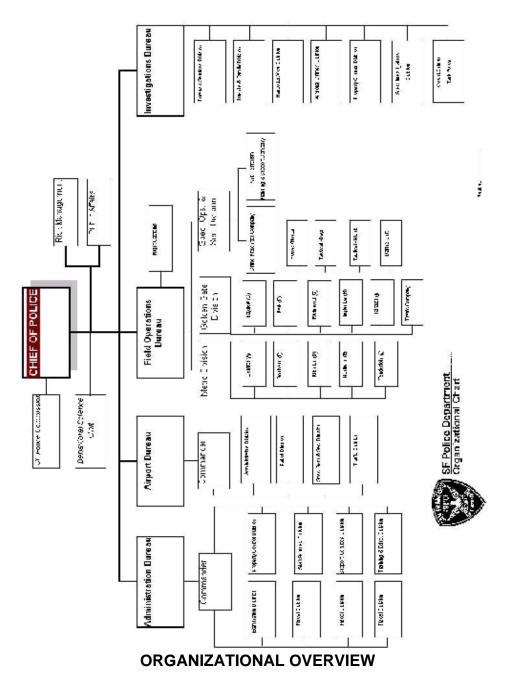
FSD will not reimburse vendors for any costs in connection with their responses to this RFI. This is NOT a Request for Proposal (RFP). No contract will be awarded based on responses to this RFI.

To fully comprehend the information contained within a response to this RFI, the reviewing group may seek further clarification on selected areas of the response.

### Appendix A



6 of 15



- The number of budgeted staff for the San Francisco Police Department:
  - approximately 2,700 (2,100 sworn + 600 civilian)
- Average per shift:
  - 800 sworn officers and civilians
- Estimated number of incident reports:
  - 120,000 per year
- Emergency Communications Department (ECD) calls:
  - 1,000,000 per year

### FIELD OPERATIONS BUREAU



Bureau Overview

Powered By Dynalivery

The Field Operations Bureau (F.O.B.) manages the Patrol Division of the Police Department. The Patrol Division is divided into two groups: the Metro Division and the Golden Gate Division, both supported by F.O.B. Headquarters staff. As the organization chart shows, the Metro and Golden Gate Divisions are comprised of the ten district stations and the Traffic Company.

#### FOB Headquarters

The Headquarters staff is comprised of two night supervising Captains, three sergeants, three non-sworn employees, and a police cadet. The functions of the staff cover a wide variety of tasks, and reach beyond the Police Department borders. The sergeants assist the district station event coordinators with large scale City events like Halloween, New Year's Eve celebrations, and the San Francisco Grand Prix Bicycle Race. The Police Reserve Program, the Patrol Special Officers, and the Department's Bicycle Program are all administered through FOB. Liaisons with local and state law enforcement agencies are maintained by FOB, including the State and San Francisco Offices of Emergency Services and the Alameda County Sheriff's Mutual Aid Coordinator. FOB staff is also tasked with preparing and maintaining overtime summaries and reports and cost of service reports for all events in the City requiring police services.

#### Metro Division / Golden Gate Division

The Metro Division is comprised of five district stations encompassing downtown San Francisco. Areas and neighborhoods serviced include the Marina, Civic Center, North Beach, Chinatown, Tenderloin, South of Market, and the Mission district.

The Golden Gate Division which is comprised of five district stations encompassing the outer areas and neighborhoods of San Francisco, and the Traffic Company. Areas, neighborhoods and parks serviced include the Richmond, Sunset, Outer Mission, Ingleside, Excelsior, Bayview, and Hunter's Point. The Traffic Company's duties extend Citywide and include traffic accident investigation, traffic enforcement programs, dignitary escorts, parades, and controlling traffic flow during athletic events.

#### Central Station (Company A)

766 Vallejo Street San Francisco, California 94133 415-315-2400

Central Station is aptly named as it is located in the central portion of San Francisco, the center of tourism, commerce, entertainment and civic events. The district comprises the Financial district, Chinatown, North Beach, Fisherman's Wharf, and three famous hills: Telegraph, Nob and Russian. Seven of the ten major tourist attractions in San Francisco are located in the Central District



2003 it is estimated that over 11 million tourists visited attractions within the Central Police District.

#### Southern Station (Company B)

850 Bryant Street San Francisco, California 94103 415-553-1373

The Southern District incorporates the Ferry Building, extending south from Market

Street to 16th Street and east to the Bay. It includes the South of Market, Embarcadero,

and China Basin areas. The original home of Southern Station was located at 4th & Clara Streets. In 1926, A. Coffey designed a building in an elaborate Spanish Baroque style to replace the shack that had been destroyed in the 1906 earthquake. In 1961, Southern Station relocated to the first floor of the Hall of Justice. Originally a mainly industrial area, the district has in recent years been the center of residential loft development, a nightlife destination, and the new home of the San Francisco Giants at PacBell Park.

#### Bayview Station (Company C)

201 Williams Street San Francisco, California 94124 415-671-2300

The original station, known as South East Station and later as Potrero Station, was built

in 1915 to serve the residents of Potrero Hill and the Bayview. In 1987, voters approved

a bond measure to build a new station at 201 Williams Avenue. The newly named Bayview Station opened in February 1997. (The original station, a landmark building designed by A. Coffey, at 2300 Third Street has been refurbished to become a private residence.) The Bayview Police District covers one of the largest areas and includes the southeastern part of the city, extending along the eastern edge of McLaren Park (Cambridge Street) to the Bay and south from Channel Street to the San Mateo County line. The area includes 3Com Park, home of the San Francisco 49ers, and is the focus of a major redevelopment effort with a new municipal rail line along the length of Third Street.

Mission Station (Company D)



630 Valencia St San Francisco, Ca 94110 (415) 558 5400

Often referred to as "the heart of the city," the Mission District covers the area east of Twin Peaks to the James Lick Freeway, and south of Market Street to Cesar Chavez Street. Because of its geographical configuration that insulates it from the city's fog and wind that affects so many other areas of town, the district's sunny climate makes it a pleasant place in which to live. In recent years, the Mission has become a destination spot for specialty restaurants and shops, as well as a burgeoning club scene. Originally built in 1902 at 17th and Treat Streets, the station relocated to 1240 Valencia Street in 1950. A new Mission Station, with triple the square footage of the old station, a community room and special secure holding areas, opened in 1994.

Northern Station (Company E) 1125 Fillmore Street San Francisco, California 94115 415-614-3400

The Northern Police District encompasses several distinct and diverse neighborhoods, including the Western Addition, Pacific Heights, Japantown, Polk Gulch, Russian Hill and the Marina. The district is bounded by Larkin Street, Market Street, Steiner Street to Broadway, and west on Broadway to the Presidio. The north boundary of the district is San Francisco Bay. Although the Northern Police District is geographically one of the smallest, it is one of the most densely populated. The district includes many high occupancy dwellings such as large apartment buildings, senior citizens' residences, residential hotels, and public housing complexes. The Northern District is also a favored location for street fairs, celebrations and cultural events. The Fillmore Street Jazz Festival, Polk Street Swing City Festival, Nihonmachi Street Fair, Culinary Arts Festival, Fleet Week Celebration and Opera Opening all occur in the district, as well as many other events. These events add a rich mix to the cultural flavor of our district. Northern Crime Statistics 2003

#### Park Station (Company F)

1899 Waller Street San Francisco, California 94117 415-242-3000



The Park Police District comprises the area bordered by Geary Boulevard, Steiner, Market, Upper Market, 7th Avenue and the vast east end of Golden Gate Park. The men and women officers at Park Station serve the communities of Cole Valley, Haight Street, the Western Addition, Twin Peaks, and the Duboce and Castro areas. They work in patrol cars, on foot beats, on buses, patrol wagons and off-road vehicles from the renowned bucolic stretches of Golden Gate Park to the world-famous thoroughfares of Haight Street and Castro Street. Built originally as quarters for the Mounted Unit, the station was reopened in 1995 after a complete refurbishing, maintaining the original 1910 Mission-style façade with its stucco walls and tile roof. The station is now an efficient, functional and secure place for officers, as well as a non-intimidating building for the residents and visitors in the surrounding neighborhoods.

**Richmond Station (Company G)** 461 – 6th Avenue San Francisco, California 94118 415-666-8000

Covering the northwest corner of the city, the Richmond police district is largely residential, but also includes the long commercial, shopping, and restaurant corridors of

Geary Boulevard and Clement Street, most of Golden Gate Park, the Golden Gate National Recreation Area and the University of San Francisco campus. Built in 1927 in a red-brick Romanesque Revival style, the station was remodeled and reopened in 1996. In keeping with the desires of many local residents and merchants, all the main original design elements were retained. Additions were constructed of reinforced concrete and steel. The seismically upgraded station includes a community room, a lunch and exercise room for officers, expanded locker space and public art.

#### Ingleside Station (Company H)

1 John Young Lane San Francisco, California 94112 415-404-4000

The Ingleside Police District encompasses the area south of Cesar Chavez Street to the San Mateo County line, and the area west from Highway 101 to Faxon Avenue. Originally built in 1910, Ingleside Station, located just off Balboa Park at San Jose Avenue, underwent a complete renovation while retaining



classic Mission style exterior of stucco and red tile and reopened in 1991. In the Department's continuing efforts at community outreach, the station includes a community room that can accommodate 50 people, visitor parking and access for the disabled. The Ingleside District is home to many long-standing neighborhoods, including Glen Park-Sunnyside, Bernal Heights, the Excelsior and St. Francis Wood. San Francisco City College is located in this district.

#### Taraval Station (Company I)

2345 – 24th Avenue San Francisco, California 94116 415-759-3100

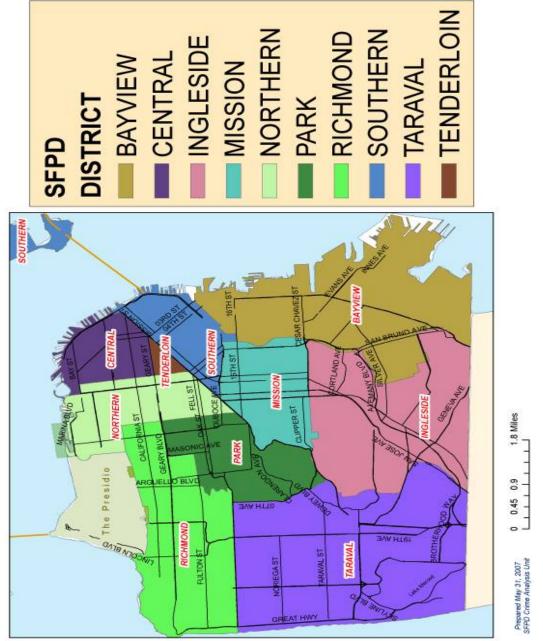
The Taraval police District encompasses a large area of the western part of San Francisco, extending from the west of Twin Peaks area to the Pacific Ocean and south to the county line. Largely residential, the Taraval district contains a large number of schools, and features traditional shopping streets like Irving Street. Intersecting with Irving is 9th Avenue, which has increasingly become a destination restaurant corridor leading to one of the entrances of world-famous Golden Gate Park at Lincoln Way. The district includes the Zoological Gardens and Harding Municipal Golf Course. Keeping the Romanesque-style brick exterior, the building was completely overhauled in 1996 through a 1987 bond issue. Like the other nine district stations, Taraval includes a community meeting room.

#### Tenderloin Station (Company J)

301 Eddy Street San Francisco, California 94102 415-345-7300

A triangular area bordered by Geary, Market and Larkin streets, the Tenderloin Police District is the smallest of the ten district station areas. The Tenderloin Task Force was created in 1991 (with the first bicycle patrol in the city) to combat the high level of crime in that area and made its headquarters in the basement of the historic Hibernia Bank building. A new headquarters, now formally known as Tenderloin Station, opened in October 2000 at 301 Eddy Street. The officers of Tenderloin Station patrol an area with the highest concentration of parolees in the city, but the area has also become a place of residence for many law-abiding immigrant families, especially from Southeast Asia. The officers' role has been to make this area, with its expanding businesses and eateries catering to those families, safe.





INVESTIGATIONS BUREAU

The Investigations Bureau is staffed by the department's many inspectors, who are the "detectives" assigned to investigate crimes that occur in San Francisco. Although most inspectors work at the Hall of Justice, those assigned to the Juvenile Division work out of Mission Station, and those assigned to the Crime Lab work at the department's Hunter's Point facility.

Inspectors conduct in-depth investigations of personal and property crimes and present completed cases for prosecution to the District Attorney's office. The bureau works closely with federal, state and local agencies on multi-jurisdictional investigations.

#### Forensic Services Division

The Director of Forensic Services oversees the division. The functions of



division include:

- <u>Criminalities Laboratory (Crime Lab)</u> The Crime Lab serves the Department by examining evidence and providing expert testimony on cases involving firearms, forensic biology (DNA), narcotics, arson debris, gunshot residue from the hands of shooters, and forensic documents. Annually the lab tests over 15,000 narcotics exhibits.
- Crime Scene Investigations (CSI) CSI inspectors and officers are highly trained members of the Department who respond to crime scenes to collect a variety of evidence, such as blood, DNA evidence, computer evidence and any video evidence as well as fingerprints from surfaces, including paper and weapon surfaces. In addition, the investigators help inspectors assigned to the case reconstruct what happened
- Identification Section (ID) The ID Section functions include processing fingerprints, mug shots and physical information data and processing suspects cited to appear for misdemeanor offenses. ID also performs criminal history checks, updates arrest information, and enters restraining orders. The ID Section starts criminal history information on first time offenders and manages the records of all San Francisco arrestees. They assist in the identification of "John/Jane Doe" arrestees and the Medical Examiner's "John/Jane Doe" cases. The ID Section is the main source for the fingerprint database. We fingerprint job and license applicants and prepare identification cards for members of the Department.

#### ADMINISTRATION BUREAU

The day-to-day operations of the Administration Bureau are directed by a Deputy Chief and together with a Commander are varied in responsibility and function. The Administration Bureau provides the support for the other bureaus of the San Francisco Police Department and is frequently the liaison with other city agencies as well as the Board of Supervisors.

#### Support Services Division

The Support Services Division is comprised of several units including:

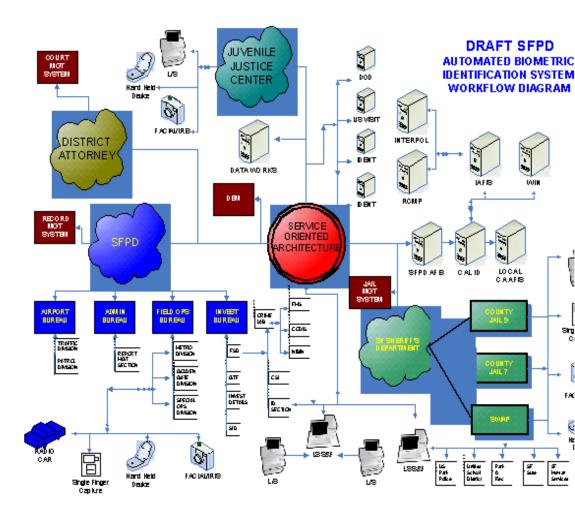
• <u>The Report Management Section</u> The Report Management Section performs separate functions related to report processing and data storage and retrieval. Copies and distributes reports to the pertinent agencies, units, etc. The Section processes an average of 300 to 400 requests on a daily basis. They are also responsible for data entry of reports into the computer for queries and to generate statistical report<sup>+</sup>



## Appendix B

## Appendix C

## Appendix D



DD.



Powered By Dynalivery