

MCE 01 Identity Management  
Requirements Definition

Minimum Biographic Information	Minimum biographic information is listed in BR-48. It includes the following: <ul style="list-style-type: none"> <li>- First Name</li> <li>- Middle Name (optional)</li> <li>- Last Name</li> <li>- Date of Birth</li> <li>- Gender</li> <li>- Associated identity document number (e.g., passport numbers, BCC number, driver's license number, etc.), if applicable</li> <li>- Document Issuing Authority (e.g., country or state), if applicable</li> </ul>
Needs-Specific View	A unified display of biographic and biometric information presented to a decision-maker. The information contained is determined based on roles and responsibilities.
Owning Agency	The organizational entity that has the authority and responsibility to ensure the quality of the information associated with a record.
Print of Record	The data set against which biometric verification or searches are performed.
Prints	The term prints include either rolled or flat fingerprints unless specifically indicated.
RapBack	The notification of biometrically confirmed interactions against a set of fingerprints to the originating entity if requested.
Response Time	Response time is the time involved for the solution to search, retrieve, and display information to the user. Response time begins when the user submits a query and ends when the user is provided with the requested information.
Role	The reason an individual is being fingerprinted.
Rolled Prints	Full fingerprint image captured as it is rolled from one edge of the fingernail to the other.
Temporary Unique Number	A unique number associated to an individual's biographic information.
Update	The addition, subtraction, or modification of information to improve the accuracy or completeness of data.
User	Any individual authorized to use the solution; operator.
Verification	One-to-one comparison of captured prints to stored prints in order to confirm the identity of a previously enumerated individual.

*Figure C-1. Glossary*

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1181716-1

Total Deleted Page(s) = 3  
Page 190 ~ Duplicate;  
Page 249 ~ Duplicate;  
Page 256 ~ Duplicate;

XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206912-0

Total Deleted Page(s) = 16

- Page 44 ~ b7E;
- Page 45 ~ b7E;
- Page 46 ~ Duplicate - FOIA 1206915- CJIS Box 16 Section 4;
- Page 130 ~ b7E;
- Page 131 ~ b7E;
- Page 159 ~ b7E;
- Page 160 ~ b7E;
- Page 161 ~ b7E;
- Page 212 ~ b7E;
- Page 213 ~ b7E;
- Page 214 ~ b7E;
- Page 216 ~ b7E;
- Page 217 ~ b7E;
- Page 343 ~ b7E;
- Page 344 ~ b7E;
- Page 345 ~ b7E;

XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX



## Rap Back Service



### **RAP BACK:**

Notification to an Authorized Contributor that activity (e.g., criminal, civil, External System activity) has occurred on a previously enrolled subject's record.

For Official Use Only

Slide 42

Unclassified



## Data Management Services



### Direct Rap Back Enrollment

For Official Use Only

Slide 210

Unclassified



## Data Management Services



### Rap Back Maintenance / Renewal

For Official Use Only

Slide 214

Unclassified



# NGI Workload



**Rap Back**

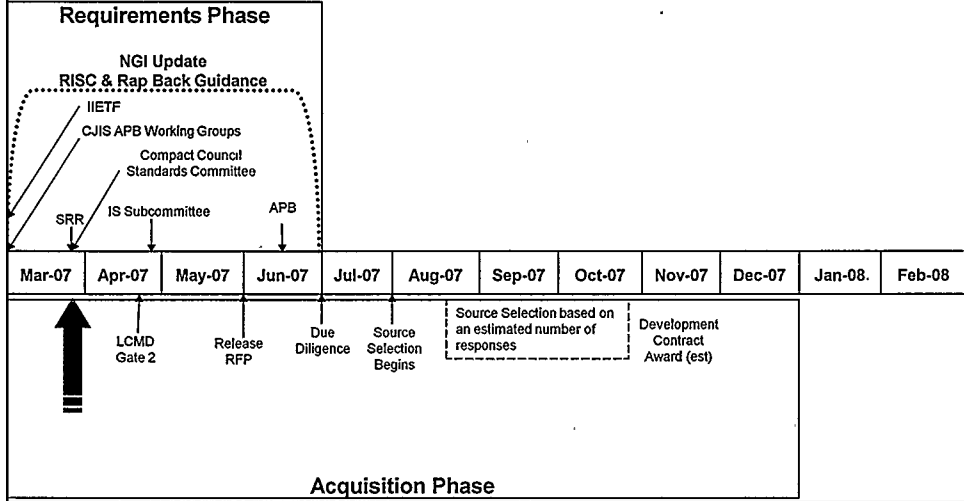
For Official Use Only

Slide 341

Unclassified



# NGI Timeline (Where we are going)



For Official Use Only Slide 348 Unclassified



FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206912-0

Total Deleted Page(s) = 10

Page 5 ~ b7E;

Page 35 ~ Referral/Direct;

Page 36 ~ Referral/Direct;

Page 37 ~ Referral/Direct;

Page 38 ~ Referral/Direct;

Page 39 ~ Referral/Direct;

Page 60 ~ Duplicate - FOIA 1181716-1 - CJIS Box 1 Section 6;

Page 99 ~ Duplicate - FOIA 1181716-1 - CJIS Box 6 Section 1;

Page 155 ~ b7E;

Page 161 ~ b7E;

```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

## *Quick Wins*

### **DHS and OPM**

#### ISSUE:

- Revetting

#### QUICK WIN:

- Interim Rap Back

8

Revetting seems to be a common issue among the IPC members and they indicated that Rap Back could be a possible solution once implemented in 2014 to fill the “gap” of information sharing.

So as a result of the discussions during the September 20<sup>th</sup> meeting of the NSS IPC, Compact Council, APB, and the FBI, the FBI has decided to implement “Interim Rap Back” until 2014 and full Rap Back is operational.

Implementation: Tentatively April 2012.

Participating Agencies: Initially  then it may be opened up to other  federal agencies and to the

b7E



**Initiative for CJIS.P4 – NGI  
Major Milestones or Tasks**

Milestone/Task	% Complete	Start	End	Responsible
Increment 0 System Acceptance Review Advanced Technology Workstations	50	02/25/09	09/14/09	ASC
Increment 1 System Acceptance Review * Identification Fingerprint	22	02/26/09	06/05/10	ASC
Initial Operating Capability *	0	12/06/10	12/06/10	ASC
Increment 2 System Acceptance Review RISC and Initial NGI Infrastructure	0	10/14/09	02/22/11	ASC
Increment 3 System Acceptance Review Latent, Palms, and Full NGI Infrastructure	0	03/08/10	09/30/11	ASC
Increment 4 System Acceptance Review Photos Rap Back and IAFIS Migration	0	08/30/10	11/28/12	ASC
Increment 5 System Acceptance Review Full User Functionality	0	03/02/11	09/26/13	ASC
Increment 6 System Acceptance Review Performance Validation	0	09/27/11	09/26/13	ASC
Full Operating Capability	0	06/05/14	06/05/14	ASC

\* Increment 1 SAR and IOC dates are expected to change due to results of the Trade Study. Expected completion date of revised schedule is mid July 2009.

NOTE: Based on Version 17 of the Contractor IMS. All Increment start dates are IBR dates. End dates are SAR dates.

b6  
b7C

**Increment 0 -** Advanced Technology Workstation  
**Functionality -** Replace Service Provider workstation  
**Benefit -** Use of commodity platform for HMI lowers Total Cost of Ownership (TCO)

**Increment 1 -** Identification Fingerprint Trade Study Implementation  
**Functionality -** Advanced Fingerprint Identification Technology (AFIT) Identification  
**Benefits -** More accurate fingerprint search and better support for flats and less than 10 fingers

**IOC -** Initial Operating Capability  
**Functionality -** Implementation of AFIT solution on Operational Environment  
**Benefit -** Early look of functionality of NGI system

**Increment 2 -** Initial deployment of NGI Infrastructure Objective Repository for Individuals of Special Concern (RISC) deployment  
**Functionality -** RISC rapid search using NGI infrastructure  
**Benefit -** Fast RISC response times and opportunity to evaluate NGI infrastructure under operational use

**Increment 3 -** Initial Deployment of NGI Workflow and National Palmprint System  
**Functionality -** Investigative fingerprint and Palmprint on NGI infrastructure  
**Benefit -** All latent functionality hosted on NGI infrastructure and National Palmprint System

**Increment 4 -** Retirement of legacy IAFIS High priority NGI  
**Functionality -** IAFIS migration to NGI / Rap back / Shared services / EIR operational / Facial and Scars, Marks, and Tattoos (SMT) search / Disposition reporting via CJIS WAN and NCIC / Unique identity / RISC notifications / Fingerprint verification Services / All legacy HMI capabilities re-implemented  
**Benefit -** All latent functionality hosted on NGI infrastructure and National Palmprint System

**Increment 5 -** Full deployment of NGI functional requirements  
**Functionality -** All NGI functionality  
**Benefit -** All NGI user functionality available

**Increment 6 -** Performance Validation  
**Functionality -** Disaster Recovery and all performance specifications met or exceeded  
**Benefit -** Complete NGI System

**FOC -** Full Operating Capability  
**Functionality -** Final implementation of the NGI System on Operational Environment  
**Benefit -** Complete System Implementation



**NGI**

## **Capabilities**

- **Advanced Fingerprint Identification Technology**
  - Increase existing IAFIS functions: Capacity, Storage, & Accuracy
  - Enhance Latent Processing Services
  - Create the RISC
- **Enhanced IAFIS Repository**
  - Utilize the civil file for ten-print searching purposes
  - Provide Iris services
  - Provide Rap Back Services
  - Five additional repositories
- **National Palm Print System**
  - Establish a Palm Print Repository with latent functionality

57

b6  
b7C

•**Quality Check (QC) Automation-** The Quality Check function of IAFIS is one of the first steps in IAFIS tenprint processing in which textual information is reviewed. At one point in time [redacted] of all transactions required a manual review. As of July 1, 2007, Auto QC was implemented and has reduced the manual processing time from an average of [redacted] to an average of [redacted]

b7E

•**Interstate Photo System (IPS) or Mugshots -** The IPS capability will enhance the enrollment of photos, the retrieval capability of photos and provide additional search capabilities of photo repositories (including SMT photos) using biographical data and/or facial recognition technology.

•**Disposition Reporting Improvements –** Approximately [redacted] of our records contain dispositions. Therefore, this initiative proposes the development of four enhancements as alternatives for the submission of disposition information: Submissions Via CJIS-WAN; Submissions Via III; Modernization of our magnetic tape based Machine Readable Data (MRD) Process; and Direct Federal Court Submissions. **A portion of this modernization began on 9/2/07 for existing MRD users.**

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206912-0

Total Deleted Page(s) = 5

Page 13 ~ b7E;

Page 89 ~ Duplicate - 1181716-1 CJIS Box 1 Section 1;

Page 145 ~ b7E;

Page 151 ~ Duplicate - FOIA 1206919- CJIS Box 26 Section 7;

Page 301 ~ b5;

```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```



**NGI**

## **Capabilities**

- **Advanced Fingerprint Identification Technology**
  - Increase existing IAFIS functions: Capacity, Storage, & Accuracy
  - Enhance Latent Processing Services
  - Create the RISC
- **Enhanced IAFIS Repository**
  - Utilize the civil file for ten-print searching purposes
  - Provide Iris services
  - Provide Rap Back Services
  - Five additional repositories
- **National Palm Print System**
  - Establish a Palm Print Repository with latent functionality

57

b6  
b7C

•**Quality Check (QC) Automation-** The Quality Check function of IAFIS is one of the first steps in IAFIS tenprint processing in which textual information is reviewed. At one point in time [redacted] of all transactions required a manual review. As of July 1, 2007, Auto QC was implemented and has reduced the manual processing time from an average of [redacted] to an average of [redacted]

b7E

•**Interstate Photo System (IPS) or Mugshots -** The IPS capability will enhance the enrollment of photos, the retrieval capability of photos and provide additional search capabilities of photo repositories (including SMT photos) using biographical data and/or facial recognition technology.

•**Disposition Reporting Improvements –** Approximately [redacted] of our records contain dispositions. Therefore, this initiative proposes the development of four enhancements as alternatives for the submission of disposition information: Submissions Via CJIS-WAN; Submissions Via III; Modernization of our magnetic tape based Machine Readable Data (MRD) Process; and Direct Federal Court Submissions. A portion of this modernization began on 9/2/07 for existing MRD users.



# Rap Back, Facial, SMT Search Capabilities Migration of Remaining IAFIS Functionality



## (Increment 4)

- **Rap Back – notification of criminal activity on previously enrolled individuals**
- **Facial and SMTs – expansion of facial and SMT searches for investigative purposes**
- **Disposition reporting via CJIS Wide Area Network (WAN)**
- **Unique Identity – more complete and accurate history records by using a unique identity reference**
- **Full DHS Interoperability to include transition of shared services to NGI**
- **Fingerprint verification services**





## Rap Back, Facial, SMT Search Capabilities Migration of Remaining IAFIS Functionality



### (Increment 4)

- Rap Back – notification of criminal activity on previously enrolled individuals
- Facial and SMTs – expansion of facial and SMT searches for investigative purposes
- Disposition reporting via CJIS Wide Area Network (WAN)
- Unique Identity – more complete and accurate history records by using a unique identity reference
- Full  Interoperability to include transition of shared services to NGI
- Fingerprint verification services



b7E

UNCLASSIFIED / FOUO

12

### INCREMENT 4 (2013)

In Increment 4, all remaining IAFIS functionality, which includes the high priority functionality previously delivered as QUICKWINS, will be migrated to the NGI architecture. At a minimum, IAFIS response and accuracy requirements will be met or exceeded, however, the advanced NGI response and accuracy requirements will be realized in Increment 6. The expansion of the facial and scars, marks, and tattoos search will be included in this increment. The verification transaction will enable users to submit a transaction to confirm an identity based on a one-to-one comparison.

The Enhanced IAFIS Repository (EIR) will be operational supporting the unique identity concept and Rap Back capability. As a new feature, the Rap Back Service will provide authorized criminal justice and non-criminal justice users the capability to receive subsequent notification of criminal activity posted to an enrolled individual's record.

NGI will include criminal and civil submissions, biometric submissions, special population files, unsolved latent/biometric files, etc. A **unique identity reference (alphanumeric character)** will identify and collectively locate individuals contained within the files.

Additionally, disposition reporting via the CJIS WAN will be included with this increment as will the shared services to provide   interoperability.

b7E





## Rap Back Activities



- Reviewing Best Practices and Lessons Learned
  - Currently identified  states with Rap Back business lines
  - Strategic discussions to align with a national implementation
- Identifying Policy Focus Areas
- Going Forward
  - Engage Law Enforcement Partners
  - Continue working with Subject Matter Experts

b7E

UNCLASSIFIED  
For official use only

9

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206913-0

Total Deleted Page(s) = 1  
Page 92 ~ Referral/Consult;

XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206913-0

Total Deleted Page(s) = 43

- Page 66 ~ b5;
- Page 67 ~ b5;
- Page 68 ~ b5;
- Page 69 ~ b5;
- Page 70 ~ b5;
- Page 71 ~ b5;
- Page 72 ~ b5;
- Page 73 ~ b5;
- Page 74 ~ b5;
- Page 75 ~ b5;
- Page 85 ~ b5;
- Page 86 ~ b5;
- Page 89 ~ b5;
- Page 92 ~ b5;
- Page 93 ~ b5;
- Page 94 ~ b5;
- Page 96 ~ b5;
- Page 99 ~ b5;
- Page 123 ~ b5;
- Page 124 ~ b5;
- Page 126 ~ b5;
- Page 127 ~ b5;
- Page 128 ~ b5;
- Page 129 ~ b5;
- Page 130 ~ b5;
- Page 131 ~ b5;
- Page 132 ~ b5;
- Page 133 ~ b5;
- Page 141 ~ b5;
- Page 142 ~ b5;
- Page 143 ~ b5;
- Page 146 ~ b5;
- Page 151 ~ b5;
- Page 152 ~ b5;
- Page 153 ~ b5;
- Page 168 ~ b5;
- Page 170 ~ b5;
- Page 171 ~ b5;
- Page 172 ~ b5;
- Page 173 ~ b5;
- Page 196 ~ b5;
- Page 213 ~ b5;
- Page 244 ~ b5;

XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206913-0

Total Deleted Page(s) = 3  
Page 71 ~ Duplicate;  
Page 103 ~ Duplicate;  
Page 255 ~ Duplicate;

XXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXX

## IAFIS UPGRADES

2006

- AFIS 64-Way uplift to support FY 2006 User Fee initiatives

- Capacity Increase: 30% - 40% increase in AFIS processing capacity

Slide 20

## FUTURE IAFIS UPGRADES

- AFIS Segment Controller Rehost
- Migration of Data to Enterprise Storage Area Network (ESAN)
- IAFIS Data Warehouse (IDWH) Rehost

Slide 21

b7E

## Next Generation Identification

- Improving Identification-  
Enhancing Crime Prevention-  
Increasing Public Safety

Slide 22

## Next Generation Identification

- Next Generation Identification (NGI) will protect the United States by providing proactive investigative and intelligence biometric capabilities to Homeland Security, Law Enforcement and Defense communities throughout the nation. It will capitalize on the nexus between law enforcement and counter terrorism through biometric information sharing to proactively disrupt terrorist activities and improve intelligence. Citizens in positions of trust will be flagged for rap back to protect national security. Flat fingerprints will be processed through wireless access in real-time with rapid notification back to front line law enforcement officers. Comprehensive criminal history information will be fused with multi-modal biometrics to aid investigations by accessing biometric databases across the US Government.

Slide 23

## Next Generation Identification

- Next Generation Identification (NGI) will protect the United States by providing proactive investigative and intelligence biometric capabilities to Homeland Security, Law Enforcement and Defense communities throughout the nation. It will capitalize on the nexus between law enforcement and counter terrorism through biometric information sharing to proactively disrupt terrorist activities and improve intelligence. Citizens in positions of trust will be flagged for rap back to protect national security. Flat fingerprints will be processed through wireless access in real-time with rapid notification back to front line law enforcement officers. Comprehensive criminal history information will be fused with multi-modal biometrics to aid investigations by accessing biometric databases across the US Government.

Slide 8

## Alignment

### Goals One and Three of DOJ Strategic Goals

- Prevent terrorism and promote the nation's security
- Assist state, local, and tribal efforts to prevent or reduce crime and violence

### Priority One, Two, Nine and Ten of FBI Strategic Initiatives

- Protect the United States from terrorist attack
- Protect the United States from foreign intelligence operations and espionage
- Support federal, state, local, and international partners
- Upgrade technology to successfully perform the FBI's mission

### Goals B and C of the CJIS Strategic Plan

- B Meet customer demands for new services
- C Expand the availability of CJIS services using web technology

Slide 9

## Program Overview

By incorporating technical and infrastructure enhancements into the IAFIS, the FBI will:

- Provide a flexible, scalable multi-modal biometrics framework.
- Provide federal, state, local, tribal, and international law enforcement agencies with access to critical law enforcement information, including access to specialized files and identification of known criminals through fingerprint identification services (civil, criminal, and latent).
- Support Homeland Security and the war on terrorism through strategic partnerships at all levels of government.
- Allow the FBI to improve information sharing at all levels of criminal justice and non-criminal justice agencies, as well as meet customers' demands for new, faster services.
- Result in faster identification of known or suspected terrorists and wanted persons, provide improved information sharing for law enforcement and non-criminal justice agencies, and solve more crimes with faster, more complete, and accurate capabilities related to fingerprint and latent palm print searches.

Slide 10

## Program Overview

- **Project Sponsor**  
FBI/CJIS Division, Assistant Director Thomas E. Bush, III
- **Who will benefit from NGI?**  
Criminal justice and authorized non-criminal justice agencies, federal, state, local, tribal, international law enforcement agencies, federal homeland security and intelligence agencies and ultimately the public.
- **Proposed Preliminary Project Timeline**  
Complete Study Effort – September 2005\*  
Development to Begin – April 2007\*  
Projected Implementation Completion – 2011\*  
(based upon incremental funding, deployment, and study strategy recommendations)

\*Dates may change based on study findings and recommended implementation strategy/approach.

Slide 11

## FUTURE IAFIS UPGRADES

- AFIS Segment Controller Rehost
- Migration of Data to Enterprise Storage Area Network (ESAN)
- IAFIS Data Warehouse (IDWH) Rehost

Slide 20

## Next Generation Identification

- Improving Identification-Enhancing Crime Prevention-Increasing Public Safety

Slide 21

## Next Generation Identification

- Next Generation Identification (NGI) will protect the United States by providing proactive investigative and intelligence biometric capabilities to Homeland Security, Law Enforcement and Defense communities throughout the nation. It will capitalize on the nexus between law enforcement and counter terrorism through biometric information sharing to proactively disrupt terrorist activities and improve intelligence. Citizens in positions of trust will be flagged for rap back to protect national security. Flat fingerprints will be processed through wireless access in real-time with rapid notification back to front line law enforcement officers. Comprehensive criminal history information will be fused with multi-modal biometrics to aid investigations by accessing biometric databases across the US Government.

Slide 22

## Alignment

- Goals One and Three of DOJ Strategic Goals
  - Prevent terrorism and promote the nation's security
  - Assist state, local, and tribal efforts to prevent or reduce crime and violence
- Priority One, Two, Nine and Ten of FBI Strategic Initiatives
  - Protect the United States from terrorist attack
  - Protect the United States from foreign intelligence operations and espionage
  - Support federal, state, local, and international partners
  - Upgrade technology to successfully perform the FBI's mission
- Goals B and C of the CJIS Strategic Plan
  - B Meet customer demands for new services
  - C Expand the availability of CJIS services using web technology

Slide 23



FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206913-0

Total Deleted Page(s) = 3  
Page 38 ~ b7E;  
Page 39 ~ b7E;  
Page 53 ~ Duplicate;


XXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXX

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206913-0


Total Deleted Page(s) = 49

Page 19 ~ b5;  
Page 60 ~ b5;  
Page 62 ~ b5;  
Page 63 ~ b5;  
Page 64 ~ b5;  
Page 65 ~ b5;  
Page 66 ~ b5;  
Page 67 ~ b5;  
Page 68 ~ b5;  
Page 69 ~ b5;  
Page 70 ~ b5;  
Page 71 ~ b5;  
Page 79 ~ b5;  
Page 80 ~ b5;  
Page 82 ~ b5;  
Page 86 ~ b5;  
Page 87 ~ b5;  
Page 89 ~ b5;  
Page 92 ~ b5;  
Page 113 ~ b5;  
Page 114 ~ b5;  
Page 115 ~ b5;  
Page 116 ~ b5;  
Page 117 ~ b5;  
Page 118 ~ b5;  
Page 119 ~ b5;  
Page 125 ~ b5;  
Page 126 ~ b5;  
Page 129 ~ b5;  
Page 133 ~ b5;  
Page 134 ~ b5;  
Page 136 ~ b5;  
Page 140 ~ b5;  
Page 141 ~ b5;  
Page 143 ~ b5;  
Page 148 ~ b5;  
Page 155 ~ b5;  
Page 173 ~ b5;  
Page 210 ~ b5;  
Page 211 ~ b5;  
Page 226 ~ b5;  
Page 230 ~ b5;  
Page 231 ~ b5;  
Page 296 ~ b5;  
Page 312 ~ b5;  
Page 313 ~ b5;  
Page 314 ~ b5;  
Page 315 ~ b5;

```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
X   Deleted Page(s)   X
X   No Duplication Fee X
X   For this Page     X
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```




## Palm Prints and Latents (Increment 3)




**Status**

- Completed successful Final Design Review
- Working towards System Acceptance Review
  - Target Deployment – Spring 2013
- Collected 3 million palm prints to date
- EBTS 9.3 – Developed and ready for final approval




**Resulting Benefits**


- Enable palm prints to be searched across the U.S.
- More latent identifications to support terrorist and violent crime investigations
- Upgraded Universal Latent Workstation Software
- Provides rapid response for DHS Customs and Border Protection transactions



UNCLASSIFIED  
For official use only

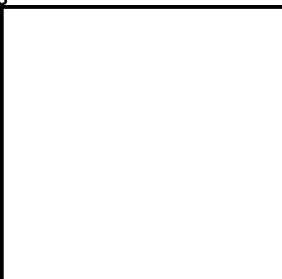


## Rap Back, Facial, SMT Search Capabilities, Migration of Remaining IAFIS Functionality (Increment 4 )



**Status**

- Facial Search
- Text based scars, marks, and tattoo (SMT) searches
- Rap Back
- Enhanced Interoperability
- Fingerprint verification services
- Improved response times



**Resulting Benefits**

- Enhance public safety
- National level investigative searches of photos/SMTs
- More accurate and complete criminal history records
- Flexible and scalable architecture for future needs

UNCLASSIFIED  
For official use only

b6  
b7C

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206913-0

Total Deleted Page(s) = 8

- Page 131 ~ Duplicate;
- Page 211 ~ Duplicate;
- Page 275 ~ Duplicate;
- Page 366 ~ Duplicate;
- Page 367 ~ b5;
- Page 368 ~ b5;
- Page 369 ~ b5;
- Page 370 ~ b5;

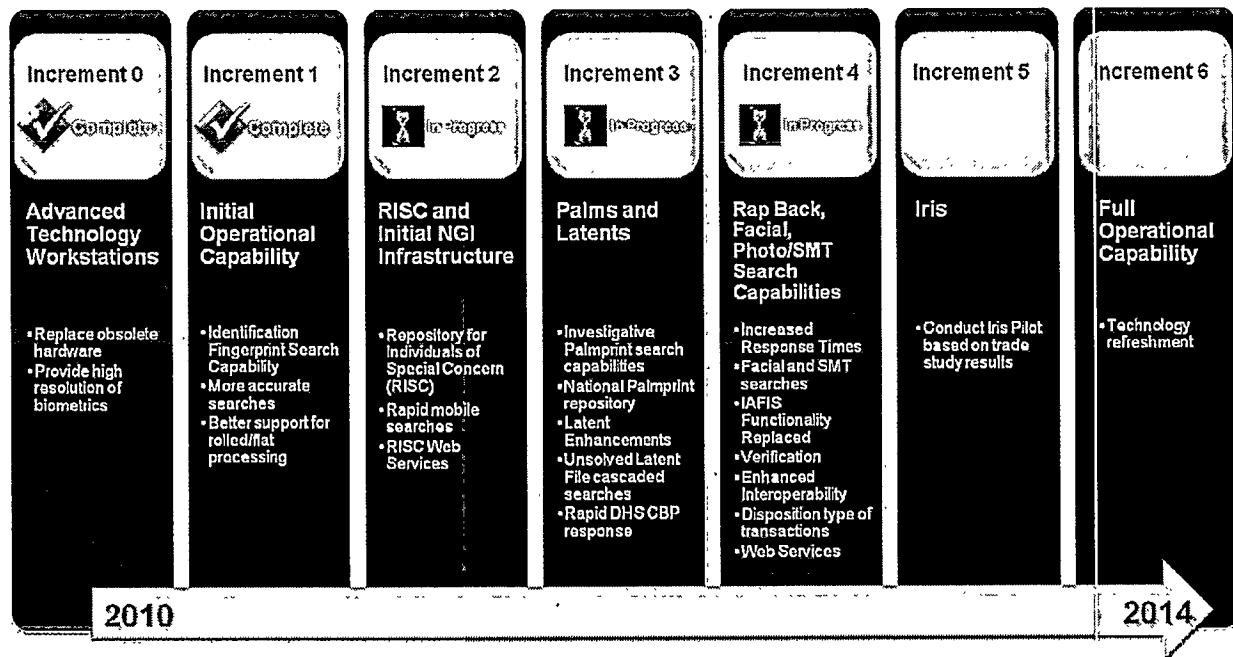
```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

## What is Next Generation Identification (NGI)?

NGI will improve, expand, and create new biometric services and will incrementally replace existing Integrated Automated Fingerprint Identification System (IAFIS) components, providing both new and improved identification and increased criminal history information services.

NGI was developed and is being deployed over a multiple year time span. NGI will increase information processing and sharing needs of the more than 18,000 local, state, federal, and international agencies who are our customers. NGI will also provide a framework to support multimodal developments in biometrics like palmprints, scars, marks, and tattoos (SMT), and facial measurement and offer state-of-the-art biometric identification services.

## NGI Implementation Schedule



Unclassified/FOUO

The FBI and its development contractor, Lockheed Martin Transportation and Security Solutions, continue to move forward with the design and development of the NGI System. The following NGI capabilities will be deployed in seven increments, spanning ten years.

### Increment 0

The first completed incremental delivery of NGI, replaced 840 legacy workstations with new Advanced Technology Workstations (ATWs). The installation process was completed seamlessly on March 26, 2010. Each ATW has a 30-inch, high resolution LCD monitor that increases operational efficiency to current IAFIS Service Providers.

**Increment 1**

This increment will support Initial Operating Capability (IOC) by replacing the FBI's existing Automated Fingerprint Identification System (AFIS) with the new Automated Fingerprint Identification Technology (AFIT) and was successfully implemented on February 25, 2011. AFIT will improve search accuracy to over 99 percent from the current 92 percent. AFIT features include faster processing, increased automated processing, and improved flat print searching.

**Increment 2**

Still in the final design stage, this increment will offer the Repository for Individuals of Special Concern (RISC) and initial NGI infrastructure in 2012. RISC allows rapid search of the databases containing wanted persons, sexual offender registry subjects, and known or appropriately suspected terrorists (KSTs), and other persons of special interest. These searches will be submitted from mobile devices by law enforcement to assess the level of threat of an encountered individual. The CJIS Division is currently piloting the RISC capability with several law enforcement agencies. Increment 2 will support both RISC rapid searches received as e-mails or as web service requests.

**Increment 3**

Increment 3 establishes the National Palmprint System and transitions IAFIS latent functionality to the new NGI infrastructure. A Latent Fingerprint and Palmprint Trade Study and subsequent report were completed in January. The CJIS Division has collected over 1 million palmprints in preparation of future search and retrieval. Increment 3 will also deliver latent enhancements such as increased penetration rates, investigative accuracy, and increased unsolved latent file capacity. Additionally, Increment 3 will provide a rapid response to the Department of Homeland Security (DHS) Customs and Border Protection (CBP) primary ports of entry.

**Increment 4**

Increment 4 will deliver the Rap Back Service to address a growing need for additional and timely notification of criminal activity involving individuals holding positions of trust. This Increment will deliver the capability for face, scars, marks, and tattoos searches and replace the IAFIS infrastructure. This increment also provides for enhanced interoperability and provides record-linking capabilities with DHS entities.

**Increment 5**

This increment will offer an Iris Pilot based on trade study results. This capability has the potential to benefit law enforcement by requiring less interaction with subjects and will allow quicker acquisition.

**Increment 6**

~~Increment 6 will offer Full Operational Capability (FOC) and support Technology Refreshment. All performance specifications will be met and additional tuning to meet non-functional requirements will occur.~~

**How will NGI change Interoperability?**

The NGI Development Contract will provide products and services that will implement legacy and future Interoperability functionality. These products and services will be leveraged in order to enable a comprehensive model for information sharing. This model will ensure the processes and protections are in place to provide accurate, timely, relevant and complete data while maintaining mission independence for each agency.

## Next Generation Identification (NGI)

- Improving Identification-  
Enhancing Crime Prevention-  
Increasing Public Safety

\* Program name is in the process of being changed from Next Generation IAFIS to Next Generation Identification

Slide 8

## Next Generation Identification

- Next Generation Identification (NGI) will protect the United States by providing proactive investigative and intelligence biometric capabilities to Homeland Security, Law Enforcement and Defense communities throughout the nation. It will capitalize on the nexus between law enforcement and counter terrorism through biometric information sharing to proactively disrupt terrorist activities and improve intelligence. Citizens in positions of trust will be flagged for rap back to protect national security. Flat fingerprints will be processed through wireless access in real-time with rapid notification back to front line law enforcement officers. Comprehensive criminal history information will be fused with multi-modal biometrics to aid investigations by accessing biometric databases across the US Government.

Slide 9



FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206913-0

Total Deleted Page(s) = 2  
Page 7 ~ b5;  
Page 45 ~ b5;

XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX

## Next Generation Identification

- Next Generation Identification (NGI) will protect the United States by providing proactive investigative and intelligence biometric capabilities to Homeland Security, Law Enforcement and Defense communities throughout the nation. It will capitalize on the nexus between law enforcement and counter terrorism through biometric information sharing to proactively disrupt terrorist activities and improve intelligence. Citizens in positions of trust will be flagged for rap back to protect national security. Flat fingerprints will be processed through wireless access in real-time with rapid notification back to front line law enforcement officers. Comprehensive criminal history information will be fused with multi-modal biometrics to aid investigations by accessing biometric databases across the US Government.

## Alignment

### **Goals One and Three of DOJ Strategic Goals**

Prevent terrorism and promote the nation's security  
Assist state, local, and tribal efforts to prevent or reduce crime and violence

### **Priority One, Two, Nine and Ten of FBI Strategic Initiatives**

Protect the United States from terrorist attack  
Protect the United States from foreign intelligence operations and espionage  
Support federal, state, local, and international partners  
Upgrade technology to successfully perform the FBI's mission

### **Goals B and C of the CJIS Strategic Plan**

B Meet customer demands for new services  
C Expand the availability of CJIS services using web technology

## Next Generation Identification

- Next Generation Identification (NGI) will protect the United States by providing proactive investigative and intelligence biometric capabilities to Homeland Security, Law Enforcement and Defense communities throughout the nation. It will capitalize on the nexus between law enforcement and counter terrorism through biometric information sharing to proactively disrupt terrorist activities and improve intelligence. Citizens in positions of trust will be flagged for rap back to protect national security. Flat fingerprints will be processed through wireless access in real-time with rapid notification back to front line law enforcement officers. Comprehensive criminal history information will be fused with multi-modal biometrics to aid investigations by accessing biometric databases across the US Government.

Slide 24

## Alignment

- **Goals One and Three of DOJ Strategic Goals**
  - Prevent terrorism and promote the nation's security
  - Assist state, local, and tribal efforts to prevent or reduce crime and violence
- **Priority One, Two, Nine and Ten of FBI Strategic Initiatives**
  - Protect the United States from terrorist attack
  - Protect the United States from foreign intelligence operations and espionage
  - Support federal, state, local, and international partners
  - Upgrade technology to successfully perform the FBI's mission
- **Goals B and C of the CJIS Strategic Plan**
  - B Meet customer demands for new services
  - C Expand the availability of CJIS services using web technology

Slide 25

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206913-0

Total Deleted Page(s) = 50

Page 19 ~ Duplicate;  
Page 60 ~ b5;  
Page 63 ~ b5;  
Page 64 ~ Duplicate;  
Page 65 ~ Duplicate;  
Page 66 ~ Duplicate;  
Page 67 ~ b5;  
Page 68 ~ Duplicate;  
Page 69 ~ Duplicate;  
Page 70 ~ Duplicate;  
Page 71 ~ Duplicate;  
Page 72 ~ Duplicate;  
Page 80 ~ b5;  
Page 81 ~ Duplicate;  
Page 83 ~ b5;  
Page 87 ~ Duplicate;  
Page 88 ~ Duplicate;  
Page 90 ~ Duplicate;  
Page 93 ~ Duplicate;  
Page 114 ~ Duplicate;  
Page 115 ~ Duplicate;  
Page 116 ~ Duplicate;  
Page 117 ~ Duplicate;  
Page 118 ~ Duplicate;  
Page 119 ~ Duplicate;  
Page 120 ~ Duplicate;  
Page 126 ~ Duplicate;  
Page 127 ~ Duplicate;  
Page 130 ~ Duplicate;  
Page 134 ~ Duplicate;  
Page 135 ~ Duplicate;  
Page 137 ~ Duplicate;  
Page 141 ~ Duplicate;  
Page 142 ~ Duplicate;  
Page 144 ~ Duplicate;  
Page 149 ~ Duplicate;  
Page 156 ~ b5;  
Page 167 ~ b5;  
Page 182 ~ Duplicate;  
Page 219 ~ Duplicate;  
Page 220 ~ Duplicate;  
Page 235 ~ Duplicate;  
Page 239 ~ Duplicate;  
Page 240 ~ Duplicate;  
Page 305 ~ Duplicate;  
Page 321 ~ Duplicate;  
Page 322 ~ Duplicate;  
Page 323 ~ Duplicate;

Page 324 ~ Duplicate;  
Page 325 ~ Duplicate;

```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X   Deleted Page(s)   X  
X   No Duplication Fee X  
X   For this Page     X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

# Next Generation Identification

- Next Generation Identification (NGI) will protect the United States by providing proactive investigative and intelligence biometric capabilities to Homeland Security, Law Enforcement and Defense communities throughout the nation. It will capitalize on the nexus between law enforcement and counter terrorism through biometric information sharing to proactively disrupt terrorist activities and improve intelligence. Citizens in positions of trust will be flagged for rap back to protect national security. Flat fingerprints will be processed through wireless access in real-time with rapid notification back to front line law enforcement officers. Comprehensive criminal history information will be fused with multi-modal biometrics to aid investigations by accessing biometric databases across the US Government.

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206913-0

Total Deleted Page(s) = 50

Page 9 ~ b5;  
Page 11 ~ b5;  
Page 13 ~ b5;  
Page 15 ~ b5;  
Page 17 ~ b5;  
Page 18 ~ b5;  
Page 22 ~ b5;  
Page 26 ~ b5;  
Page 47 ~ b5;  
Page 75 ~ b5;  
Page 101 ~ b5;  
Page 102 ~ b5;  
Page 103 ~ b5;  
Page 104 ~ b5;  
Page 107 ~ b5;  
Page 108 ~ b5;  
Page 120 ~ b5;  
Page 122 ~ b5;  
Page 123 ~ b5;  
Page 124 ~ b5;  
Page 130 ~ b5;  
Page 135 ~ b5;  
Page 139 ~ b5;  
Page 144 ~ b5;  
Page 145 ~ b5;  
Page 221 ~ b7E;  
Page 222 ~ b7E;  
Page 223 ~ b7E;  
Page 224 ~ b7E;  
Page 225 ~ b7E;  
Page 229 ~ b7E;  
Page 230 ~ b7E;  
Page 232 ~ b7E;  
Page 235 ~ b7E;  
Page 246 ~ b7E;  
Page 247 ~ b7E;  
Page 248 ~ b7E;  
Page 249 ~ b7E;  
Page 250 ~ b7E;  
Page 251 ~ b7E;  
Page 254 ~ b7E;  
Page 255 ~ b7E;  
Page 256 ~ b7E;  
Page 259 ~ b7E;  
Page 265 ~ b7E;  
Page 266 ~ b7E;  
Page 267 ~ b7E;  
Page 268 ~ b7E;

Page 345 ~ b7E;  
Page 346 ~ b7E;

```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X   Deleted Page(s)   X  
X   No Duplication Fee X  
X   For this Page     X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```



Unclassified For Limited Official Use Only

Term	Definition
	associated with a record.
Person-Centric View	A comprehensive, consistent, accurate, and integrated view of individuals that is shared across multiple government agencies and organizations
Platen	The glass scanning region on a flatbed fingerprint scanner that records the prints.
Positive Identification	See Identification. Positive Identification implies that biometrics have been compared and found to be of the same individual.
Priority Levels	Immediate: response within 10-30 seconds; High: response within 15 minutes; Medium: response within two hours; Low: response within 24 hours, and up to 30 days
Processing	Any specific directives on how to manipulate the inputs for a desired output.
Purge	The batch removal of records for charges that are no longer considered criterion offenses based on changes to State law.
Query Time	The length of time a query takes to be processed.
Querying Officer	The authorized individual requesting a biometric search.
RAP Sheet	Record of Arrests and Prosecutions sheet. It describes arrests and subsequent dispositions attributable to an individual.
Rap Back	The notification of subsequent criminal and/or civil data to an existing record for biometrically confirmed interactions to the originating entity if requested.
Recidivist	Refers to an IDENT sub-file containing the fingerprints of a subject repeatedly encountered, but not necessarily arrested by DHS.
Remove	Removal of an entire record or record link from an information system. A removal request will be issued for any record that has been issued a court order for expungement and does not qualify for immigration retention purposes (e.g. President or Governor issued pardon, mistaken identity) and for records which have been purged.

B-7

Version 3.1, March 13, 2007 BIO-DOC-01174-3.1 Final

Unclassified For Limited Official Use Only

Unclassified For Limited Official Use Only

Term	Definition
Reports	Organized output, system status reporting is generated by the system (infrastructure), Management Information Reporting (MIR) is generated by the application.
Repository	A central location where the biometric and biographic data is stored and maintained. This can be multiple databases or files located for distribution over a network.
Requestor	The authorized individual requesting a biometric search.
Response Filtering	Restricting biographic response information to requesting users based on user profile and record-based access controls
Response Time	The time involved for the solution to search, retrieve, and display information to the user. Response time begins when a user submits a query and ends when the user is provided with the requested information.
Risk Assessment Data	Determines the threat a person or situation represents. This category is comprised of, at minimum, wanted subjects, terrorists, and sexual offender registrants.
Roles	Dictates what data and/or procedures are available to a specific individual based on their agency or position.
Rolled Fingerprints	Full fingerprint image captured as it is rolled from one edge of the fingernail to the other
Scalable	Adaptable to increased demands.
Score Threshold	The parameter used to define AFIS outputs.
Special Population Cognizant Files	Subcategories of fingerprints from a repository that may be physically or logically separated from the main repository and searched separately.
Stakeholder	Any user, organization, or agency that has a vested interest in the development of the interoperability solution

b7E

B-8

Version 3.1, March 13, 2007 BIO-DOC-01174-3.1 Final

Unclassified For Limited Official Use Only

## **A More Detailed Look at EIR Rap Back Service**

- Accept Rap Back enrollments for a specified identity.
- Provide Rap Back notifications for specified event types.
- Maintain Rap Back subscription information.
- Provide Rap Back subscription renewal notification.
- Provide Rap Back subscription status.

## EIR Rap Back Service Recommendations

*Standards Committee input related to **criminal justice** Rap Back services will be forwarded to the IS Subcommittee for consideration.*

- 1) The Rap Back service utilizes the same dissemination protocols currently in place for criminal/civil fingerprint submissions.

## **EIR Rap Back Service Recommendations**

- 2) Prior to sending a Rap Back notification to the authorized agency(ies), a Rap Back pre-notification would be sent to the submitting agency indicating that IAFIS has received subsequent activity on an enrolled individual. The submitting agency would need to confirm, through a response, that the individual is still of interest prior to IAFIS releasing the Rap Back notification.

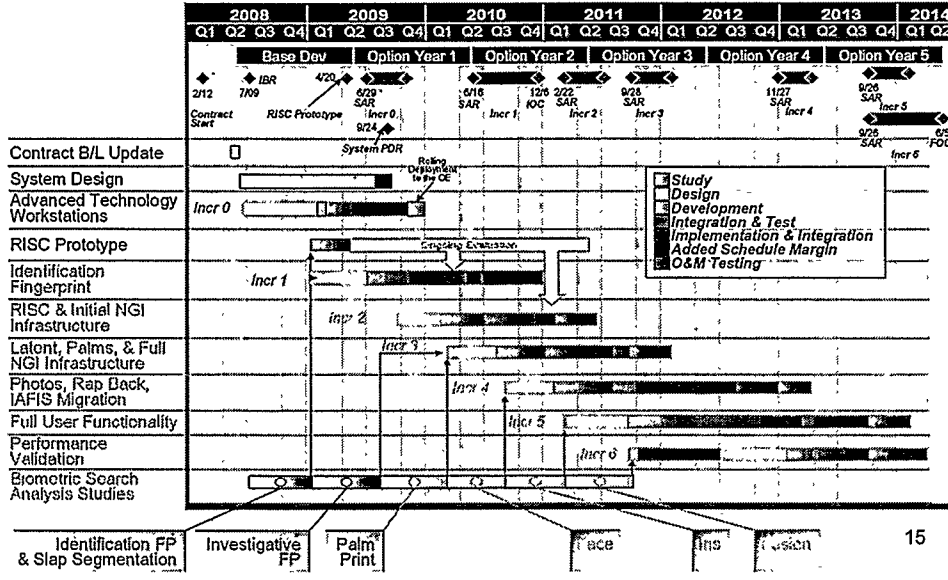
## **EIR Rap Back Service Recommendations**

- 3) The Rap Back event that triggered the Rap Back notification will be highlighted within the Rap Back response.
  
- 4) Disposition data submitted to IAFIS on an enrolled Rap Back identity would trigger a Rap Back notification.



# Projected Implementation Schedule

NEXT GENERATION IDENTIFICATION



FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206915-0

Total Deleted Page(s) = 2  
Page 300 ~ Duplicate;  
Page 301 ~ Duplicate;

XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX



# NGI Initiatives

---

- QC Automation
- Interstate Photo System (Mugshots)
- Disposition Reporting Improvements
- Advanced Fingerprint Identification Technology
  - Enhanced Terrorist Identification Service (ETIS)
- Enhanced IAFIS Repository
  - Rap Back
- National Palm Print System (NPPS)





# Enhanced IAFIS Repository

---

- **Functionality**
  - New Capabilities For Civil Records
  - Civil Record Consolidation
  - Rap Back Service
  - Multi-modal Potential
  - Interoperability

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206915-0

Total Deleted Page(s) = 12

- Page 301 ~ b5; b7E;
- Page 302 ~ b5; b7E;
- Page 303 ~ b5; b7E;
- Page 304 ~ b5; b7E;
- Page 305 ~ b5; b7E;
- Page 306 ~ b5; b7E;
- Page 307 ~ b5; b7E;
- Page 308 ~ b5; b7E;
- Page 309 ~ b5; b7E;
- Page 310 ~ b5; b7E;
- Page 311 ~ b5; b7E;
- Page 312 ~ b5; b7E;

XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX

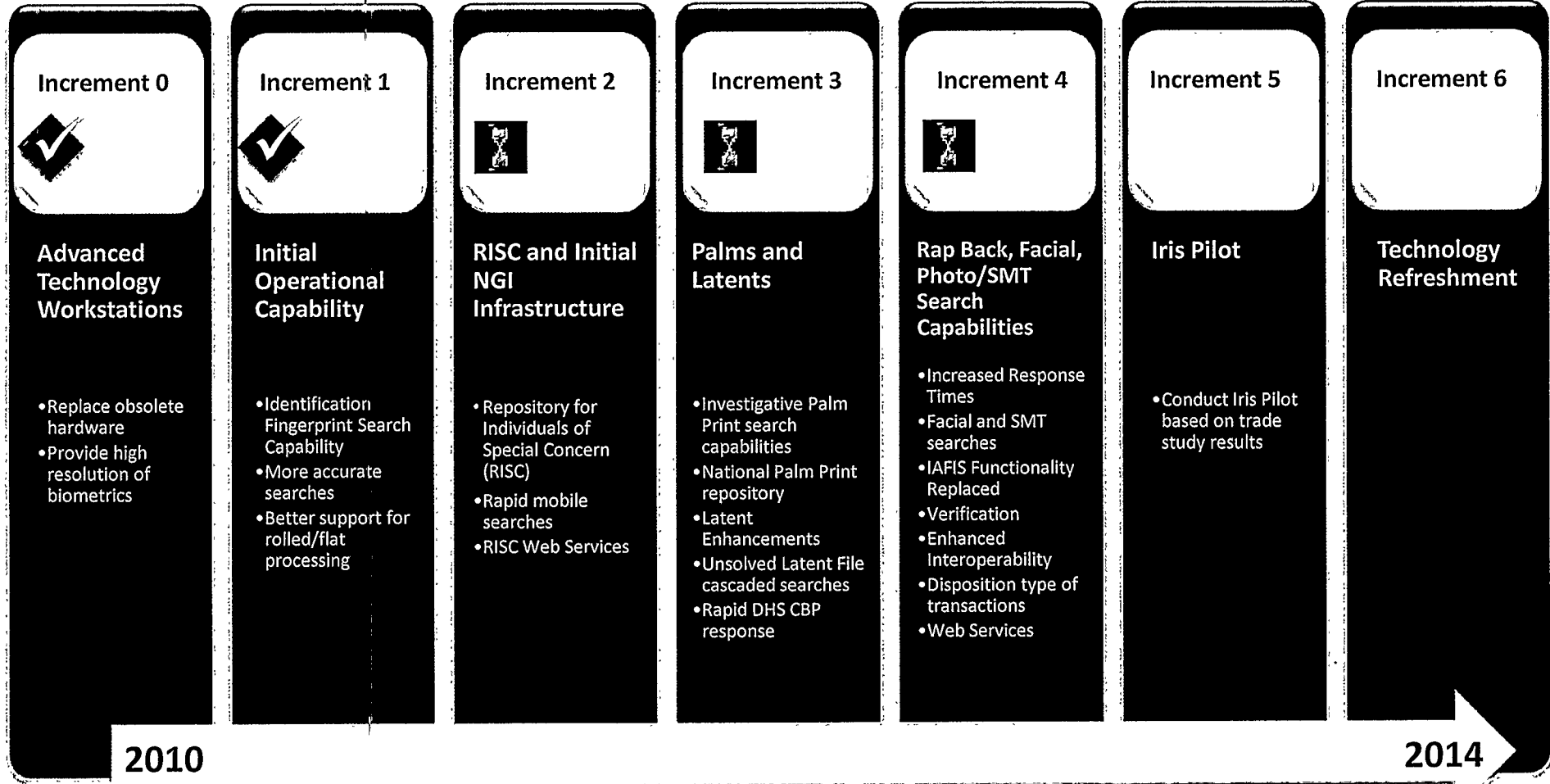
FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206915-0

Total Deleted Page(s) = 1  
Page 8 ~ b5; b7E;

XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX



# NGI Implementation Schedule



2010

2014



# Rap Back, Facial, SMT Search Capabilities, Migration of Remaining IAFIS Functionality

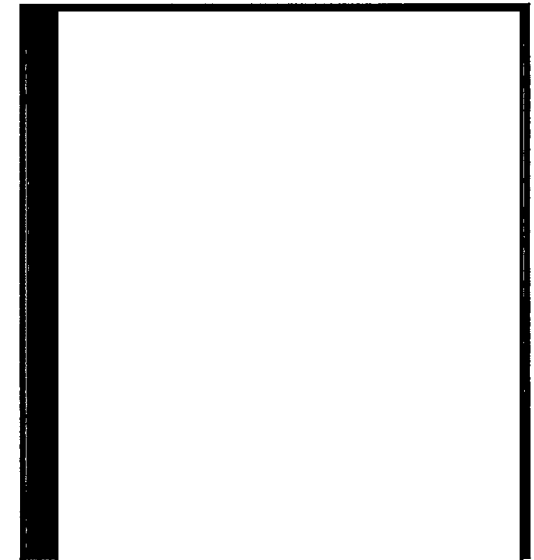


## Status:

- Rap Back
- Facial Search
- Text based scars, marks, and tattoo (SMT) searches
- Enhanced Interoperability
- Fingerprint verification services
- Improved response times
- Target Deployment - Summer 2014

## Resulting Benefits

- Enhance public safety
- National level investigative searches of photos/SMTs
- More accurate and complete criminal history records
- Flexible and scalable architecture for future needs



b6  
b7c



# Rap Back Activities



- Reviewing Best Practices and Lessons Learned
  - Currently identified  with Rap Back business lines
  - Strategic discussions to align with a national implementation
- Identifying Policy Focus Areas
- Going Forward
  - Engage Law Enforcement Partners
  - Continue working with Subject Matter Experts

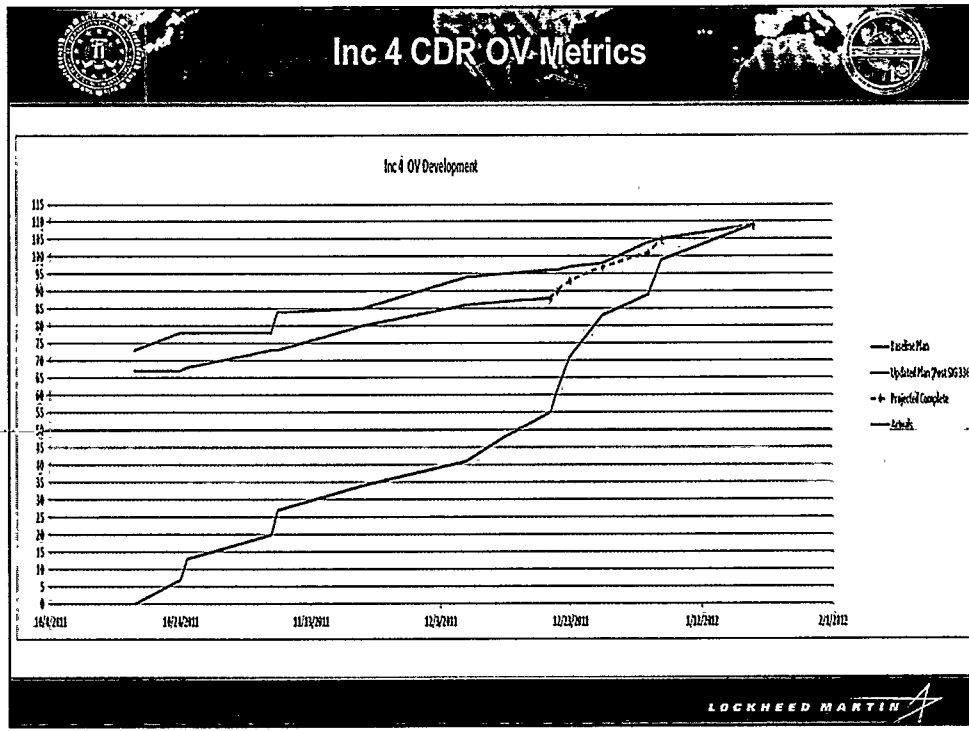
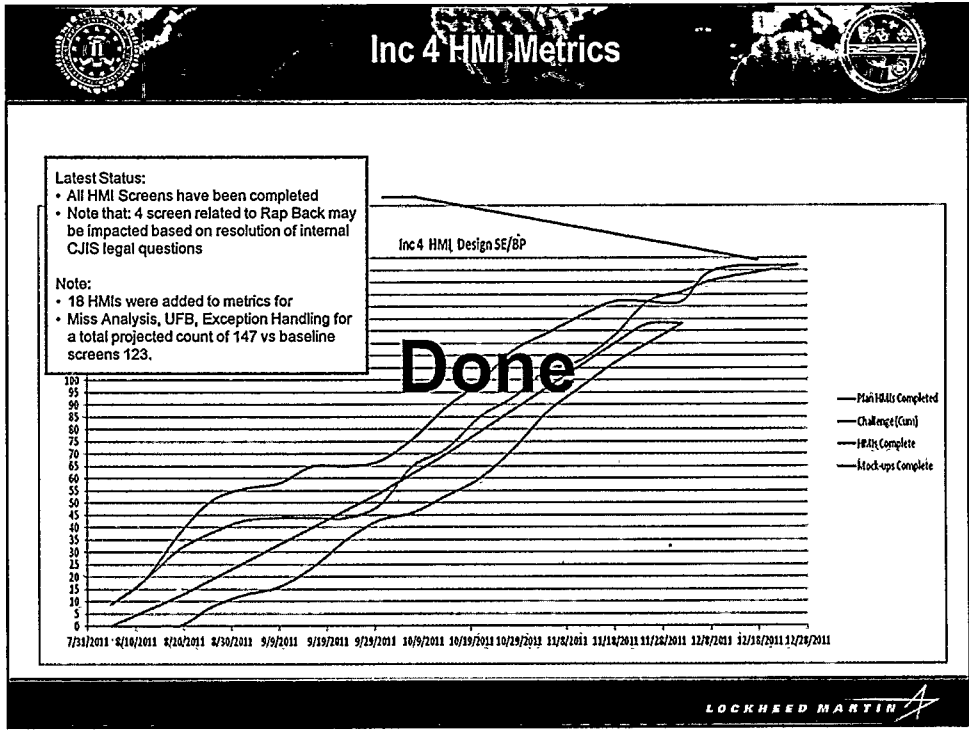
b7E

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206915-0

Total Deleted Page(s) = 7

- Page 286 ~ b5;
- Page 287 ~ b5;
- Page 297 ~ b5;
- Page 308 ~ b5;
- Page 309 ~ b5;
- Page 310 ~ b5;
- Page 316 ~ b5;

```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```





FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206915-0

Total Deleted Page(s) = 7

- Page 267 ~ b5;
- Page 277 ~ b5;
- Page 288 ~ b5;
- Page 294 ~ b5;
- Page 317 ~ b5;
- Page 318 ~ b5;
- Page 319 ~ b5;

```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206915-0

Total Deleted Page(s) = 1  
Page 45 ~ Duplicate;

XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX

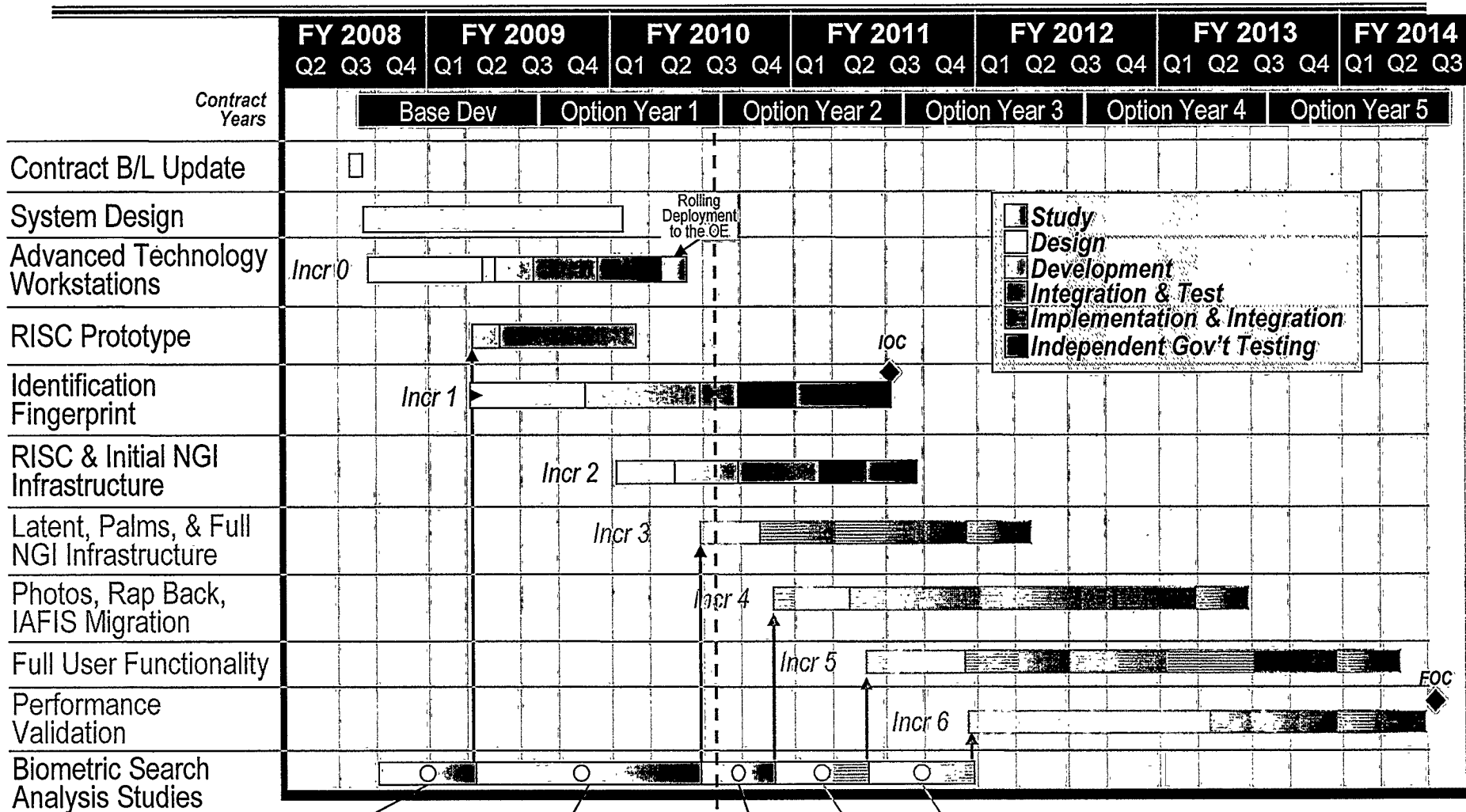
FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206915-0

Total Deleted Page(s) = 2  
Page 230 ~ Duplicate;  
Page 258 ~ Duplicate;

XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX



# Timeline



**Legend:**

- Study
- Design
- Development
- Integration & Test
- Implementation & Integration
- Independent Gov't Testing

Identification FP & Slap Segmentation

Investigative FP & Palm Print

As of 4/21/10

Facial

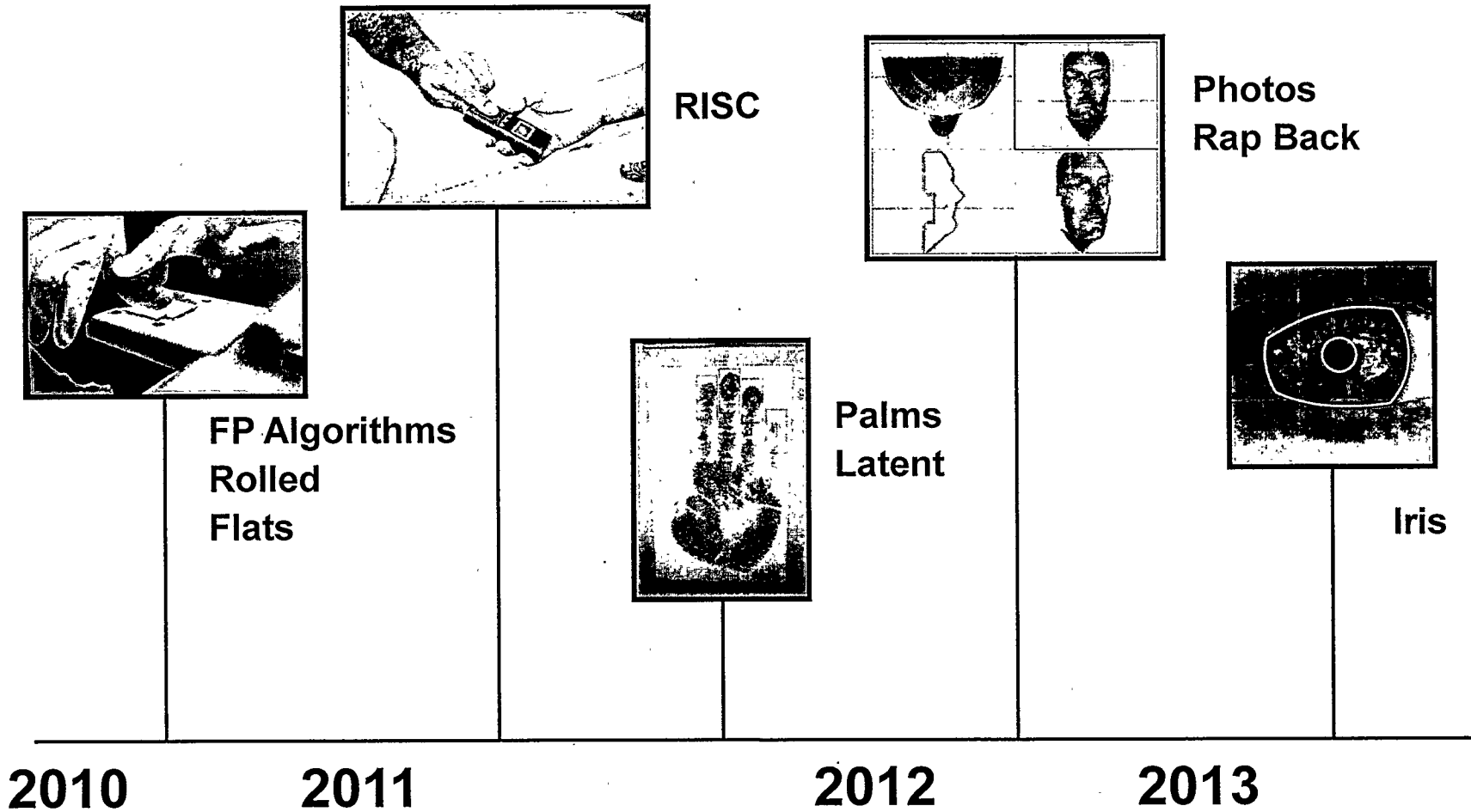
Iris

Fusion

IOC- Initial Operating Capability  
 FOC- Final Operating Capability  
 OE- Operating Environment



# NGI Tentative Implementation Dates



FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206915-0

Total Deleted Page(s) = 1  
Page 8 ~ Duplicate;

XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206915-0

Total Deleted Page(s) = 14

- Page 137 ~ b7E;
- Page 138 ~ b7E;
- Page 223 ~ b7E;
- Page 252 ~ b7E;
- Page 253 ~ b7E;
- Page 254 ~ b7E;
- Page 305 ~ b7E;
- Page 306 ~ b7E;
- Page 307 ~ b7E;
- Page 309 ~ b7E;
- Page 310 ~ b7E;
- Page 436 ~ b7E;
- Page 437 ~ b7E;
- Page 438 ~ b7E;

XXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXX



# Status



## ■ Benefit Allocation

- Some capabilities have little or no tangible benefits identified
  - IPS and EIR have no tangible benefits in the Noblis CBA other than O&M cost avoidance.
  - No tangible benefit was calculated for functionality within a capability such as Face Recognition, Rap Back or Iris
  - Only CJIS labor savings to process dispositions were estimated for DRI. Potential savings to society as a result of more available dispositions (e.g., impact on NICS) were not estimated.



# Notional NGI Incremental Development Strategy

FY07	FY08	FY09	FY10	FY11	FY12	FY13	
<b>NGIPO</b> <ul style="list-style-type: none"> <li>Requirements Development</li> <li>Acquisition Planning</li> <li>Source Selection</li> </ul>	<b>CONTRACT AWARD</b> <b>Increment 1 (IOC)</b>		O&M				
	Algorithm Trade Study System Design <b>AFIT</b> <ul style="list-style-type: none"> <li>Implement RISC Rapid Search</li> <li>Initial implementation of AFIT search capacity</li> </ul> <b>EIR</b> <ul style="list-style-type: none"> <li>Identity Management (Civil/Criminal) – Unique Identifier</li> </ul> <b>DRI</b> <ul style="list-style-type: none"> <li>Enhanced Disposition Data Submission</li> </ul> <b>IPS</b> <ul style="list-style-type: none"> <li>Enhanced Photo Repository</li> </ul> <b>NPPS</b> <ul style="list-style-type: none"> <li>Enhanced IAFIS Repository</li> </ul> <b>Interoperability</b> <ul style="list-style-type: none"> <li>Initial External Repository Record Link</li> <li>Biometric Search Capability</li> </ul>	<b>Increment 2</b>	O&M				
		<b>AFIT</b> <ul style="list-style-type: none"> <li>Increase search capacity to 268,500</li> <li>Increase RISC capacity to 25,000</li> </ul> <b>EIR</b> <ul style="list-style-type: none"> <li>Conversion (Civil/Criminal)</li> <li>Expanded Identity Management</li> <li>Expanded Repository Infrastructure</li> </ul> <b>IPS</b> <ul style="list-style-type: none"> <li>Photo Text Searches</li> </ul> <b>Interoperability</b> <ul style="list-style-type: none"> <li>Complete External Repository Record Link</li> <li>Biometric Search Capacity</li> </ul>	<b>Increment 3</b>	O&M			
		<b>AFIT</b> <ul style="list-style-type: none"> <li>Enhanced Finger Processing</li> <li>Enhanced Latent Processing</li> <li>Increase search capacity to 331,000</li> <li>Increase RISC capacity to 50,000</li> </ul> <b>EIR</b> <ul style="list-style-type: none"> <li>Rap Back Services</li> <li>Iris Services</li> </ul> <b>IPS</b> <ul style="list-style-type: none"> <li>Expanded IAFIS Repositories</li> </ul> <b>NPPS</b> <ul style="list-style-type: none"> <li>Expanded IAFIS Repositories</li> </ul> <b>Interoperability</b> <ul style="list-style-type: none"> <li>Increase search capacity</li> </ul>	<b>Increment 4</b>	O&M			
					<b>AFIT</b> <ul style="list-style-type: none"> <li>Increase search capacity to 400,000</li> <li>Increase RISC capacity to 75,000</li> </ul> <b>IPS</b> <ul style="list-style-type: none"> <li>Face Recognition</li> </ul> <b>NPPS</b> <ul style="list-style-type: none"> <li>Palm Services</li> </ul> <b>Interoperability</b> <ul style="list-style-type: none"> <li>Increase search capacity</li> </ul>	<b>Increment 5</b>	
						<b>AFIT</b> <ul style="list-style-type: none"> <li>Increase search capacity to 422,000</li> <li>Increase RISC capacity to 125,000</li> </ul> <b>Interoperability</b> <ul style="list-style-type: none"> <li>Increase search capacity</li> </ul>	
<b>Quick Wins</b> <ul style="list-style-type: none"> <li>CD Capability for III (MRD)</li> <li>QC Automation Phase III</li> </ul>	<ul style="list-style-type: none"> <li>Disposition (New III Message)</li> <li>Disposition via CJIS WAN</li> <li>RISC Prototype</li> </ul>	<ul style="list-style-type: none"> <li>Receipt and Storage (ANSI/NIST)</li> <li>Accept 1000 ppi</li> </ul>					



# Rap Back Service



## **RAP BACK:**

Notification to an Authorized Contributor that activity (e.g., criminal, civil, External System activity) has occurred on a previously enrolled subject's record.

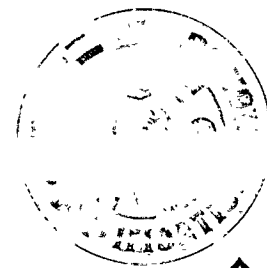


# Rap Back Enrollment



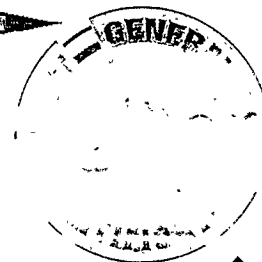
## ■ Rap Back Enrollment

- Indicate on a Ten-Print Fingerprint Identification Search Request
- Indicate Rap Back Expiration Date
  - Default if not designated or invalid
- Indicate event types that trigger Rap Back notifications
  - Civil, Criminal, External
- Designate recipients of Rap Back notifications
- Reject if search is rejected



◻ **Information** – The IAFIS service that provides specific biographic or biometric information on an individual.

- Biometric Image Retrieval
- Biometric Features Retrieval
- Biometric Audit Trail Retrieval
- Biometric Information Retrieval
- Identity History Request
- Certification File Request
- Rap Back Subscription List Request
- Rap Back Rap Sheet Request



## ■ New functionality

Allow Rap Back Subscriber to request a Rap Sheet after receipt of Rap Back Activity Notification

- Rap Sheet indicates event that triggered the Rap Back

## ■ Contributing sources

- Authorized IAFIS Contributors



## ■ New Functionality

- Expanded Uninvolved Biometric Notification
- Expanded Special Population Cognizant File Notification
- External System Link Notification
- Rap Back Activity Notification
- Rap Back Renewal Notification
- RISC Notification
- International Terrorist File Notification
- Immigration Violator File Notification



# Data Management Services



## ■ New Functionality (cont.)

- Special Population Cognizant File Maintenance
- Direct Rap Back Enrollment
- Rap Back Maintenance / Renewal
- External System Record / Link Maintenance
- External System Link Activity *Notification*
- ITF Maintenance
- IVF Maintenance



# Data Management Services



## Direct Rap Back Enrollment





# Data Management Services



## Rap Back Maintenance / Renewal



# Administrative & Control Services



- Minimally impacted by NGI
  - System Status Reporting
    - Centralize functions
  - System Administration
    - Create & Manage new repositories
  - Manage Workflow & Work Queues
    - Manage workflow for new biometrics
  - Transaction History
    - Centralized functions
    - Supports new services
  - User Fee Billing
    - Rap Back



# Identity Data Management



## ■ Identity Information

- Biographic information
- Biometric Information
- Event Information
- Special Processing Indicators
- Notification Indicators (e.g., Want, Flash, SOR, ITF, IVF, Rap Back)



# System Reliability



## ■ System Reliability

– Process all transactions to completion

Fingerprint

Latent

Photo

Palms

IRIS

Rapid Searches

Disposition Submissions

ITF Searches

Rap Back

Major Case Print (MCP)

Repository Management

Identity Management

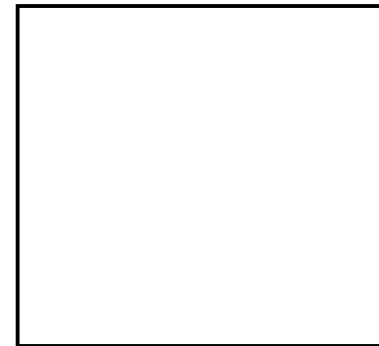


# System Performance



## ■ Rap Back Response Times

- Rap Back notification:
- Rap Back subscription list:
- Maintenance / Renewal:



b7E



# NGI Workload



## Rap Back

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206916-0

Total Deleted Page(s) = 3  
Page 268 ~ b5;  
Page 321 ~ b5;  
Page 325 ~ b5;

XXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXX

UNCLASSIFIED  
NON-RECORD

Please let me know who will review for CJIS.

Thank you!!

[Redacted]

Policy, Administrative and Liaison Branch  
Criminal Justice Information Services Division

[Redacted]

b6  
b7C

From: [Redacted] (OCA) (FBI)

Sent: Thursday, April 17, 2008 4:43 PM

To: [Redacted]

Cc:

Subject: Review of CJIS Response to AG 1/30/08 SJC QFR, Feingold 220

Importance: High

b6  
b7C

UNCLASSIFIED  
NON-RECORD

[Redacted]

On 3/12/08, [Redacted] forwarded to me a response to a Congressional Question for the Record (QFR) re: NGI (Feingold 220, copied below).

Our Office of the General Counsel [Redacted] happened to see that response in the context of a separate review, and he wanted to ensure that all the right folks have reviewed that response for accuracy. In particular, he believes NGI may involve the retention of fingerprints unrelated to the NGI Rap Back service, which would contradict the first sentence of the second paragraph, highlighted below.

Could you please ensure that all the folks who might be knowledgeable review this response carefully? I've copied [Redacted] so they can help to do everything necessary to ensure our response is clear and correct.

DOJ has requested any edits by 9:30 am tomorrow, but I'll get more time if necessary to ensure we are completely accurate.

Thanks for your help. Let me know if you have questions.

[Redacted]

Office of Congressional Affairs  
JEH Building Room 7270  
(Send mail to Room 7240)

[Redacted]

[Redacted]

b5



Policy, Administrative and Liaison Branch  
Criminal Justice Information Services Division

[Redacted]

b6  
b7C

**From:** [Redacted] (OCA) (FBI)  
**Sent:** Thursday, April 17, 2008 4:43 PM  
**To:**  
**Cc:**

[Redacted]

**Subject:** Review of CJIS Response to AG 1/30/08 SJC QFR, Feingold 220  
**Importance:** High

**UNCLASSIFIED**  
**NON-RECORD**

[Redacted]

b6  
b7C

On 3/12/08 [Redacted] forwarded to me a response to a Congressional Question for the Record (QFR) re: NGI (Feingold 220, copied below).

Our Office of the General Counsel [Redacted] happened to see that response in the context of a separate review, and he wanted to ensure that all the right folks have reviewed that response for accuracy. In particular, he believes NGI may involve the retention of fingerprints unrelated to the NGI Rap Back service, which would contradict the first sentence of the second paragraph, highlighted below.

Could you please ensure that all the folks who might be knowledgeable review this response carefully? I've copied [Redacted] so they can help to do everything necessary to ensure our response is clear and correct.

DOJ has requested any edits by 9:30 am tomorrow, but I'll get more time if necessary to ensure we are completely accurate.

Thanks for your help. Let me know if you have questions.

[Redacted]

Office of Congressional Affairs  
JEH Building Room 7270  
(Send mail to Room 7240)

[Redacted]

[Large Redacted Area]

b5

[Redacted]

Biometric Services Section (BSS)  
Criminal Justice Information Services Division

[Redacted] (Fax)  
[Redacted] (Cell)

E-mail: [Redacted]  
SIPRNET: [Redacted]

**From:** [Redacted] (CJIS) (FBI)  
**Sent:** Friday, April 18, 2008 7:38 AM  
**To:** [Redacted]  
**Cc:** [Redacted]  
**Subject:** FW: Review of CJIS Response to AG 1/30/08 SJC QFR, Feingold 220  
**Importance:** High

**UNCLASSIFIED**  
**NON-RECORD**

Please let me know who will review for CJIS.

Thank you!!

[Redacted]

Policy, Administrative and Liaison Branch  
Criminal Justice Information Services Division

[Redacted]

**From:** [Redacted] (OCA) (FBI)  
**Sent:** Thursday, April 17, 2008 4:43 PM  
**To:** [Redacted]  
**Cc:** [Redacted]  
**Subject:** Review of CJIS Response to AG 1/30/08 SJC QFR, Feingold 220  
**Importance:** High

**UNCLASSIFIED**  
**NON-RECORD**

[Redacted]

On 3/12/08, [Redacted] forwarded to me a response to a Congressional Question for the Record (QFR) re: NGI (Feingold 220, copied below).

Our Office of the General Counsel [Redacted] happened to see that response in the context of a separate review, and he wanted to ensure that all the right folks have reviewed that response for accuracy. In particular, he believes NGI may involve the retention of fingerprints unrelated to the NGI Rap Back service, which would contradict the first sentence of the second paragraph, highlighted below.

Could you please ensure that all the folks who might be knowledgeable review this response carefully? I've copied [Redacted] [Redacted] so they can help to do everything necessary to ensure our response is clear and correct.

DOJ has requested any edits by 9:30 am tomorrow, but I'll get more time if necessary to ensure we are completely accurate.

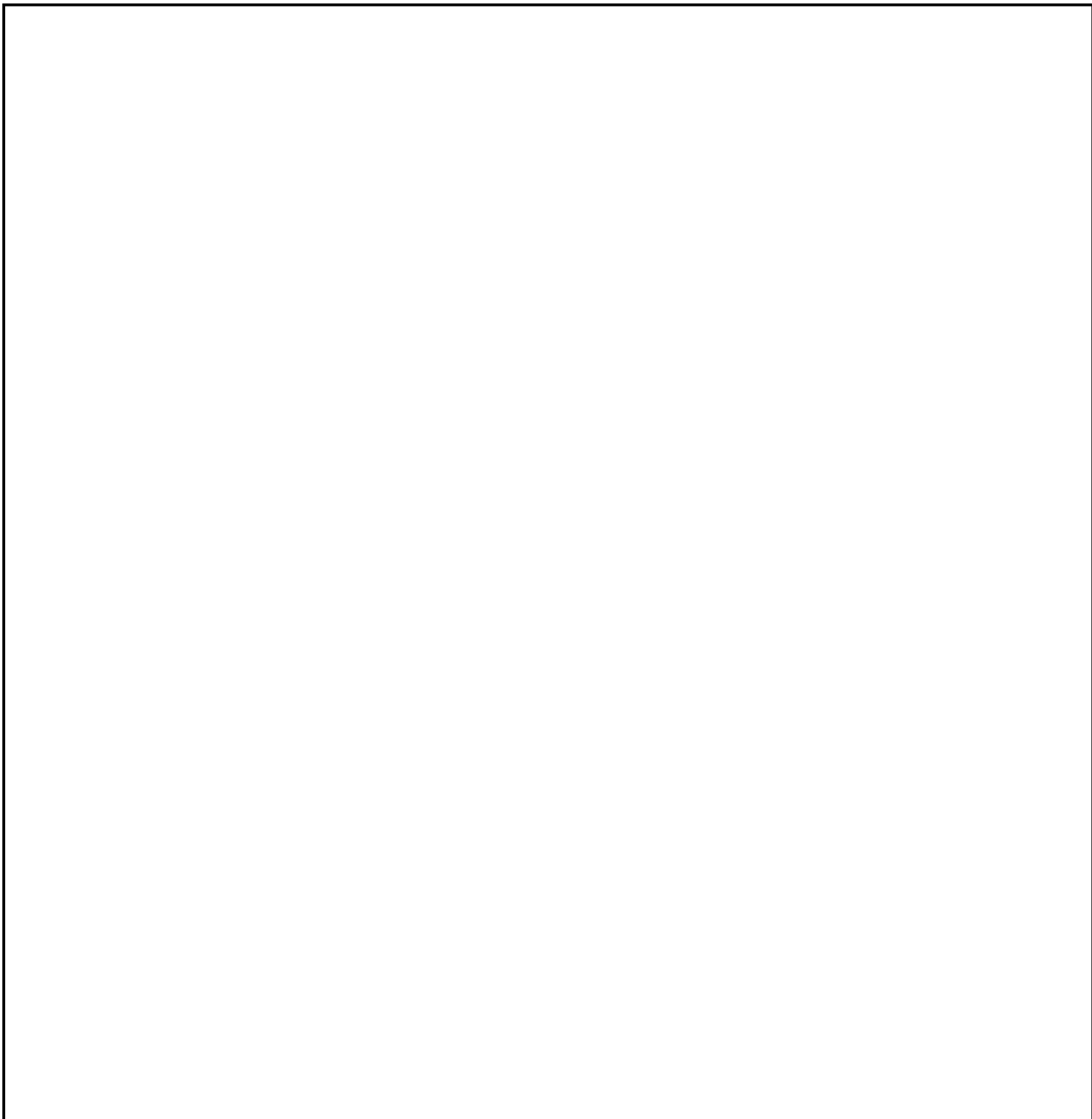
Thanks for your help. Let me know if you have questions.

[Redacted]

Office of Congressional Affairs  
JEH Building Room 7270  
(Send mail to Room 7240)

[Redacted]

b6  
b7C



b5

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206916-0

Total Deleted Page(s) = 16

- Page 110 ~ b5;
- Page 115 ~ b5;
- Page 126 ~ b5;
- Page 134 ~ b5;
- Page 247 ~ b5;
- Page 261 ~ b5;
- Page 266 ~ b5;
- Page 271 ~ b5;
- Page 274 ~ b5; b7E;
- Page 296 ~ b5;
- Page 319 ~ b5;
- Page 333 ~ b5;
- Page 338 ~ b5;
- Page 343 ~ b5;
- Page 346 ~ b5; b7E;
- Page 368 ~ b5;

XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX

will include business logic that provides a single, consistent result. The identification of people using the automated matching and/or correlation of multiple biometric data based on the following physiological traits are authorized: Facial, Hand Geometry, Iris, Retinal. The enhancements to the IAFIS will also update the technical architecture to a more current, flexible, modular system. This will support easier and faster modifications to enable future multi-modal developments in biometrics, such as facial recognition, iris, and retina. It will also allow easier modification of the workflow to support future business process requirements. **Enhanced IAFIS Repository (EIR).** The Enhanced IAFIS Repository recommends consolidating the records for subjects with multiple records. The project will also offer a new service to authorized users who desire immediate notification when a person of interest may pose a threat to national security or the well being of others. This service is commonly referred to as the Rap Back Program. Agencies that employ persons in high security positions or positions of trust want options in keeping abreast of an employee's criminal history other than performing reinvestigations and submitting fingerprints on a continual basis. Even with regular background checks, the employer may discover long after the fact that an employee has been charged with crimes while entrusted with high security information or provided access to a high-security facility. The entire project will require the CJIS Division to develop new functionality for the automated civil file, collectively locate civil history and criminal history information, and enhance the search, storage, file maintenance, and response generation capabilities. **Interstate Photo System Enhancements (IPS).** The following recommended enhancements will increase the number of photos in the IPS; allow easier access to the photos by CJIS Division customers; and increase the IAFIS photo capabilities. Allow submission of photos independent of an arrest submission with ten or less fingerprints and a quoted FBI Number (FNU) and continue to allow existing capabilities of photo submissions with arrests. Allow bulk submission of photos maintained at state/federal level. Encourage submission of photos other than facial (e.g., scars, marks, tattoos [SMTs]) Allow search of record for facial, S, M, and T photos. Allow IPS photo retrieval via the National Crime Information Center (NCIC) Allow submission of photos with Civil Types of Transactions (TOTs)<sup>5</sup>. Eliminate restriction of ten photo sets per FBI record. **Automation of Quality Check (QC).** Automation of QC will automate the QC function by including automatic processing of User Fee transactions which currently require manual review or action. This will require automation of complex business rules and development of a new Human Machine Interface (HMI) so that the business rules can be modified as needed. **Advanced Fingerprint Identification Technology (AFIT).** The goal of this initiative is to improve the services provided by the Integrated Automated Fingerprint Identification System (IAFIS) by increasing the Automated Fingerprint Identification System (AFIS) accuracy; improving the IAFIS criminal and civil response time; creating a new IAFIS service that provides a rapid (eight second) search of known or suspected terrorists and wanted persons. Improving the search capabilities will ensure fewer mistakes in fingerprint searches, which is especially important in relation to national security. Additionally, this project will increase the number of searches the IAFIS can process per day, provide more efficient AFIS processing of flat fingerprint impressions, improve the latent processing services, and reduce the IAFIS out of service time. **Disposition Reporting Improvements (DRI).** This enhancement will support the development of additional

The FBI is proposing to develop four additional methods to allow expanded disposition acceptance capabilities. These include the following: 1) addition of disposition information to an existing criminal history record utilizing the NCIC Interstate Identification Index message key, 2) modernization of the current MRD process via the Internet and CD-ROM formatting, 3) the electronic submission of disposition information utilizing a new Type of Transaction, supported by FBI Number, descriptive data, and/or fingerprint images, via the CJIS Wide Area Network (WAN), and 4) Federal Courts submit disposition information electronically to the IAFIS.

It is imperative that the FBI maintain a complete CHRI database in order to provide customers with information necessary to make informed decisions regarding the backgrounds of individuals whether for criminal justice purposes, noncriminal justice purposes for employment, licensing, and gun permit matters, or for purposes of national and international security. Disposition data is information pertaining to the resolutions of arrest charges or the custody or supervisory status of subjects subsequent to convictions. Disposition data is the core of the criminal history database. Currently, disposition data is included on only approximately 46 percent of arrest records. It is imperative that the FBI provide the law enforcement community with a means of submitting disposition information in a more timely and efficient manner. Lack of disposition data on criminal history records has been a major problem for the FBI's National Instant Criminal Background Check System (NICS) program and is a major factor in the cost of the NICS program. As a result, the FBI has dedicated a large number of personnel resources to retrieving disposition data in order to make timely decisions relating to the transfer of firearms.

Availability of complete computerized criminal records is vital for criminal investigations, prosecutorial charging, sentencing decisions, correctional supervision and release, and background checks for licensing, purchasing of handguns, and applying for child-care positions or other responsibilities involving children, the elderly, and the disabled. Enhancing the CHRI database within the IAFIS will allow the FBI to take advantage of the improvements that state and local law enforcement partners have made to their criminal history record systems using National Criminal History Improvement Program funds.

### **C. Enhanced IAFIS Repository (EIR) - Civil File Enhancements**

The IAFIS' current civil repository does not provide sufficient functionality in order to meet the ever-growing needs of the FBI's customers. Expanding the functionality of this repository will enable the FBI to provide new services such as Rap Back and advanced search capabilities. The Rap Back initiative will allow certain IAFIS customers to know when criminal activities occur concerning individuals who are currently in positions of trust, resulting in an increased confidence level for those employers. The existing IAFIS criminal and civil repositories are maintained as separate and distinct databases that do not allow for the automated transfer of records among repositories. The proposed IAFIS design change combines the records from the civil and criminal repositories into an interoperable repository. The repository design will facilitate the transition, search, addition, consolidation, modification, expungement, response generation, and file maintenance of criminal and civil information; provide the ability to search the civil records with remote latent fingerprint submissions; and support user required fingerprint search and notification capabilities. With this initiative, the records from the civil and criminal repositories will be maintained in one interoperable repository.

utilizing a new Type of Transaction, supported by FBI Number, descriptive data, and/or fingerprint images, via the CJIS Wide Area Network (WAN), and 4) Federal Courts submit disposition information electronically to the IAFIS.

It is imperative that the FBI maintain a complete CHRI database in order to provide customers with information necessary to make informed decisions regarding the backgrounds of individuals whether for criminal justice purposes, noncriminal justice purposes for employment, licensing, and gun permit matters, or for purposes of national and international security. Disposition data is information pertaining to the resolutions of arrest charges or the custody or supervisory status of subjects subsequent to convictions. Disposition data is the core of the criminal history database. Currently, disposition data is included on only approximately 46 percent of arrest records. It is imperative that the FBI provide the law enforcement community with a means of submitting disposition information in a more timely and efficient manner. Lack of disposition data on criminal history records has been a major problem for the FBI's National Instant Criminal Background Check System (NICS) program and is a major factor in the cost of the NICS program. As a result, the FBI has dedicated a large number of personnel resources to retrieving disposition data in order to make timely decisions relating to the transfer of firearms.

Availability of complete computerized criminal records is vital for criminal investigations, prosecutorial charging, sentencing decisions, correctional supervision and release, and background checks for licensing, purchasing of handguns, and applying for child-care positions or other responsibilities involving children, the elderly, and the disabled. Enhancing the CHRI database within the IAFIS will allow the FBI to take advantage of the improvements that state and local law enforcement partners have made to their criminal history record systems using National Criminal History Improvement Program funds.

### **C. Enhanced IAFIS Repository (EIR) - Civil File Enhancements**

The IAFIS' current civil repository does not provide sufficient functionality in order to meet the ever-growing needs of the FBI's customers. Expanding the functionality of this repository will enable the FBI to provide new services such as Rap Back and advanced search capabilities. The Rap Back initiative will allow certain IAFIS customers to know when criminal activities occur concerning individuals who are currently in positions of trust, resulting in an increased confidence level for those employers. The existing IAFIS criminal and civil repositories are maintained as separate and distinct databases that do not allow for the automated transfer of records among repositories. The proposed IAFIS design change combines the records from the civil and criminal repositories into an interoperable repository. The repository design will facilitate the transition, search, addition, consolidation, modification, expungement, response generation, and file maintenance of criminal and civil information; provide the ability to search the civil records with remote latent fingerprint submissions; and support user required fingerprint search and notification capabilities. With this initiative, the records from the civil and criminal repositories will be maintained in one interoperable repository.

The EIR initiative envisions two categories of subjects with the redesign of IAFIS. The first category would include all records of individuals who have a criminal cycle within their IAFIS history record. The records may also contain civil cycles for the individual. These records would be

Rap Back initiative will allow certain IAFIS customers to know when criminal activities occur concerning individuals who are currently in positions of trust, resulting in an increased confidence level for those employers. The existing IAFIS criminal and civil repositories are maintained as separate and distinct databases that do not allow for the automated transfer of records among repositories. The proposed IAFIS design change combines the records from the civil and criminal repositories into an interoperable repository. The repository design will facilitate the transition, search, addition, consolidation, modification, expungement, response generation, and file maintenance of criminal and civil information; provide the ability to search the civil records with remote latent fingerprint submissions; and support user required fingerprint search and notification capabilities. With this initiative, the records from the civil and criminal repositories will be maintained in one interoperable repository.

The EIR initiative envisions two categories of subjects with the redesign of IAFIS. The first category would include all records of individuals who have a criminal cycle within their IAFIS history record. The records may also contain civil cycles for the individual. These records would be available to authorized users for criminal, civil, humanitarian, and remote and internal latent fingerprint search purposes. Responses generated as the result of a positive identification or non-identification will require format changes. The second category would include records of individuals who only have civil cycles within their IAFIS history record. These records would be available to authorized users for criminal, civil, humanitarian, and remote and internal latent search purposes. Responses generated as the result of a positive identification or non-identification will require development. The FBI currently plans to deliver this functionality in FY2010.

A summary of the funding required for the projects listed under initiative two is provided below:

Item	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
<b>Acquisition</b>					
Hardware					
Software					
<b>Maintenance</b>					
Hardware					
Software					
Services					
<b>Travel</b>					
<b>Total</b>					

b7E



## Next Generation IAFIS (NGI)

NGI is a major upgrade to expand current IAFIS capabilities and add additional capabilities. NGI will improve IAFIS speed and accuracy, enhance the Criminal History Record Information Database, and provide Latent Palm Print capabilities through development of the following enhancements:

- # **Quality Check (QC) Automation** - reduce the QC Manual workload from 50 to approximately 25 percent of 10-print submissions.
- # **Disposition Reporting Improvements (DRI)** - allow electronic and bulk disposition submissions.
- # **Advanced Fingerprint Identification Technology (AFIT), including the Enhanced Terrorist Identification System (ETIS)** - ensure close to 100 percent accuracy rate, increase IAFIS processing and capacity, decrease response times, and provide a rapid search of known or suspected terrorists and wanted persons.
- # **National Palm Print System (NPPS)** - receive, store, and search palm prints.
- # **Interstate Photo System (IPS)** - allow submission of photos independent of an arrest submission, bulk submissions, and searches of photos (facial, scars, tattoos, etc.).
- # **Enhanced IAFIS Repository** - electronic searches of the civil file, civil record maintenance consolidation for individuals with multiple records, and a new service to users who desire immediate notification when a person in a position of trust has been arrested "Rap Back".
- # **Multi-Modal Framework** – advance the integration strategies and indexing of additional biometric data, provide an expandable, scalable and flexible framework for multi-modal biometric fusion.

Current Functionality	NGI Enhancements
<b>QC-</b> Manual QC is performed on 55% of all Ten-print Transactions; 5% Reject Rate	<b>QC-FY07-</b> Manual QC is performed on 25% of all Ten-print Transactions; 4% Reject Rate
<b>DRI-</b> 46% of criminal arrests retained in the repository contain disposition information	<b>DRI-FY08-</b> Number of criminal arrests that contain disposition information retained in the repository will increase to 55% within one year of new capability
<b>ETIS-</b> No capability to provide a fast response to searches of a known or suspected terrorist and wanted person database	<b>ETIS-FY08-</b> Provide a fast response to our customers after a search of the ETIS database of known or suspected terrorists and wanted persons
<b>NPPS-</b> No capability to submit latent palm print	<b>NPPS-FY09-</b> Capability to receive, store, and search palm prints
<b>IPS-</b> No search capability for photos contained <b>IPS-</b> Retain up to ten photo sets per FBI record	<b>IPS-FY09-</b> Allow search capability for facial, scar, mark, and tattoo photos <b>IPS-FY09-</b> Will retain up to twenty-five photo sets per FBI record
<b>AFIT-</b> Accepts flat fingerprints on a very limited basis	<b>AFIT-FY10-</b> 100% of agencies transmitting civil applicant submissions will have the capability to submit ten-flat fingerprint impressions instead of ten-rolled
<b>EIR-</b> No capability for electronic civil file searches <b>EIR-</b> No rap back functionality	<b>EIR-FY10-</b> Allow electronic search capability of the civil file for authorized agencies <b>EIR-FY10-</b> Authorized participating agencies will be electronically notified when an enrolled employee has a subsequent arrest

(U) Both categories of data would be available to authorized users for criminal, civil, humanitarian, and remote and internal latent search purposes. With this initiative, only one record would be needed for each subject, and responses will be generated to submitting agencies. For instance, a Rap Back functionality will enable the FBI to notify authorized customers of any updates to records belonging to individuals in positions of trust.

(U) The FBI currently plans to deliver additional methods for the submission of disposition information to the IAFIS in FY 2008, expanded photo file capabilities in FY 2009, and EIR in FY 2010.

(U) *Latent Palm Print Capabilities* [redacted]

(U) IAFIS does not allow [redacted] from the FBI's Laboratory Division, as well as federal, state, and local law enforcement and criminal justice agencies nationwide. However, according to the International Association for Identification [redacted]

[redacted] Ultimately, the increased use of latent palm print capabilities would provide customers with an additional tool that will solve more crimes. The FBI currently plans to deliver this functionality in FY 2009.

(U) The table below summarizes the benefits NGI would provide compared with current IAFIS capabilities.

(U)

Capability	Current IAFIS	NGI	Benefits
Search Capability	<ul style="list-style-type: none"> <li>95% AFIS accuracy rate in the current system specifications</li> </ul>	<ul style="list-style-type: none"> <li>Increased reliability rate to as close to 100% as technologically possible</li> <li>Improve efficiency of processing flat fingerprints</li> </ul>	<ul style="list-style-type: none"> <li>Interoperability with other systems</li> <li>More efficient searches</li> <li>Ensure fewer misses in fingerprint searches</li> </ul>
Fingerprint Requirements	<ul style="list-style-type: none"> <li>Ten rolled fingerprints only</li> </ul>	<ul style="list-style-type: none"> <li>Ten or fewer fingerprint capabilities, flat or rolled</li> </ul>	<ul style="list-style-type: none"> <li>Compatible with other systems</li> <li>More efficient searches</li> </ul>
Search Capacity	<ul style="list-style-type: none"> <li>160,000 searches/day</li> <li>1,000 latent searches/day</li> </ul>	<ul style="list-style-type: none"> <li>200,000 searches/day</li> <li>15,000 latent searches/day</li> </ul>	<ul style="list-style-type: none"> <li>Accommodates increased needs in pre-employment background checks, licenses, etc.</li> <li>Will support increase in border patrol and entry/exit checks</li> <li>Avoids hiring additional staff to accommodate increased workload volumes</li> </ul>
Quality Check Function	<ul style="list-style-type: none"> <li>50% of ten-print submissions require a manual QC</li> </ul>	<ul style="list-style-type: none"> <li>Automation will reduce the manual work load to approximately 25%</li> </ul>	<ul style="list-style-type: none"> <li>Verifies authorized users</li> <li>Guarantees only serious offenses are retained in the database</li> <li>Streamlines work processes, reduces overall response time</li> <li>Reduces number of ten-print transactions rejected by the FBI, saving costs to local law enforcement and allowing more timely updates of records</li> </ul>

(eight seconds) of known or suspected terrorists based on a two fingerprint search; providing a green light/red light response in seconds.

#### **Enhanced IAFIS Repository**

The IAFIS Civil File currently has very limited capabilities. There is no search capability for authorized agencies and no method for the CJIS Division to modify or locate multiple submissions that may exist for the same individual. The Enhanced IAFIS Repository will allow electronic searches of the civil file, and allow civil record maintenance and consolidations for individuals with multiple civil fingerprint records. A new Rap Back Service will provide authorized users the ability to obtain an automatic notification when an enrolled subject has subsequent criminal activity.

#### **National Palm Print System (NPPS)**

The current IAFIS does not retain palm prints. The NPPS will allow IAFIS to receive, store, and search palm prints, provide the capability to receive bulk palm print submissions, and allow the search of the Unsolved Latent File. The NPPS will also be built to allow for future incorporation of multi-modal identification functionality.

NGI development will be based on the NGI Study findings. It is anticipated that new functionality will be

NGI development will provide various capabilities that provide benefits to the Interoperability project. These capabilities include, partitioning the CHRI database for segmented searches of known or suspected terrorists and wanted individuals (ETIS), providing a Rap Back service to authorized users by automatically notifying them when an enrolled subject has subsequent criminal activity, providing the capability to process flat fingerprint impressions, providing a more accurate CHRI database for decision making purposes and improving the IAFIS speed and accuracy.

NGI development will not provide various capabilities that are required for the Interoperability project. For example, NEED INPUT FROM IAFIS/IDENT.

Background: The Next Generation IAFIS (NGI) will be a major upgrade to the current IAFIS that will provide new functionality, as well as, improve upon current functionality. The NGI, because it is a major upgrade to the existing IAFIS, was included in the previous IAFIS OMB 300 submission. This year, the NGI was separated from the IAFIS Exhibit 300 for Management Control purposes based on guidance from the FBI's Office of the Chief Information Officer (OCIO).

Implementation of the NGI enhancements will benefit the law enforcement community and non-criminal justice agencies by providing functionality that currently does not exist and expanding and/or improving the existing IAFIS services. Although CJIS/FBI has the largest and most state-of-the-art fingerprint identification system in the world, exceptions and spoofing of a single biometric identifier offers threats which demand safeguards. Fusion of multiple biometrics will further improve matching performance and accuracy protecting the integrity of a thorough criminal or terrorist related background check. The NGI initiative will study the integration strategies and indexing of additional biometric data which will support a futuristic multimodal system. Furthermore, NGI will identify storage opportunities via the appropriate standard to grow repositories containing various kinds of biometric information, prior to the integration of multimodal searching. Finally, and more specific to the current biometric data collected by CJIS, NGI will identify near-term opportunities for multimodal searching of the Interstate Identification Index (III) Photo File, the Fingerprint Criminal Master File, and the NGI Palm Print Repository.

The following summaries are provided to describe each of the NGI initiatives:

#### Enhanced IAFIS Repository

The *Enhanced IAFIS Repository* recommends consolidating the records for subjects with multiple records. The project will also offer a new service to authorized users who desire immediate notification when a person of interest may pose a threat to national security or the well being of others. This service is commonly referred to as the Rap Back Program. The entire project will require the CJIS Division to develop new functionality for the automated civil file, collectively locate civil history and criminal history information, and enhance the search, storage, file maintenance, and response generation capabilities.

#### Interstate Photo System Enhancements

The following recommended enhancements will increase the number of photos in the *IPS*; allow easier access to the photos by CJIS Division customers; and increase the IAFIS photo capabilities.

1. Allow submission of photos independent of an arrest submission with ten or less fingerprints and a quoted FBI Number (FNU) and continue to allow existing capabilities of photo submissions with arrests
  - a. Allow bulk submission of photos maintained at state/federal level
2. Encourage submission of photos other than facial (e.g., scars, marks, tattoos [SMTs])
  - a. Allow search of record for facial, S, M, and T photos
3. Allow *IPS* photo retrieval via the National Crime Information Center (NCIC)
4. Allow submission of photos with Civil Types of Transactions (TOTs)

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206916-0

Total Deleted Page(s) = 6  
Page 5 ~ Duplicate;  
Page 9 ~ Duplicate;  
Page 22 ~ Duplicate;  
Page 321 ~ b5;  
Page 322 ~ b5;  
Page 323 ~ b5; b7E;

XXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXX

## Scope

The Next Generation IAFIS (NGI) is a compilation of initiatives within the Criminal Justice Information Services (CJIS) Division of the Federal Bureau of Investigation (FBI) that will either improve or expand existing biometric identification services. The NGI Program will be a major upgrade to the current IAFIS that will provide new functionality, as well as improve upon current functionality.

## Objectives

Upgrading the existing IAFIS technology with the NGI initiatives will accommodate increased information processing and sharing demands from local, state, federal, tribal, and international agencies, as well as meet customer demands for new and faster services. The NGI Initiatives are outlined below:

- **Advanced Fingerprint Identification Technology (AFIT) Component**  
The goal of this initiative is to improve the services provided by the IAFIS by increasing the Automated Fingerprint Identification System (AFIS) accuracy, improving the IAFIS criminal and civil response time, and creating a new IAFIS service, the Enhanced Terrorist Identification Service (ETIS). This functionality will provide a rapid search of known or suspected terrorists and wanted persons. Additionally, this component will increase the number of searches the IAFIS can process per day, provide more efficient AFIS processing of flat fingerprint impressions, improve the latent processing services, and reduce the IAFIS out-of-service time.
- **Disposition Reporting Improvements (DRI) Component**  
This enhancement will support the development of additional options for the submission of disposition information to IAFIS, thereby increasing the availability of disposition information.
- **Enhanced IAFIS Repository (EIR) Component**  
This initiative involves consolidating the records for subjects with multiple records. The component will also offer a new service to authorized users who desire immediate notification when a person of interest may pose a threat to national security or the well being of others, commonly referred to as the *Rap Back* program. Development of EIR enhancements will require the FBI/CJIS Division to develop new functionality for the automated civil file, collectively locate civil history and criminal history information, and enhance the search, storage, file maintenance, and response generation capabilities.
- **Interstate Photo System (IPS) Enhancement Component**  
This enhancement will increase the number of photos in the IPS, allow easier access to the photos by FBI/CJIS Division customers, and increase the IAFIS photo capabilities. This enhancement will: allow submission of photos independent of an arrest submission; allow bulk submission of photos; encourage submission of photos other than facial (e.g., scars, marks, tattoos [SMT]); allow search of records for facial and SMT photos; allow IPS photo retrieval via the NCIC; allow submission of photos with Civil TOTs; and eliminate restriction of ten photo sets per FBI record.
- **National Palm Print System (NPPS) Component**  
This enhancement will support the development of a centralized palm print repository consisting of known palm prints that may be searched to provide a list of candidates for latent palm print comparison to support criminal investigations.
- **Quality Check Automation (QCA)**  
This enhancement will automate transactions which currently require manual review or action.

## Status

- FBI and IntelliDyne personnel began the elicitation of user requirements/information gathering during the month of October 2005 by conducting onsite interviews at the following agencies/organizations: the National Institute of Standards and Technology (NIST), Arizona Department of Public Safety, the American Society of Crime Laboratory Directors (ASCLD), and the National Law Enforcement Telecommunications System (NLETS). This effort will continue through January 2006. The study is anticipated to conclude in August 2006 and will provide functional and system requirements for the development of the NGI initiatives.
- NGI has been actively involved in the Interoperability and the Transition to 10-Print Integrated Project Teams (IPTs) that have been established to identify a solution to the data sharing issues that have occurred in the past between the Department of Homeland Security's Automated Biometrics Identification System (IDENT) and the FBI's IAFIS. Requirements for NGI's fingerprint-based technology components are being considered and may satisfy some of the Interoperability requirements.

This enhancement to the IAFIS will support the development of additional options for the submission of disposition information to IAFIS thereby increasing the availability of disposition information. The new options are:

- 1) Electronic submission of disposition information using a new TOT, supported by FNU, descriptive data, and/or fingerprint images, via the CJIS Wide Area Network (WAN).
  - a) Modernization of the current Machine-Readable Data (MRD) process via the Internet and Compact Disk – Read Only Memory (CD-ROM) formatting.
  - b) Addition of disposition information to an existing Criminal History Record (CHR) utilizing a new Interstate Identification Index (III) message key.
  - c) Federal Courts submit disposition information electronically to the IAFIS.

- Enhanced IAFIS Repository (EIR) Component

The Enhanced IAFIS Repository recommends consolidating the records for subjects with multiple records. The component will also offer a new service to authorized users who desire immediate notification when a person of interest may pose threat to national security or the well being of others. This service is commonly referred to as the Rap Back Program. The component will require the CJIS Division to develop new functionality for the automated civil file, collectively locate civil history and criminal history information, and enhance the search, storage, file maintenance, and response generation capabilities.

- Quality Check Automation (QCA)

QCA will include automatic processing of User Fee transactions which currently require manual review or action. This will require automation of complex business rules and development of a new Human Machine Interface (HMI) so that the business rules can be modified as needed.

## **2.4 Program Authority and Oversight**

Authority and oversight for this program is provided by the Assistant Director in Charge (ADIC) of the FBI/CJIS Division, the Advisory Policy Board (APB), and Executive-level Review Boards (e.g., Investment Management Project Review Board (IMPRB), Technical Review Board (TRB), Change Management Board (CMB), Enterprise Architecture Board (EAB), and the IT Policy Review Board (ITPRB). NGI will be managed in accordance with the FBI Information Technology Life Cycle Management Directive (IT LCMD).

### **2.4.1 Program Sponsor**

The Sponsor for the program is the Assistant Director in Charge (ADIC), FBI/CJIS Division.

### **2.4.2 Key Decision Authority**

The Key Decision Authority reviews and approves program and project plans, establishes concurrence of phase completion, and provides approval to proceed to the next life cycle phase. All FBI IT Programs are reviewed and managed according to the process described in the LCMD. Those processes include seven Executive-level Control Gates. The Executive-level Review Boards listed below serve as the decision authority for Control Gate Review. Input from other



FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206916-0

Total Deleted Page(s) = 4  
Page 329 ~ b7E;  
Page 362 ~ Duplicate;  
Page 374 ~ Duplicate;  
Page 377 ~ Duplicate;

XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX

- Encourage submission/categorization of photos other than facial (e.g., scars, marks, tattoos [SMT]).
- Allow retrieval of photos in the IPS via the National Crime Information Center (NCIC).
- Allow submission of photos with a civil Type of Transactions (TOT).
- Eliminate restriction of ten photo sets per FBI record.

Although facial recognition is not advanced enough to be a viable biometric for large database identification services, this effort is a necessary initial step toward collecting data to field facial identification services in a future multimodal system.

#### **1.1.3.4 Disposition Reporting Improvements (DRI)**

Disposition data is information pertaining to the resolutions of arrest charges, court counts or the custody or supervisory status of subjects subsequent to convictions. Disposition data is the core of the criminal history database. The IAFIS disposition process continues to rely on the submission of hard copy forms and dated Machine Readable Data (MRD) technology. The FBI is proposing to develop four additional methods to allow expanded disposition acceptance capabilities. These include the receiving of dispositions by adding disposition information to an existing CHR utilizing a new III message key via NCIC, the modernization of the current MRD process via the Internet and standard media formatting, the electronic submission of disposition information utilizing a new TOT via the CJIS Wide Area Network (WAN), and Federal Courts submitting disposition information electronically to the IAFIS.

It is imperative that the FBI maintain a complete CHR database in order to provide customers with information necessary to make informed decisions regarding the backgrounds of individuals whether it be for criminal justice purposes; noncriminal justice purposes for employment, licensing, and gun permit matters; or for purposes of national and international security. It is imperative that the FBI provide the law enforcement community with a means of submitting disposition information in a more timely and efficient manner.

#### **1.1.3.5 Enhanced IAFIS Repository - Civil File Enhancements**

The IAFIS' current civil repository does not provide sufficient functionality or capacity to meet the ever-growing needs of the FBI's customers. Expanding the functionality and capacity of this repository will enable the FBI to provide new services such as Rap Back and advanced search capabilities. The capacity of this repository will increase dramatically with the future retention of all civil submissions (when requested) to support these new services. The Rap Back initiative will notify certain IAFIS customers when criminal and/or possibly civil activities occur concerning individuals who are currently in positions of trust, resulting in an increased confidence level for those employers. The IAFIS criminal and civil repositories are currently maintained as logically separate and distinct databases that do not allow for the automated transition of records between repositories. The redesign will collectively consolidate civil history and criminal history information into one central IAFIS repository for biographic data and history information and one central IAFIS repository for fingerprint features. The civil repository should have all the capabilities currently available in the criminal repository, including the ability to maintain, search, and modify records. With this initiative, there will be only one record of the highest quality composite set of fingerprint images and features for each

WAN	Wide Area Network
XML	Extensible Markup Language

## 4.2 GLOSSARY

**Biometrics** is the method of utilizing a physical identifier such as fingerprints, facial, iris scanning, or other unique physiological feature to identify and authenticate the identification of an individual.

**Deviations** are specific written authorizations, granted prior to manufacture/development of an item/product, to depart from a particular requirement of an item's/product's current approved configuration documentation for a specific number of units or a specified period of time. [Modified MIL-STD-973] (This is an obsolete term. See Variance)

**Effectivity** is the determination and solidification upon when a change will be effective. The effectivity is based upon the type of end-item being addressed. Effectivity is signified by a date, build, release, lot, or serial number classification. A designation defining the product range (e.g., serial, lot numbers, model, dates) or event at which a change to a specific product is to be (or has been) effected or to which a variance applies. [ANSI/EIA-649]

**Exceptions** are a fault or mistake, either in the software or on the part of the user that causes a program to stop running (crash) or to produce unexpected results.

**Exception handling** is a programming language mechanism designed to handle runtime exceptions or other problems during the execution of a computer system.

**Multimodal Biometric Systems** are those which utilize, or are capable of utilizing, more than one physiological or behavioral characteristic for enrollment, verification, or identification.

**Rap Back** is the capability to notify authorized agencies of a fingerprint submission to IAFIS so that the agency can take appropriate action.

**Scope creep** is a condition in which the scope of a product continues to increase, typically in an uncontrolled fashion, throughout the development process. [Wiegers' Software Requirements]

**Spoofing** is the unauthorized use of legitimate identification and authentication data to gain access to a system by pretending to be an authorized user. A premeditated and conscious act (or inducement) by a perpetrator that causes an incorrect (or inappropriate) action to be taken by a user, system, or other resource.

#### Automated Fingerprint Identification Technology (AFIT)

The IAFIS fingerprint search capability is based on technology that is almost ten years old. Although periodic technology refresh helps with hardware and operating systems upgrades, the need still exists to improve functionality. The FBI/CJIS Division will better serve customers by increasing the Automated Fingerprint Identification System (AFIS) accuracy and improving the IAFIS criminal and civil response times. This component will increase the number of searches the IAFIS can process per day, provide more efficient AFIS processing of flat fingerprint impressions, improve latent processing services, and reduce the IAFIS out-of-service time. This component will also create a new IAFIS service known as the Repository for Individuals of Special Concern (RISC) that will provide a rapid ten second search of known or suspected terrorists, wanted persons, and other persons of special interest.

#### Disposition Reporting Improvements (DRI)

This enhancement will provide additional methods for submitting dispositions to the IAFIS. Disposition information is extremely important to the user community when making fitness determinations for licensing, employment, and volunteer positions. The IAFIS disposition process currently relies on the submission of hard copy forms and Machine Readable Data (MRD) format which utilizes out-of-date technology. Automated methods will speed the process and improve accuracy.

#### Enhanced IAFIS Repository (EIR)

Redesign of the IAFIS criminal and civil history repository will improve the overall effectiveness of the IAFIS, develop new and streamline existing internal user processes, and provide new search and response services to the FBI's customers. Additionally, modifications will be made to incorporate multimodal biometric identification capabilities for future needs. The EIR will offer a new *Rap Back* service allowing authorized agencies to receive notification of criminal activity on individuals holding positions of trust. Iris is being introduced as a new biometric modality that will be supported by the EIR. IAFIS users will have the ability to enroll iris images and features for a subject being enrolled into the system, search against the IAFIS iris repositories (Special Populations, Criminal, Civil, and RISC) using the submitted subject's data, and to retrieve iris images and features for an identified subject.

#### Interstate Photo System (IPS) Enhancement

Currently, the IAFIS can accept photographs (mugshots) with criminal tenprint submissions. The NGI will allow customers to add photographs to previously submitted arrest data (possibly from existing photo databases) and allow for easier retrieval of photos. Enhancements will include the ability to accept and search for photographs of scars, marks, and tattoos (SMT).

#### National Palmprint System (NPPS)

The NGI will include the capability for the IAFIS to accept, store, and search palmprint submissions from local, state, and federal law enforcement and criminal justice agencies nationwide. The NPPS will provide a centralized repository for palmprint data that can be accessed nationwide, providing customers with an additional tool to solve crimes.

DRI		
Current IAFIS	NGI	Benefits
<ul style="list-style-type: none"> <li>• 46 percent of arrest records contained within the IAFIS Criminal History Repository (CHR) have disposition data</li> <li>• Three methods to submit disposition information:                             <ul style="list-style-type: none"> <li>○ United States Postal Service</li> <li>○ MRD process</li> <li>○ Inclusion with initial fingerprint submission</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Improved methods of submitting Disposition Information</li> <li>• Establishment of a new Interstate Identification Index (III) Message Key</li> <li>• Modernization of the MRD process</li> <li>• Federal Courts submitting disposition information</li> </ul>	<ul style="list-style-type: none"> <li>• Will facilitate a more complete CHR that will support local, state, and federal criminal justice agencies</li> <li>• A more complete CHR will also benefit the adjudication of civil applicant background checks</li> </ul>

### 3.2.4 Enhanced IAFIS Repository

The IAFIS repository is currently comprised of multiple sets of data including criminal history; civil history; criminal fingerprint images; civil fingerprint images; criminal fingerprint features; and civil fingerprint features. There are subjects in the IAFIS who have more than one civil record, and the enhancement recommendation is to consolidate the records for subjects with multiple records. The EIR capability has four objectives: Identity Management, Iris, Rap Back, and Expanded Repository Infrastructure.

Identify Management Services: The existing IAFIS criminal and civil repositories are maintained as separate and distinct databases that do not allow for interaction of records among repositories. The EIR capability will address this issue through Identify Management objective, which involves combining records from the civil, criminal, and new repositories into an interoperable repository tied by a unique identity reference. Such design will facilitate enrollment, search, consolidation, modification, deletion, and file maintenance of all identity and biometric information.

Iris Services: Iris is being introduced as a new biometric modality that will be supported by EIR. The supported functionality for iris will be similar to the functionality offered for other biometrics, such as photos and palmprints. The EIR will offer IAFIS users the ability to enroll iris images and features for any subject being enrolled into the system, search against the IAFIS iris repositories (Special Populations, Criminal, Civil, and RISC) using the submitted subject's data, and retrieve iris images and features for an identified subject. The proposed enhancements will also allow IAFIS users to maintain iris data by offering functionality to update and delete a subject's iris data.

Rap Back Services: The Rap Back objective will allow IAFIS users to enroll identities for Rap Back based on events, maintain their subscription information, and receive notification on the subject when selected activities occur against the subject's records. The Rap Back

---

to add photographs to previously submitted arrest data, submit photos with civil submissions, and submit photos in bulk formats. The IPS will also allow for easier retrieval of photos, include the ability to accept and search for photographs of scars, marks, and tattoos, and the use of facial recognition technology.

***National Palmprint System (NPPS)*** - The NPPS will support the establishment of a centralized repository for palmprint data within the NGI by facilitating the search and storage of both known and unknown palmprints. The NPPS will be accessible by authorized criminal justice and noncriminal justice agencies nationwide. This new capability will enable criminal justice agencies to search latent palmprints obtained from crime scenes against a national repository, enhancing law enforcement's ability to solve crime.

***Quality Check Automation (QCA)*** - The QCA capability has successfully enabled faster response times by eliminating the manual Quality Check review of the majority of fingerprint transactions. The QCA capability implemented electronic business rules to provide an automated quality check review, automating the decision process and making it more consistent.

***Enhanced IAFIS Repository (EIR)*** - Redesign of the IAFIS criminal and civil history repository will improve the overall effectiveness of the IAFIS, develop new and streamline existing internal user processes, and provide new search and response services to the FBI's customers. Additionally, modifications will be made to incorporate multimodal biometric identification capabilities for future needs. The EIR capability will allow compatibility between existing civil and criminal repositories as well as new repositories by providing single identity management. The EIR will offer a new *Rap Back* service allowing authorized agencies to receive notification of criminal activity on individuals holding positions of trust. Iris is being introduced as a new biometric modality that will be supported by the EIR. IAFIS users will have the ability to enroll Iris images and features for a subject being enrolled into the system, search against the IAFIS Iris repositories (Special Populations, Criminal, Civil, and RISC) using the submitted subject's data, and to retrieve Iris images and features for an identified subject.

***Shared Services*** - The long-term vision of the FBI is to make the NGI system fully interoperable with other biometric systems. Ongoing efforts are underway to fulfill congressional mandates to achieve interoperability between the NGI and other systems, such as the Department of Homeland Security's (DHS) Automated Biometric Identification System (IDENT).

The Shared Services capability developed under the NGI development and integration contract will allow, at a minimum, the following:

- Provide a dedicated communication portal between the NGI system and IDENT.
- Capability to conduct biometric searches of the IDENT system or other interoperable systems requested by CJIS contributing agencies.
- Capability to conduct biometric search requests of NGI directly from the IDENT system, as initiated by IDENT authorized contributors.

- 
- Federal Courts Submitting Disposition Information to the IAFIS. The CJIS Division is exploring the feasibility of authorizing Federal Courts to transmit electronic fingerprint-based disposition information directly to the IAFIS.

- EIR

The IAFIS repository is currently comprised of multiple sets of data including criminal history; civil history; criminal fingerprint images; civil fingerprint images; criminal fingerprint features; and civil fingerprint features. There are subjects in the IAFIS who have more than one civil record, and the enhancement recommendation is to consolidate the records for subjects with multiple records. The EIR capability has four objectives, Identity Management, Iris, Rap Back, and Expanded Repository Infrastructure.

1. Identify Management Services: The existing IAFIS criminal and civil repositories are maintained as separate and distinct databases that do not allow for interaction of records among repositories. The EIR initiative will address this issue through Identify Management objective, which involves combining records from the civil, criminal, and new repositories into an interoperable repository tied by a unique identity reference. Such design will facilitate enrollment, search, consolidation, modification, deletion, and file maintenance of all identity and biometric information.
2. Iris Services: Iris is being introduced as a new biometric modality that will be supported by EIR. The supported functionality for Iris will be similar to the functionality offered for other biometrics, such as Photos and Palmprints. EIR will offer IAFIS users the ability to enroll Iris images and features for any subject being enrolled into the system, search against the IAFIS Iris repositories (Special Populations, Criminal, Civil, and RISC using the submitted subject's data, and retrieve Iris images and features for an identified subject. The proposed enhancements will also allow IAFIS users to maintain Iris data by offering functionality to update and delete a subject's Iris data.
3. Rap Back Services: The Rap Back objective will allow IAFIS users to enroll identities for Rap Back based on events, maintain their subscription information, and receive notification on the subject when selected activities occur against the subject's records. The Rap Back objective allows the users to select the activities that will trigger a notification to be sent, and the specific data to be included in that notification such as Criminal; Civil, or both.
4. Expanded Repository Infrastructure: The Expanded Repository Infrastructure objective indirectly supports users by providing the structures and system support necessary to allow EIR and all the NGI capabilities to implement their respective capabilities. The objective will enhance the capabilities of legacy repositories (e.g., criminal, civil, Unsolved Latent File (ULF)) as well as provide new unsolved biometric files. The repository infrastructure will be enhanced to meet the challenges of a multimodal biometric framework and new biometric modalities. In addition, this objective will support Special Population Cognizant Files, the RISC, and the capability to create new repositories based on congressional mandates, executive orders, or Attorney General Directives.

impressions, improve latent processing services, and reduce the IAFIS out-of-service time. This component will create a new IAFIS service known as the Enhanced Terrorist Identification Service (ETIS) that will provide a rapid (eight second) search of known or suspected terrorists and wanted persons. This service will be expanded into the National Security Interest File (NSIF) that will incorporate all fingerprints and corresponding contextual data within IAFIS that have been designated to be of national security interest, including military detainees, suspected intelligence officers, and a miscellaneous category for other individuals who are believed to be of interest from a national security perspective, but who are not suspected terrorists.

#### Disposition Reporting Improvements (DRI)

This enhancement will provide additional methods for submitting dispositions to the IAFIS. Disposition information is extremely important to the user community when making fitness determinations for licensing, employment, and volunteer positions. The IAFIS disposition process currently relies on the submission of hard copy forms and Machine-Readable Data (MRD) format which utilizes out-of-date technology. Automated methods will speed the process and improve accuracy.

#### Enhanced IAFIS Repository (EIR)

Redesign of the IAFIS criminal and civil history repository will improve the overall effectiveness of the IAFIS, develop new and streamline existing internal user processes, and provide new search and response services to the FBI's customers. The EIR will also offer a new *Rap Back* service that will allow authorized agencies to receive notification of criminal activity on individuals holding positions of trust. Additionally, modifications will be made to incorporate multimodal biometric identification capabilities for future needs.

#### Interstate Photo System (IPS) Enhancement

Currently, the IAFIS can accept photographs (mugshots) with criminal ten-print submissions. The NGI will allow customers to add photographs to previously submitted arrest data (possibly from existing photo databases) and allow for easier retrieval of photos. Enhancements will include the ability to accept and search for photographs of scars, marks, and tattoos (SMT).

#### National Palm Print System (NPPS)

The NGI will include the capability for the IAFIS to accept, store, and search palm print submissions from local, state, tribal, and federal law enforcement and criminal justice agencies nationwide. The NPPS will provide a centralized repository for palm print data that can be accessed nationwide, providing customers with an additional tool to solve crimes.

#### Quality Check Automation (QCA)

Current IAFIS functionality requires human intervention to perform the Quality Check (QC) function which delays the processing, as the submissions must be queued while waiting to be processed. Automation of QC will enhance the CJIS Division's ability to provide timely and accurate information by streamlining processes, improving consistency of actions, and reducing the IAFIS response times.



- Automation of complex business rules.
- Development of a new HMI so that the business rules can be modified as needed.
- Provide verification of authorized users.
- Establish consistency for data verification and better management of user fee transactions.
- Streamline work processes and improve overall response time.
- Reduce number of ten-print transactions rejected by the IAFIS, saving costs to local law enforcement.
- Allow more timely updates of records.
- Avoid hiring additional staff to accommodate increased workload volumes.

#### **6.4 IPS Enhancements**

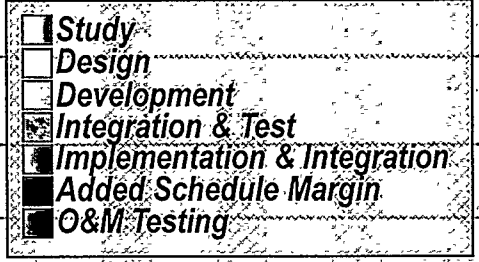
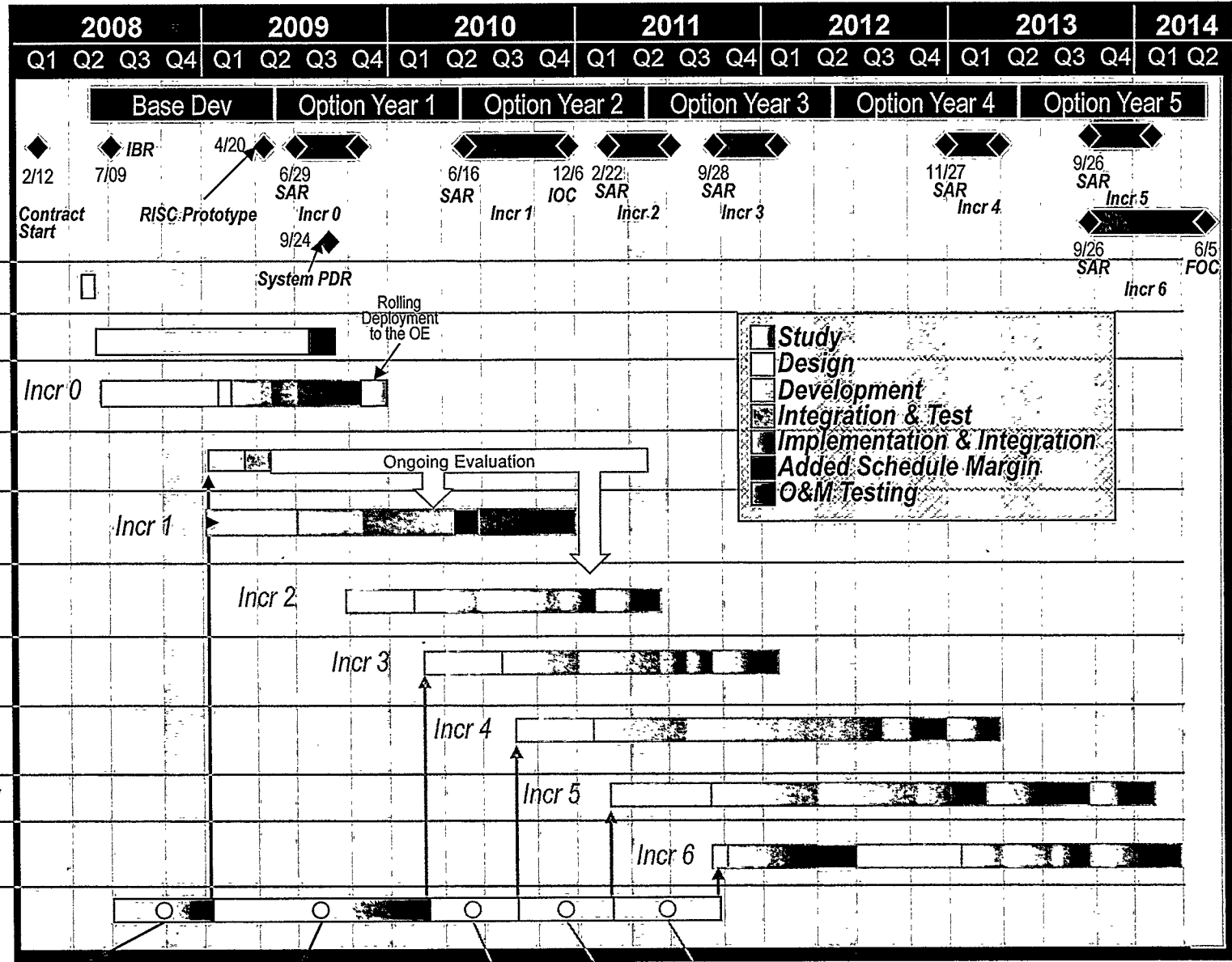
- Increase the number of photos in the IPS.
- Allow easier submission and retrieval of photos into database.
- Provide new search capabilities.
- Ability to collect and retain data to field facial identification services.
- Ability to submit photos independent of an arrest submission with ten or less fingerprints and an FBI Number (FNU).
- Allow bulk submission of photos maintained at state/federal level.
- Allow submission of photos other than facial (e.g., SMTs).
- Ability to search records for SMTs.
- Ability to retrieve photos via the NCIC.
- Allow submission of photos with civil Types of Transactions (TOT).

#### **6.5 DRI**

- Provide additional options for the submission of disposition information to IAFIS thereby increasing the availability of disposition information. Some of these options include electronic submission of disposition information, modernization of the current MRD, and receipt of electronic submission of disposition information from Federal Courts.
- Provide a more complete CHR that will support local, state, federal, and international criminal justice agencies, as well as the adjudication of civil applicant background checks.

#### **6.6 EIR**

- Provide a new service to authorized users who desire immediate notification when a person of interest may pose a threat to national security or the well-being of others (commonly referred to as the *Rap Back* program).
- Allow for the transition of files between civil and criminal repositories.
- Create new search and response generation functionality for the civil file.
- Provide the ability to search the civil records with remote latent fingerprint submissions.
- Collectively locate civil history and CHR to facilitate the search, addition, consolidation, modification, expungement, response generation, and file maintenance of civil and criminal information.



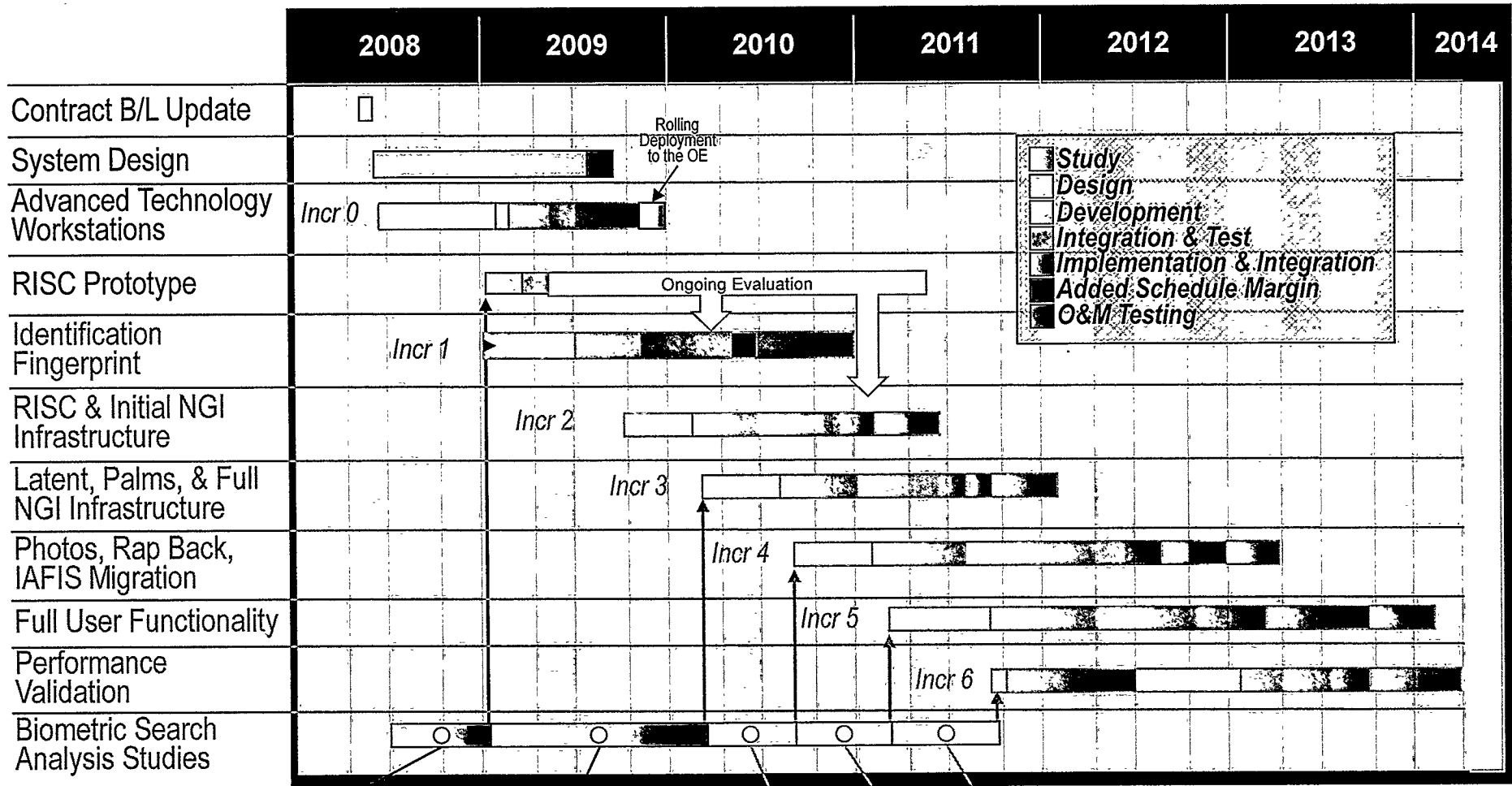
Identification FP & Slap Segmentation

Investigative FP & Palm Print

Face

Iris

Vision



Rolling Deployment to the OE

Study
Design
Development
Integration & Test
Implementation & Integration
Added Schedule Margin
O&M/Testing

Identification FP & Slap Segmentation

Investigative FP & Palm Print

Face

Iris

Vision

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206916-0

Total Deleted Page(s) = 1  
Page 491 ~ b7E;

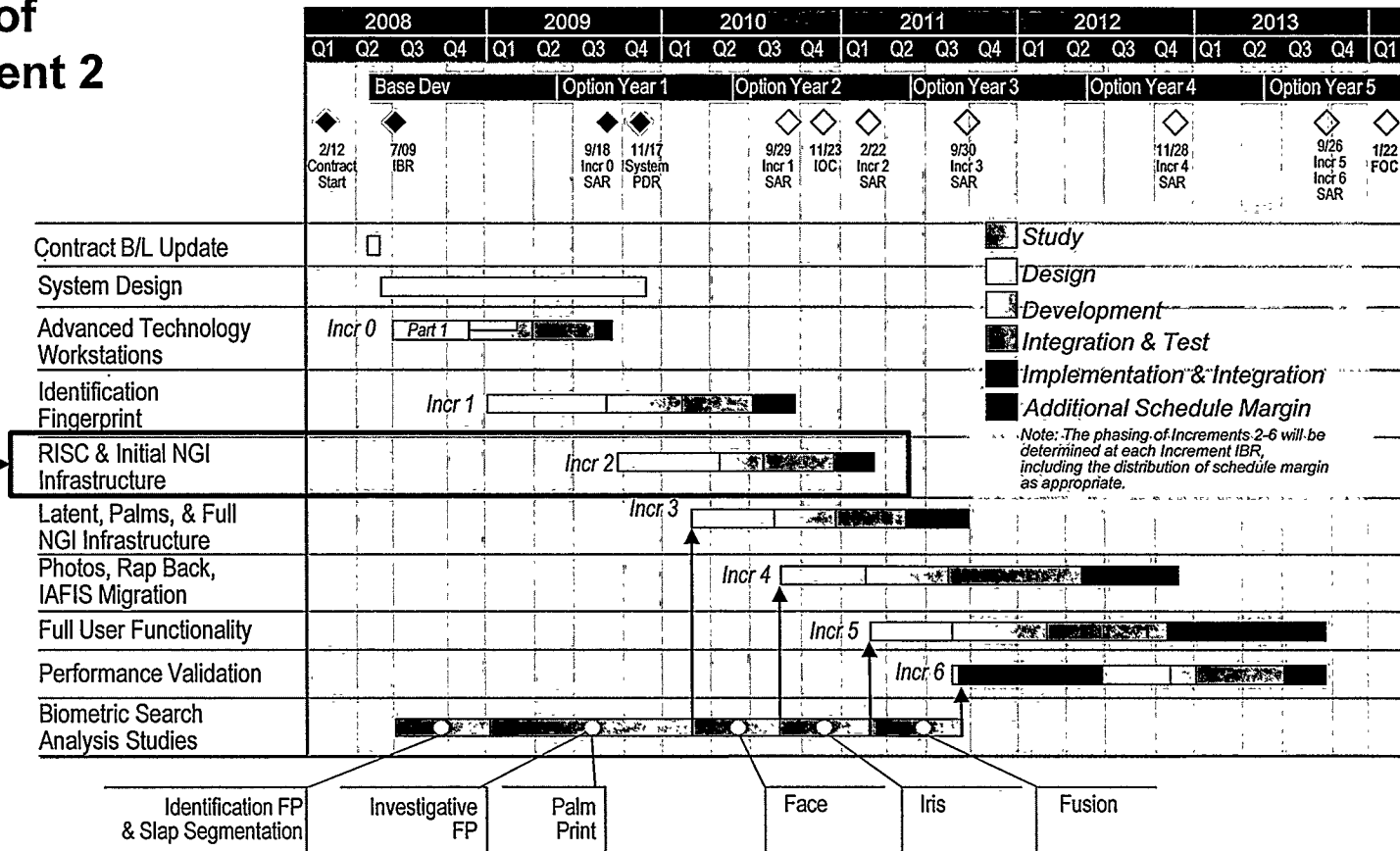
XXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXX



# NGI Project Summary



## Focus of Increment 2 PDR



will also allow for easier retrieval of photos, include the ability to accept and search for photographs of scars, marks, and tattoos, and the use of facial recognition technology.

***National Palm Print System (NPPS)*** - The NPPS will support the establishment of a centralized repository for palmprint data within the NGI by facilitating the search and storage of both known and unknown palmprints. The NPPS will be accessible by authorized criminal justice and noncriminal justice agencies nationwide. This new capability will enable criminal justice agencies to search latent palmprints obtained from crime scenes against a national repository, enhancing law enforcement's ability to solve crime.

***Quality Check Automation (QCA)*** - The QCA capability has successfully enabled faster response times by eliminating the manual Quality Check review of the majority of fingerprint transactions. The QCA capability implemented electronic business rules to provide an automated quality check review, automating the decision process and making it more consistent.

***Enhanced IAFIS Repository (EIR)*** - Redesign of the IAFIS criminal and civil history repository will improve the overall effectiveness of the IAFIS, develop new and streamline existing internal user processes, and provide new search and response services to the FBI's customers. Additionally, modifications will be made to incorporate multimodal biometric identification capabilities for future needs. The EIR will offer a new *Rap Back* service allowing authorized agencies to receive notification of criminal activity on individuals holding positions of trust. Iris is being introduced as a new biometric modality that will be supported by the EIR. IAFIS users will have the ability to enroll Iris images and features for a subject being enrolled into the system, search against the IAFIS Iris repositories (Special Populations, Criminal, Civil, and RISC) using the submitted subject's data, and to retrieve Iris images and features for an identified subject.

The EIR capability will allow compatibility between existing civil and criminal repositories as well as new repositories by providing single identity management. The EIR will support the search and retrieval services for new biometric modalities such as iris images, and provide administrative functions for special population cognizant files. As a new feature, a Rap Back Service will support an authorized contributor's ability to enroll identities and receive notifications regarding individuals based on selected activities. The proposal to develop the Rap Back Service is currently undergoing review by the FBI's Office of General Counsel.

***Shared Services*** - The long-term vision of the FBI is to make the NGI system fully interoperable with other biometric systems. Ongoing efforts are underway to fulfill congressional mandates to achieve interoperability between the NGI and other systems, such as the Department of Homeland Security's (DHS) Automated Biometric Identification System (IDENT).

The Shared Services capability developed under the NGI development and integration contract will allow, at a minimum, the following:

- Provide a dedicated communication portal between the NGI system and IDENT.

DRI		
Current IAFIS	NGI	Benefits
<ul style="list-style-type: none"> <li>• 46 percent of arrest records contained within the IAFIS Criminal History Repository (CHR) have disposition data</li> <li>• Three methods to submit disposition information:                             <ul style="list-style-type: none"> <li>○ United States Postal Service</li> <li>○ MRD process</li> <li>○ Inclusion with initial fingerprint submission</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Improved methods of submitting Disposition Information</li> <li>• Establishment of a new Interstate Identification Index (III) Message Key</li> <li>• Modernization of the MRD process</li> <li>• Federal Courts submitting disposition information</li> </ul>	<ul style="list-style-type: none"> <li>• Will facilitate a more complete CHR that will support local, state, and federal criminal justice agencies</li> <li>• A more complete CHR will also benefit the adjudication of civil applicant background checks</li> </ul>

Table 8 DRI

### 3.2.4 Enhanced IAFIS Repository

The IAFIS repository is currently comprised of multiple sets of data including criminal history; civil history; criminal fingerprint images; civil fingerprint images; criminal fingerprint features; and civil fingerprint features. There are subjects in the IAFIS who have more than one civil record, and the enhancement recommendation is to consolidate the records for subjects with multiple records. The EIR capability has four objectives: Identity Management, Iris, Rap Back, and Expanded Repository Infrastructure.

Identify Management Services: The existing IAFIS criminal and civil repositories are maintained as separate and distinct databases that do not allow for interaction of records among repositories. The EIR capability will address this issue through Identify Management objective, which involves combining records from the civil, criminal, and new repositories into an interoperable repository tied by a unique identity reference. Such design will facilitate enrollment, search, consolidation, modification, deletion, and file maintenance of all identity and biometric information.

Iris Services: Iris is being introduced as a new biometric modality that will be supported by EIR. The supported functionality for iris will be similar to the functionality offered for other biometrics, such as photos and palmprints. The EIR will offer IAFIS users the ability to enroll iris images and features for any subject being enrolled into the system, search against the IAFIS iris repositories (Special Populations, Criminal, Civil, and RISC) using the submitted subject's data, and retrieve iris images and features for an identified subject. The proposed enhancements will also allow IAFIS users to maintain iris data by offering functionality to update and delete a subject's iris data.

Rap Back Services: The Rap Back objective will allow IAFIS users to enroll identities for Rap Back based on events, maintain their subscription information, and receive notification on the subject when selected activities occur against the subject's records. The Rap Back

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206916-0

Total Deleted Page(s) = 3  
Page 137 ~ Duplicate;  
Page 367 ~ b5; b7E;  
Page 373 ~ b5; b6; b7C; b7E;

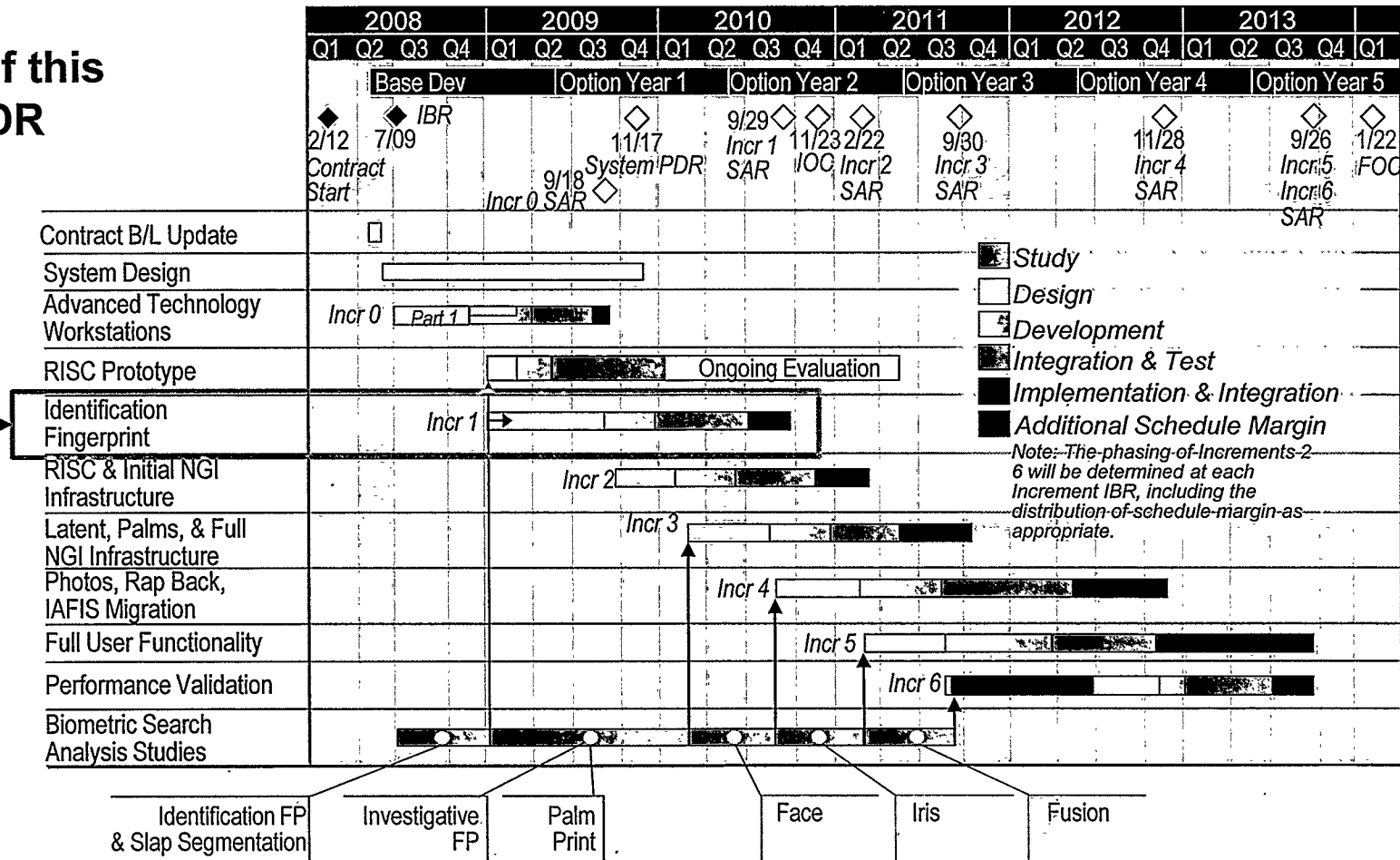
XXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXX



# NGI Project Summary



## Focus of this IPDR/CDR



---

to add photographs to previously submitted arrest data, submit photos with civil submissions, and submit photos in bulk formats. The IPS will also allow for easier retrieval of photos, include the ability to accept and search for photographs of scars, marks, and tattoos, and the use of facial recognition technology.

***National Palmprint System (NPPS)*** - The NPPS will support the establishment of a centralized repository for palmprint data within the NGI by facilitating the search and storage of both known and unknown palmprints. The NPPS will be accessible by authorized criminal justice and noncriminal justice agencies nationwide. This new capability will enable criminal justice agencies to search latent palmprints obtained from crime scenes against a national repository, enhancing law enforcement's ability to solve crime.

***Quality Check Automation (QCA)*** - The QCA capability has successfully enabled faster response times by eliminating the manual Quality Check review of the majority of fingerprint transactions. The QCA capability implemented electronic business rules to provide an automated quality check review, automating the decision process and making it more consistent.

***Enhanced IAFIS Repository (EIR)*** - Redesign of the IAFIS criminal and civil history repository will improve the overall effectiveness of the IAFIS, develop new and streamline existing internal user processes, and provide new search and response services to the FBI's customers. Additionally, modifications will be made to incorporate multimodal biometric identification capabilities for future needs. The EIR capability will allow compatibility between existing civil and criminal repositories as well as new repositories by providing single identity management. The EIR will offer a new *Rap Back* service allowing authorized agencies to receive notification of criminal activity on individuals holding positions of trust. Iris is being introduced as a new biometric modality that will be supported by the EIR. IAFIS users will have the ability to enroll Iris images and features for a subject being enrolled into the system, search against the IAFIS Iris repositories (Special Populations, Criminal, Civil, and RISC) using the submitted subject's data, and to retrieve Iris images and features for an identified subject.

***Shared Services*** - The long-term vision of the FBI is to make the NGI system fully interoperable with other biometric systems. Ongoing efforts are underway to fulfill congressional mandates to achieve interoperability between the NGI and other systems, such as the Department of Homeland Security's (DHS) Automated Biometric Identification System (IDENT).

The Shared Services capability developed under the NGI development and integration contract will allow, at a minimum, the following:

- Provide a dedicated communication portal between the NGI system and IDENT.
- Capability to conduct biometric searches of the IDENT system or other interoperable systems requested by CJIS contributing agencies.
- Capability to conduct biometric search requests of NGI directly from the IDENT system, as initiated by IDENT authorized contributors.

- 
- Federal Courts Submitting Disposition Information to the IAFIS. The CJIS Division is exploring the feasibility of authorizing Federal Courts to transmit electronic fingerprint-based disposition information directly to the IAFIS.

- EIR

The IAFIS repository is currently comprised of multiple sets of data including criminal history; civil history; criminal fingerprint images; civil fingerprint images; criminal fingerprint features; and civil fingerprint features. There are subjects in the IAFIS who have more than one civil record, and the enhancement recommendation is to consolidate the records for subjects with multiple records. The EIR capability has four objectives, Identity Management, Iris, Rap Back, and Expanded Repository Infrastructure.

1. Identify Management Services: The existing IAFIS criminal and civil repositories are maintained as separate and distinct databases that do not allow for interaction of records among repositories. The EIR initiative will address this issue through Identify Management objective, which involves combining records from the civil, criminal, and new repositories into an interoperable repository tied by a unique identity reference. Such design will facilitate enrollment, search, consolidation, modification, deletion, and file maintenance of all identity and biometric information.
2. Iris Services: Iris is being introduced as a new biometric modality that will be supported by EIR. The supported functionality for Iris will be similar to the functionality offered for other biometrics, such as Photos and Palmprints. EIR will offer IAFIS users the ability to enroll Iris images and features for any subject being enrolled into the system, search against the IAFIS Iris repositories (Special Populations, Criminal, Civil, and RISC using the submitted subject's data, and retrieve Iris images and features for an identified subject. The proposed enhancements will also allow IAFIS users to maintain Iris data by offering functionality to update and delete a subject's Iris data.
3. Rap Back Services: The Rap Back objective will allow IAFIS users to enroll identities for Rap Back based on events, maintain their subscription information, and receive notification on the subject when selected activities occur against the subject's records. The Rap Back objective allows the users to select the activities that will trigger a notification to be sent, and the specific data to be included in that notification such as Criminal, Civil, or both.
4. Expanded Repository Infrastructure: The Expanded Repository Infrastructure objective indirectly supports users by providing the structures and system support necessary to allow EIR and all the NGI capabilities to implement their respective capabilities. The objective will enhance the capabilities of legacy repositories (e.g., criminal, civil, Unsolved Latent File (ULF)) as well as provide new unsolved biometric files. The repository infrastructure will be enhanced to meet the challenges of a multimodal biometric framework and new biometric modalities. In addition, this objective will support Special Population Cognizant Files, the RISC, and the capability to create new repositories based on congressional mandates, executive orders, or Attorney General Directives.



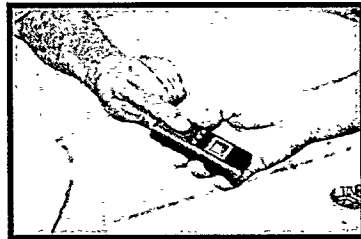
# NGI Tentative Implementation Dates

NEXT  
GENERATION  
IDENTIFICATION



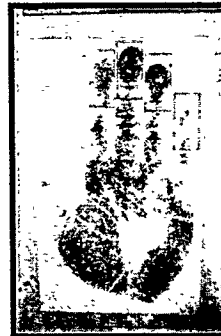
FP Algorithms  
Rolled  
Flats

2011



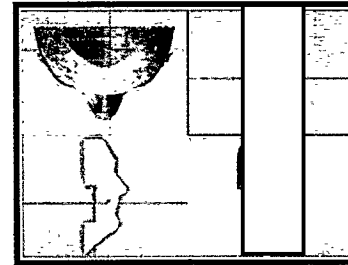
RISC

2012



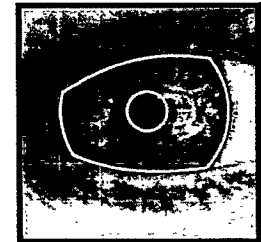
Palms  
Latent

2013



Photos  
Rap Back

2014



Iris

b6  
b7C

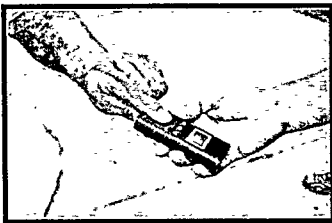


# NGI Tentative Implementation Dates

NEXT  
GENERATION  
IDENTIFICATION



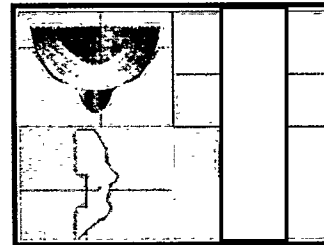
FP Algorithms  
Rolled  
Flats



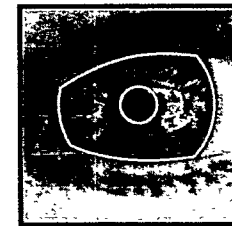
RISC



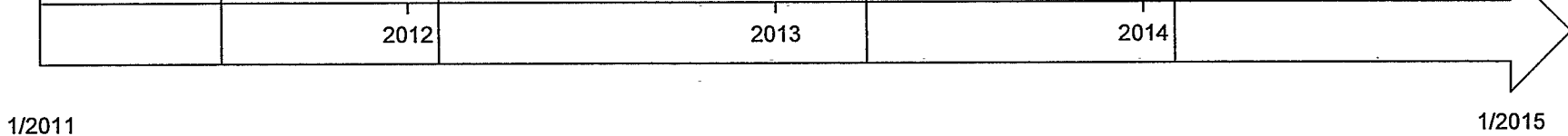
Palms  
Latent



Photos  
Rap Back



Iris

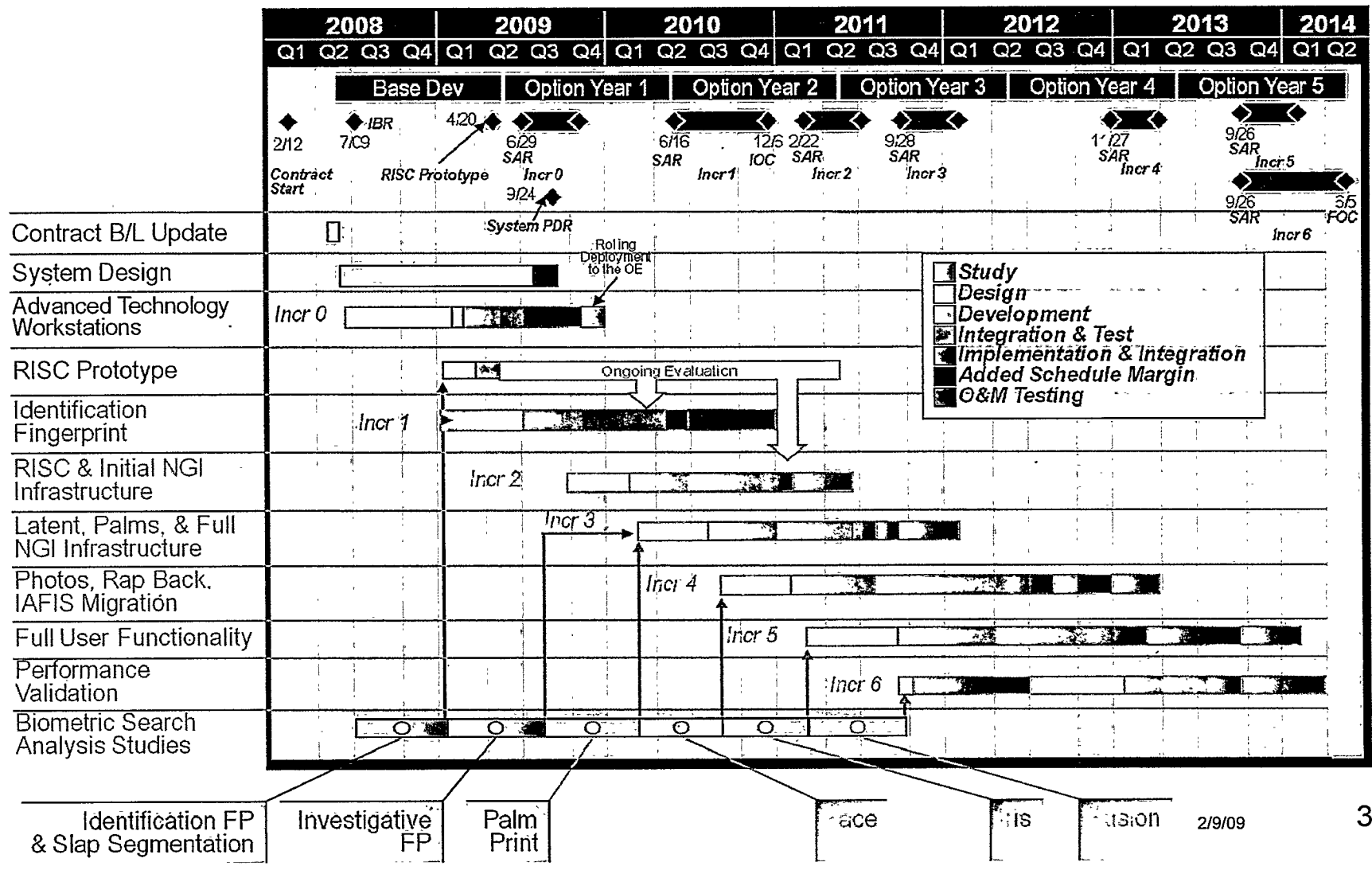


b6  
b7C



# Projected Implementation Schedule

NEXT  
GENERATION  
IDENTIFICATION



Enhanced IAFIS Repository (EIR)

The current IAFIS civil and criminal repositories are separate and distinct databases. Re-organization of the criminal and civil repositories into a consolidated database will support the need to identify when criminal activity occurs on the records of persons holding positions of trust. This component will also offer a new service known as Rap Back to authorized users who desire immediate notification when a person of interest may pose a threat to national security or the well being of others.

Interstate Photo System (IPS) Enhancement

The capability to routinely retrieve mug shots will allow police officers without specialized identification training to recognize criminals. These photos will allow officers to quickly obtain a visual comparison within the IAFIS of an individual with an existing criminal history. The enhanced IPS will also allow the submission of photographs absent of a current arrest as well as bulk submissions of photos maintained at the state/federal level. Today, the IAFIS will only allow ten photos sets per record. Users of the IAFIS will also have an expanded capability to submit and search for photos other than facial (i.e., scars, marks, tattoos).

National Palm Print System (NPPS)

This NGI component will allow IAFIS to accept, store, and search palm print submissions from the FBI Laboratory Division, as well as, local, state, tribal, and federal law enforcement and criminal justice agencies nationwide. Currently, IAFIS does not support this functionality.

Quality Check Automation (QCA)

Current IAFIS functionality requires human intervention to perform the QC function which delays the processing as the submissions must be queued while waiting to be processed. Automation of QC will enhance the CJIS Division's ability to provide timely and accurate information by streamlining processes, improving consistency of actions, and reducing the IAFIS response times.

**Benefits.** Upgrading the existing IAFIS technology with the NGI initiatives will accommodate increased information processing and sharing demands from local, state, tribal, and federal agencies. NGI is an integral component in achieving priorities One, Two, Nine, and Ten of the FBI's Strategic Plan. NGI provides enhancements that support Goals One and Three of the DOJ Strategic Plan and Goals One, Two, and Three of the FBI/CJIS Division Strategic Plan (Program Plan). The NGI components will support the FBI's mission to reduce criminal and terrorist activity by providing the enhancements summarized in this document. Specific NGI mission alignment to CJIS, FBI, DOJ, and DHS Priorities and Goals are described in Section 1.4 of this document. In addition to the NGI initiatives, it will also be important to continue the daily O&M of the current IAFIS and to continue to develop, modernize, and enhance that service.



## Increment 4

LM IPT Lead:

CJIS IPT Lead:

b6  
b7C

**Objectives:** Retirement of legacy IAFIS, High priority NGI functionality

**Functionality:** IAFIS migration to NGI, Rap back, Shared services, EIR operational, Facial and Scars, Marks, and Tattoos (SMT) search, Disposition reporting via CJIS WAN and NCIC, Unique identity, Implementation of UCN, Fingerprint Verification Services, Migration of legacy HMI to Java, ITF, Direct contributor maintenance, Unsolved photo, New repositories, Disaster recovery



support the need to identify when criminal activity occurs on the records of persons holding positions of trust. This component will also offer a new service known as *Rap Back* to authorized users who desire immediate notification when a person of interest may pose a threat to national security or the well being of others.

#### Interstate Photo System (IPS) Enhancement Component

The capability to routinely retrieve mug shots will allow police officers without specialized identification training to recognize criminals. These photos will allow officers to quickly obtain a visual comparison within the IAFIS of an individual with an existing criminal history. The enhanced IPS will also allow the submission of photographs absent of a current arrest as well as bulk submissions of photos maintained at the state/federal level. Today, the IAFIS will only allow ten photos per record. Users of the IAFIS will also have an expanded capability to submit and search for photos other than facial (i.e., scars, marks, tattoos).

#### National Palm Print System (NPPS) Component

This NGI component will allow IAFIS to accept, store, and search palm print submissions from the FBI Laboratory Division, as well as, local, state, tribal, and federal law enforcement and criminal justice agencies nationwide. Currently, IAFIS does not support this functionality.

#### Quality Check Automation (QCA) Component

Current IAFIS functionality requires human intervention to perform the QC function which delays the processing, as the submissions must be queued while waiting to be processed. Automation of QC will enhance the CJIS Division's ability to provide timely and accurate information by streamlining processes, improving consistency of actions, and reducing the IAFIS response times.

## **2.0 NGI STAFFING REQUIREMENTS**

The NGI Program Office Staffing Plan consists of the following Teams: Front Office, Policy and Planning, Analysis and Liaison, Risk Management and Compliance, Program Control, and Requirements and Specifications. Appendix A presents the Proposed NGI Program Office which proposes a staff of 35 people plus an 8-person Requirements and Specification Team, and includes the Systems Development Organization's request for an additional 24 individuals, for a total request of 67.

### **2.1 NGI PROGRAM FRONT OFFICE**

#### **Staffing Total – 10 plus Contractor Support**

The NGI Program Front Office will be responsible for Program Level oversight for all: NGI and related analysis, liaison, policy and planning development, corresponding implementation, system requirements and specifications, risk management and compliance, and program control. The NGI Program Front Office will consist of:

- 1 - Program Manager GS15

Identification Service (ETIS) that will provide a rapid (eight second) search of known or suspected terrorists and wanted persons.

#### Disposition Reporting Improvements (DRI)

This enhancement to the IAFIS will provide additional methods for submitting dispositions to the IAFIS. Disposition information is extremely important to the user community when making fitness determinations for licensing, employment, and volunteer positions. The IAFIS disposition process currently relies on the submission of hard copy forms and Machine Readable Data (MRD) format which utilizes out-of-date technology. Automated methods will speed the process and improve accuracy.

#### Enhanced IAFIS Repository (EIR)

The current IAFIS civil and criminal repositories are separate and distinct databases. Re-organization of the criminal and civil repositories into a consolidated database will support the need to identify when criminal activity occurs on the records of persons holding positions of trust. This component will also offer a new service known as *Rap Back* to authorized users who desire immediate notification when a person of interest may pose a threat to national security or the well being of others.

#### Interstate Photo System (IPS) Enhancement

The capability to routinely retrieve mug shots will allow police officers without specialized identification training to recognize criminals. These photos will allow officers to quickly obtain a visual comparison within the IAFIS of an individual with an existing criminal history. The enhanced IPS will also allow the submission of photographs absent of a current arrest as well as bulk submissions of photos maintained at the state/federal level. Today, the IAFIS will only allow ten photos sets per record. Users of the IAFIS will also have an expanded capability to submit and search for photos other than facial (i.e., scars, marks, tattoos).

#### National Palm Print System (NPPS)

This NGI component will allow the IAFIS to accept, store, and search palm print submissions from the FBI Laboratory Division, as well as, local, state, tribal, and federal law enforcement and criminal justice agencies nationwide. Currently, the IAFIS does not support this functionality.

#### Quality Check Automation (QCA)

Current IAFIS functionality requires human intervention to perform the QC function which delays the processing as the submissions must be queued while waiting to be processed. Automation of the QC will enhance the CJIS Division's ability to provide timely and accurate information by streamlining processes, improving consistency of actions, and reducing the IAFIS response times.

**Benefits.** Upgrading the existing IAFIS technology with the NGI initiatives will accommodate increased information processing and sharing demands from local, state, tribal, federal, and international agencies. The NGI Program will offer state-of-the-art biometric identification services, including the collection of multi-modal biometrics and facilitation of identification using fusion techniques. The NGI is an integral component in achieving Priorities One, Two, Nine, and Ten of the FBI's Strategic Plan. The NGI provides enhancements that support Goals One and Three of the Department of Justice's (DOJ) Strategic Plan and Goals One, Two, and Three of the FBI/CJIS Division Strategic Plan (Program Plan). The NGI components will support the FBI's mission to reduce criminal and terrorist activity by providing the enhancements summarized in this document. The NGI also supports the DHS Interoperability

- Provide a search process that will allow submission of latent palm print searches and have the system return a candidate list to the submitter.
- Allow bulk submissions of palm prints from established repositories.
- Provide a check of known palm print submissions against the Unsolved Latent File (ULF).

#### **4.2.2.3 IPS**

The following recommended enhancements will increase the number of photos in the IPS, allow easier access to the photos by the CJIS Division customers, and increase the IAFIS photo capabilities. The following IPS enhancements are in scope:

- Allow submission of photos independent of an arrest submission with ten or less fingerprints and a FBI Number (FNU) and continue to allow existing capabilities of photo submissions with arrests.
- Allow bulk submission of photos maintained at state/federal level.
- Encourage submission of photos other than facial (e.g., scars, marks, tattoos - SMT).
- Allow search of record for SMTs.
- Allow IPS photo retrieval via the National Crime Information Center (NCIC).
- Allow submission of photos with Civil Types of Transaction (TOT).
- Eliminate restriction of ten photo sets per FBI record.

#### **4.2.2.4 DRI**

The DRI enhancement will support the development of additional options for the submission of disposition information to the IAFIS thereby increasing the availability of disposition information. The following DRI enhancements are in scope:

- Electronic submission of disposition information using a new TOT, supported by a FNU, descriptive data, and/or fingerprint images, via the CJIS Wide Area Network (WAN).
- Modernization of the current MRD process by allowing submission via the Internet and/or Compact Disk – Read Only Memory (CD-ROM) media.
- Addition of disposition information to an existing CHR utilizing a new III message key.
- Electronic submission of disposition information by the Federal Courts to the IAFIS.

#### **4.2.2.5 EIR**

The IAFIS repository is currently comprised of multiple sets of data including criminal and civil history, criminal and civil fingerprint images, and criminal and civil fingerprint features. For subjects in the IAFIS who have more than one civil record, the EIR will consolidate those records. This initiative will also offer a new service to authorized users who desire immediate notification when a person of interest may pose a threat to national security or the well being of others. This service is commonly referred to as the *Rap Back* Program. This initiative will require the CJIS Division to develop new functionality for the automated civil file; collectively locate civil history and criminal history information; and enhance the search, storage, file maintenance, and response generation capabilities.

**Normal Mode** is when all components of a computer system are operating within specified parameters. [MIL-STD-721C]

A **prototype** is a preliminary type, form, or instance of a product or product component that serves as a model for later stages or for the final, complete version of the product. This model (physical, electronic, digital, analytical, etc.) can be used for the following (and other) purposes:

- Assessing the feasibility of a new or unfamiliar technology
- Assessing or mitigating technical risk
- Validating requirements
- Demonstrating critical features
- Qualifying a product
- Qualifying a process
- Characterizing performance or product features
- Elucidating physical principles

[IEEE 610.12-1990]

A **quality attribute** is a type of non-functional requirement that describes a quality or property of a system. Examples include usability, portability, maintainability, integrity, efficiency, reliability, and robustness. Quality attribute requirements describe the extent to which a software product demonstrates desired characteristics, not what the product does. [Wiegers' Software Requirements]

**Rap Back** is the capability to notify authorized agencies of a fingerprint submission to IAFIS so that the agency can take appropriate action.

A **requirement** is a statement of a customer need or objective, or of a condition or capability that a product must possess to satisfy such a need or objective (e.g., a property that a product must have to provide value to a stakeholder. [Wiegers' Software Requirements]

A **requirement attribute** provides descriptive information about a requirement that enriches its definition beyond the statement of intended functionality. Examples include origin, rationale, priority, owner, release number, and version number. [Wiegers' Software Requirements]

**Requirements allocation** is the process of apportioning system requirements among various architectural subsystems and components. [Wiegers' Software Requirements]

**Requirements elicitation** is the process of identifying software or system requirements from various sources through interviews, workshops, workflow and task analysis, and document analysis. [Wiegers' Software Requirements]

**Requirements Management** is the process of working with a defined set of product requirements throughout the product's development process and its operational life. It includes tracking status, managing changes to the requirements and versions of requirements specifications, and tracing individual requirements to other project phases and work products. [Wiegers' Software Requirements]

# NGI INITIATIVES

## 1. AFIT "Advanced Fingerprint Identification Technology"

- Searching of flat fingerprints for noncriminal justice purposes (growing demand to use ten flat fingerprint impression livescan devices to support fingerprint background checks for employment and licensing purposes... flat impressions are attractive because the capture process is less invasive, faster, reduces sequence errors, and allows less skilled operators to obtain acceptable quality images)
- FBI will be able to meet the customers' need for rapid capture of fingerprint images while improving the accuracy and efficiency of identification and verification processing.
- Improve Criminal/Civil response times. (IAFIS currently processes electronic Criminal Answer Required (CAR) fingerprint submissions in two hours or less. The FBI must enable the contributor to receive faster responses to civil and criminal fingerprint submissions.)
- Increase number of searches IAFIS can process per day. (currently between 50-80K per day)
- Improve Latent processing services by providing improved and enhanced latent retrieval, enrollment, search and maintenance processing functionality.
- Reduce IAFIS out of service time.
- Create ETIS "Enhanced Terrorist Identification Services" provide a rapid (10 second) searches of a specialized repository anticipated to contain records for wanted persons, known or suspected terrorists, violent gang and terrorist organizations, and other persons of special interest.

## 2. DRI "Disposition Reporting Improvements"

- Disposition data is information pertaining to the resolution of arrest charges, court counts, or the custody or supervisory status of subjects subsequent to convictions. Disposition data is the core of the FBI's criminal history database. (The current disposition process relies on the manual submission of hard copy forms and dated machine-readable data (MRD) technology.
- The DRI component of the NGI will develop at least for additional methods to expand disposition acceptance capabilities:
  - a. Electronic submission of disposition information utilizing a new type of transaction (TOT) via the CJIS Wide Area Network (WAN).
  - b. Electronic submission of disposition information to an existing CHR utilizing a new National Crime Information Center (NCIC) Interstate Identification Index (III) message key.
  - c. Modernization of the current MRD process by making use of the Internet, the Law Enforcement Online (LEO) network and standard media (CD-ROM, DVD, etc.) formatting.
  - d. Federal Courts submitting disposition information electronically via the CJIS WAN.
- End users of the IAFIS have expressed great interest in the development of alternative methods for submitting disposition information to the FBI. (The enhancements or replacements provided by the DRI capability will incorporate technical and infrastructure enhancements or replacements into the IAFIS thereby providing improved identification and criminal history services.
- The FBI must provide the law enforcement community with a means of submitting disposition information in a more timely and efficient manner.

## 3. EIR "Enhanced IAFIS Repository"

- Expanding the functionality and capacity of this repository will enable the FBI to provide new services such as Rap Back and advanced search capabilities.
- The Rap Back service will notify certain customers when criminal and/or possibly civil activities occur concerning individuals who are currently in positions of trust, resulting in an increased confidence level for those employers.

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206916-0

Total Deleted Page(s) = 11

- Page 6 ~ b7E;
- Page 15 ~ b7E;
- Page 25 ~ b7E;
- Page 28 ~ b7E;
- Page 29 ~ b7E;
- Page 30 ~ b7E;
- Page 34 ~ b7E;
- Page 173 ~ b5;
- Page 177 ~ b5;
- Page 179 ~ b5; b7E;
- Page 190 ~ b5; b7E;

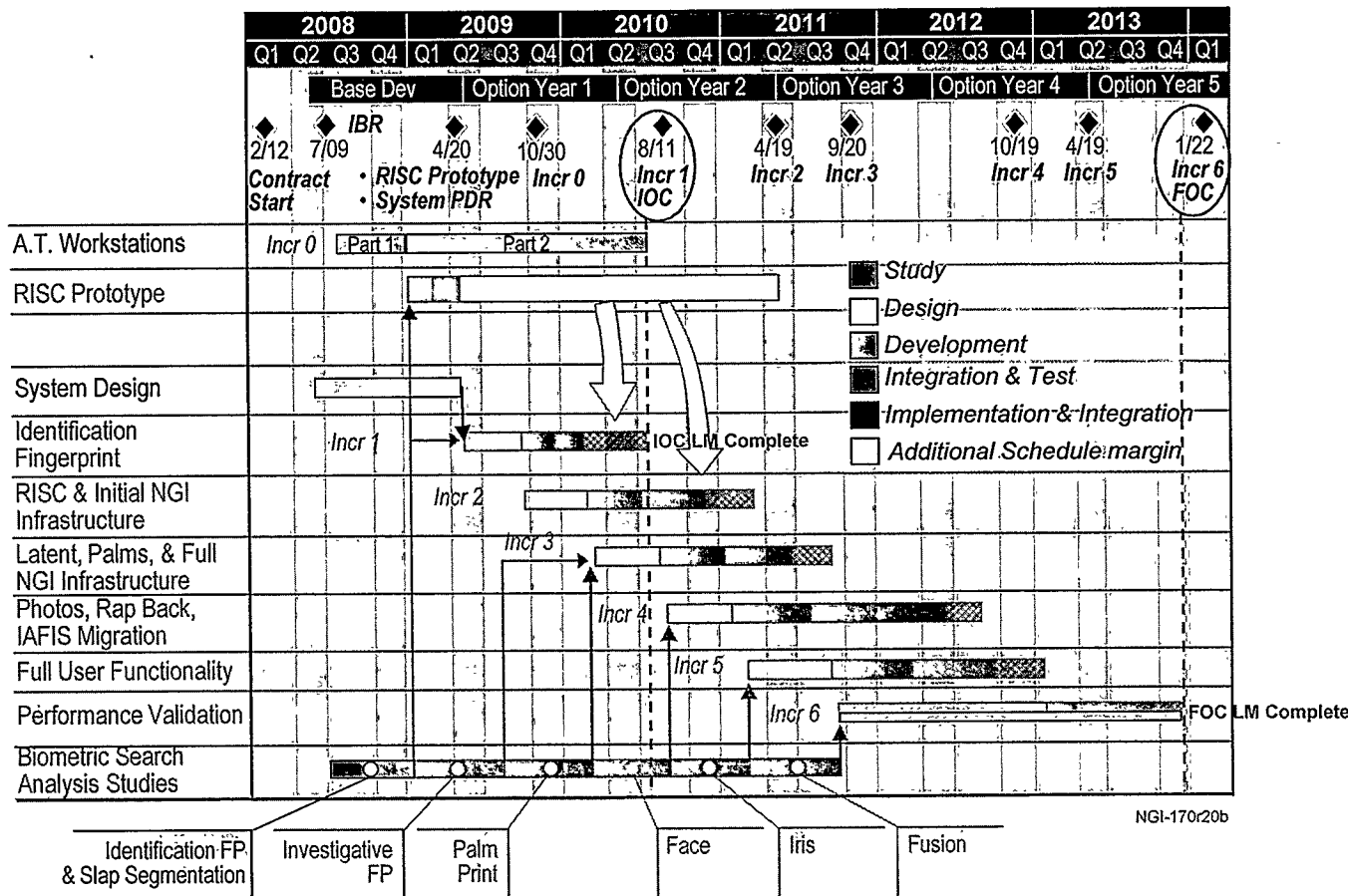
```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206916-0

Total Deleted Page(s) = 1  
Page 208 ~ b5;

XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX

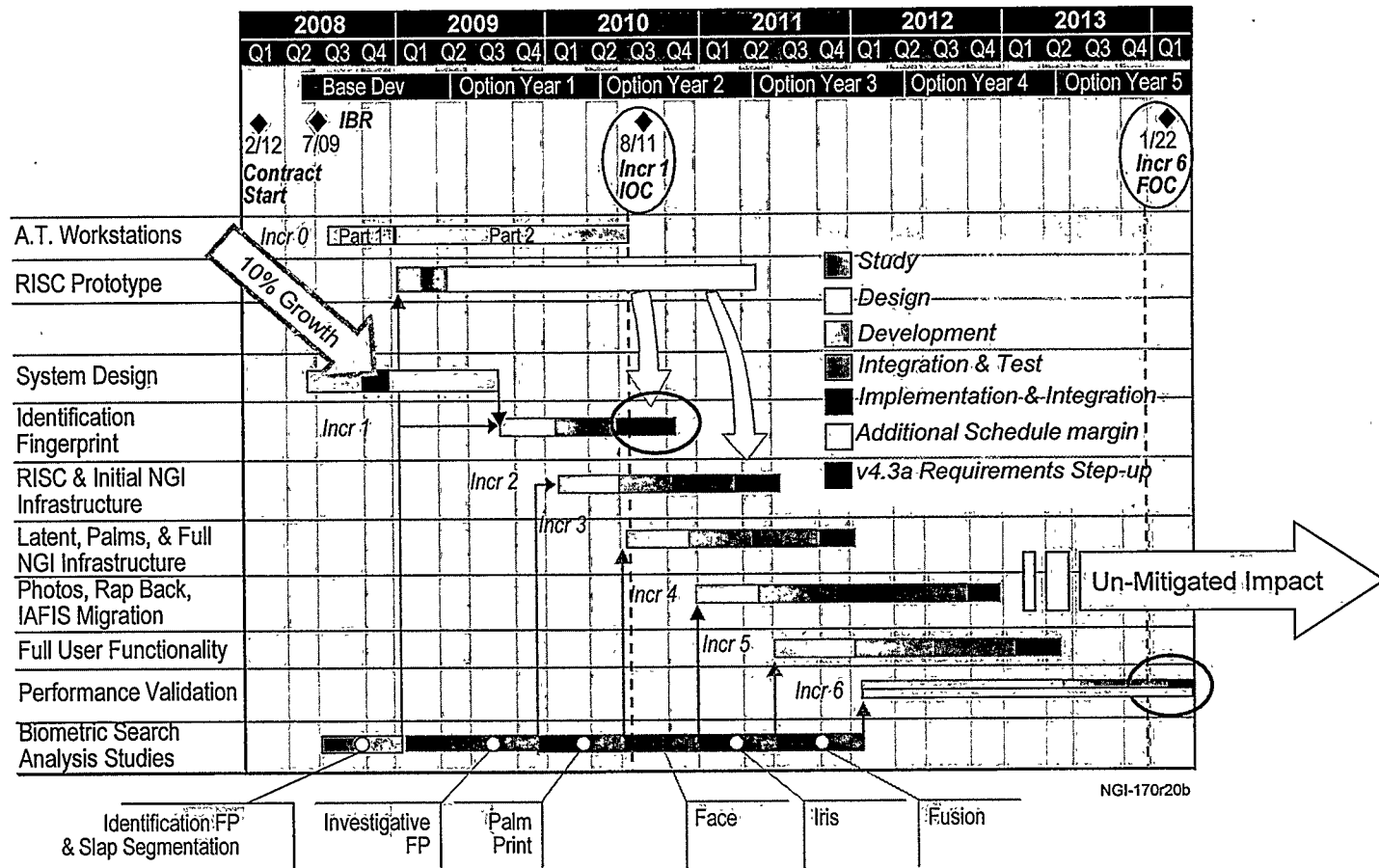
# Current Schedule v4.1



Objective: Hold IOC & FOC dates (manage between the goalposts above)



# v4.3a Impact assessment

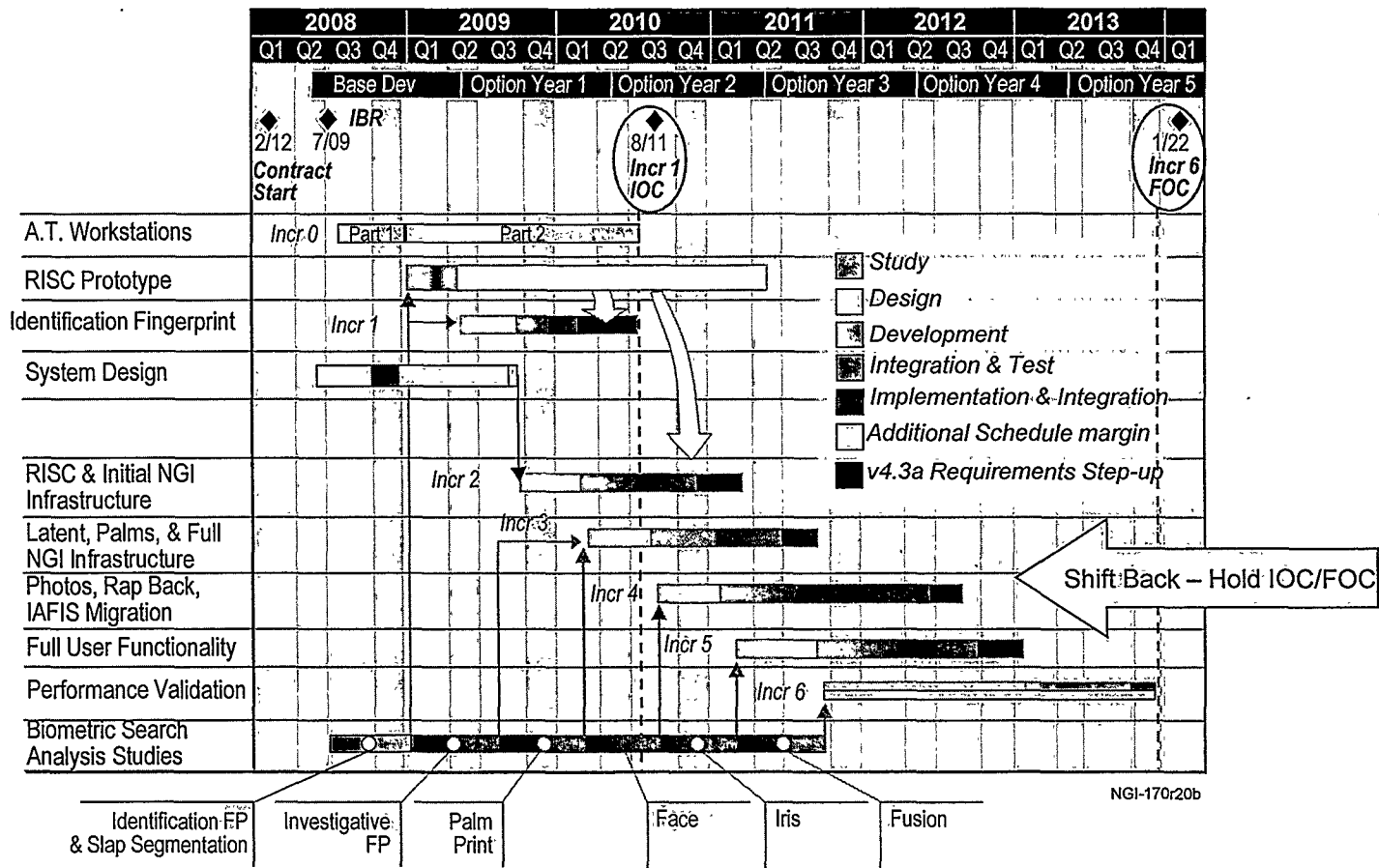


- Impact assessment: Assess v4.3a without any process adjustments
- Impact: ROM [ ] & Moves IOC by 3 months

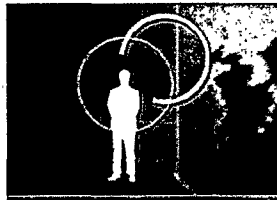
b7E



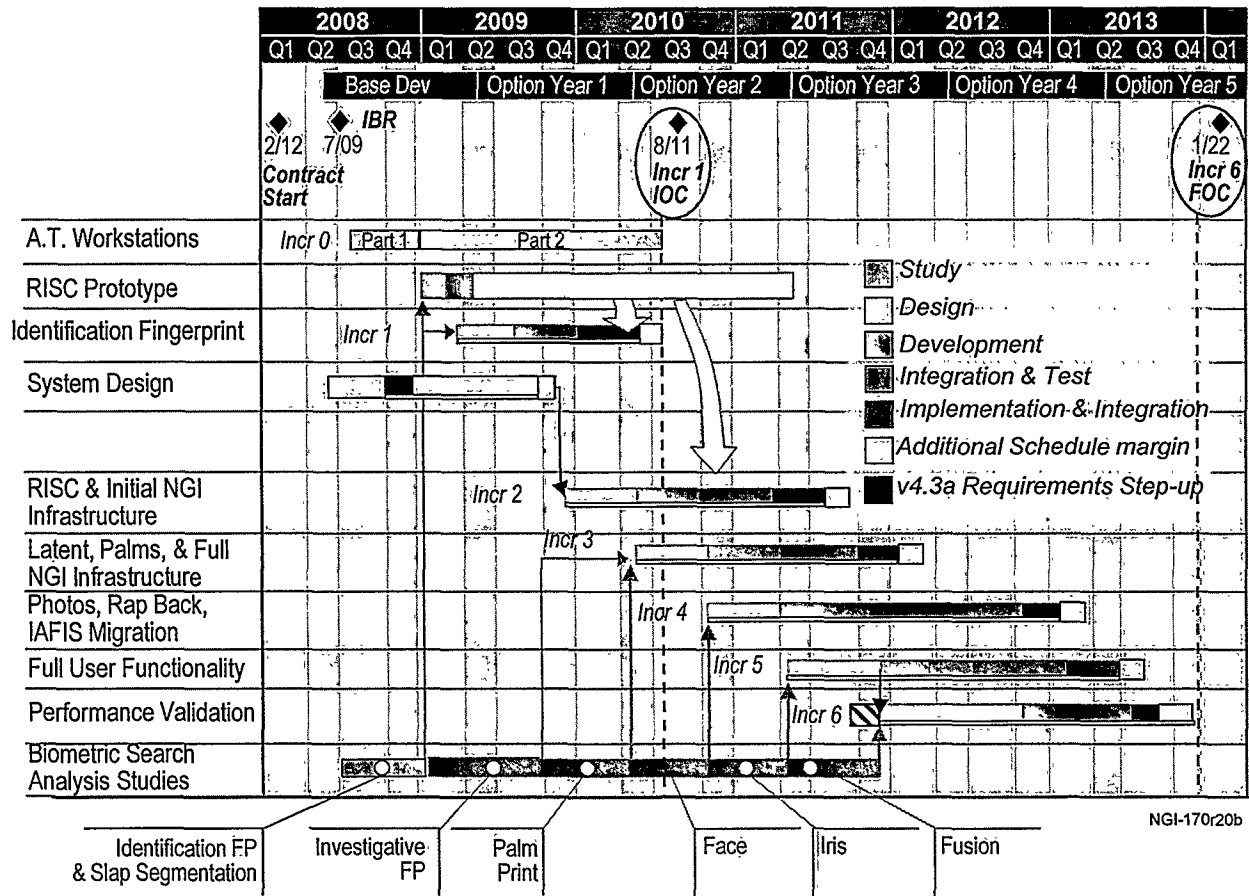
# LM Recommended Strategy (Holds IOC & FOC)





De-Couple Increment One



# LM Recommended Plan (Holds IOC & FOC & Adjust for Additional Topics)





Shift some schedule margin from increment 6 into System Design & increments 2 thru 5 to address the comprehensive plan








## Federal Bureau of Investigation CJIS Division Next Generation Identification

**Next Generation Identification  
 Program Office**

UNCLASSIFIED  
 For official use only

## NGI Implementation Schedule

Increment 0	Increment 1	Increment 2	Increment 3	Increment 4	Increment 5	Increment 6
 <b>Advanced Technology Workstations</b>	 <b>Initial Operational Capability</b>	 <b>RISC and Initial NGI Infrastructure</b>	 <b>Palms and Latents</b>	 <b>Rap Back, Facial, Photo/SMT Search Capabilities</b>	 <b>Iris Pilot</b>	 <b>Full Operational Capability</b>
<ul style="list-style-type: none"> <li>• Replace obsolete hardware</li> <li>• Provide high resolution of biometrics</li> </ul>	<ul style="list-style-type: none"> <li>• Identification Fingerprint Search Capability</li> <li>• More accurate searches</li> <li>• Better support for rolled/mat processing</li> </ul>	<ul style="list-style-type: none"> <li>• Repository for Individuals of Special Concern (RISC)</li> <li>• Rapid mobile searches</li> <li>• RISC Web Services</li> </ul>	<ul style="list-style-type: none"> <li>• Investigative Palm Print search capabilities</li> <li>• National Palm Print repository</li> <li>• Latent Enhancements</li> <li>• Unsolved Latent File cascaded searches</li> <li>• Rapid DHS CBP response</li> </ul>	<ul style="list-style-type: none"> <li>• Increased Response Times</li> <li>• Facial and SMT searches</li> <li>• IAFIS Functionality Replaced</li> <li>• Verification</li> <li>• Enhanced Interoperability</li> <li>• Disposition type of transactions</li> <li>• Web Services</li> </ul>	<ul style="list-style-type: none"> <li>• Conduct Iris Pilot based on trade study results</li> </ul>	<ul style="list-style-type: none"> <li>• Technology refreshment</li> </ul>

2010
2014

UNCLASSIFIED  
 For official use only



### Rap Back, Facial, SMT Search Capabilities, Migration of Remaining IAFIS Functionality (Increment 4)



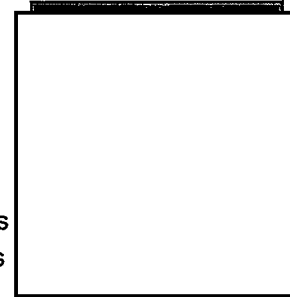
#### Status

- Rap Back
  - Continued support of the Rap Back Task Force for policy/administration development
- Facial Search
- Text based scars, marks, and tattoo (SMT) searches
- Enhanced Interoperability
- Fingerprint verification services
- Improved response times
- Target Deployment - Summer, 2014

#### Resulting Benefits

- Enhance public safety
- National level investigative searches of photos/SMTs
- More accurate and complete criminal history records
- Flexible and scalable architecture for future needs

UNCLASSIFIED  
For official use only



b6  
b7C




### NGI Face Pilot




- NGI is implementing a Facial Recognition Pilot
  - Face Trade Study completed December 2010
  - Face matching system
- Universal Facial Workstation software
  - Will be made available to Pilot participants
- Currently soliciting participation
  - Already working with Michigan, Washington, Florida and North Carolina
  - Contact (304) 625-3437 for more information

UNCLASSIFIED  
For official use only



## RISC and Initial NGI Infrastructure (Increment 2) – Completed





**Status:**

- Deployed 08/25/2011


**Resulting Benefits:**








- Supports mobile fingerprint identification operations on a national level
- Biometric searches of the worst of the worst – wanted persons, known or appropriately suspected terrorists, sex offenders, and persons of special interest
- Provides the “Street Cop” the ability to quickly assess subject’s threat level

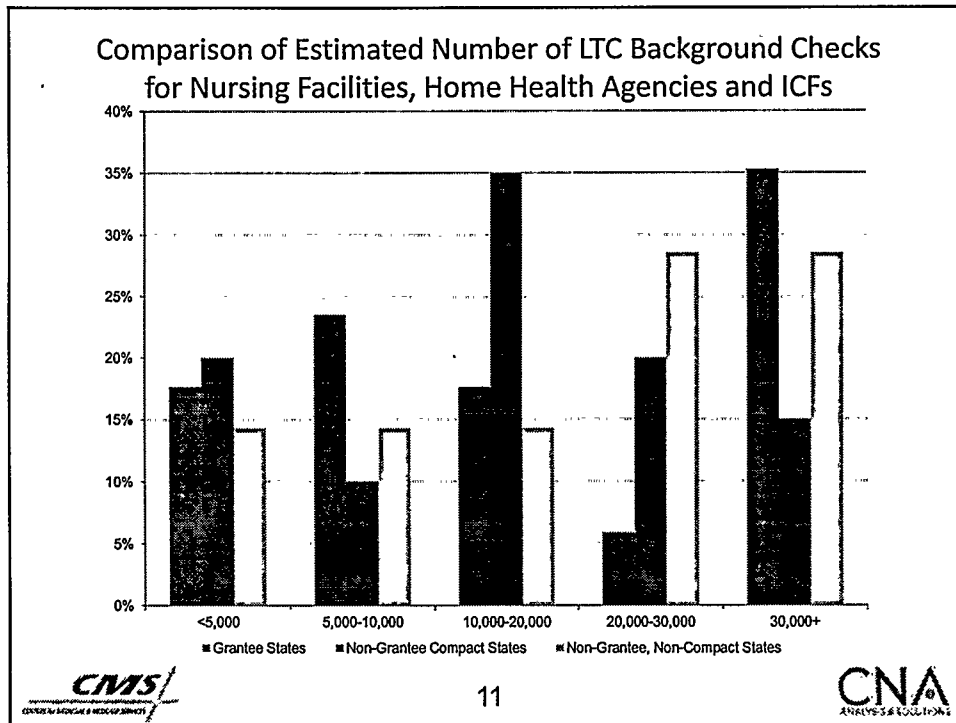




## NGI Implementation Schedule




Increment 0	Increment 1	Increment 2	Increment 3	Increment 4	Increment 5	Increment 6
						
<b>Advanced Technology Workstations</b>	<b>Initial Operational Capability</b>	<b>RISC and Initial NGI Infrastructure</b>	<b>Palms and Latents</b>	<b>Rap Back, Facial, Photo/SMT Search Capabilities</b>	<b>Iris Pilot</b>	<b>Technology Refreshment</b>
<ul style="list-style-type: none"> <li>• Replace obsolete hardware</li> <li>• Provide high resolution of biometrics</li> </ul>	<ul style="list-style-type: none"> <li>• Identification Fingerprint Search Capability</li> <li>• More accurate searches</li> <li>• Better support for rolled/flatt processing</li> </ul>	<ul style="list-style-type: none"> <li>• Repository for Individuals of Special Concern (RISC)</li> <li>• Rapid mobile searches</li> <li>• RISC Web Services</li> </ul>	<ul style="list-style-type: none"> <li>• Investigative Palm Print search capabilities</li> <li>• National Palm Print repository</li> <li>• Latent Enhancements</li> <li>• Unsolved Latent File cascaded searches</li> <li>• Rapid DHS CBP response</li> </ul>	<ul style="list-style-type: none"> <li>• Improved Response Times</li> <li>• Facial and SMT searches</li> <li>• JAFIS Functionality Replaced</li> <li>• Verification</li> <li>• Enhanced Interoperability</li> <li>• Disposition type of transactions</li> <li>• Web Services</li> </ul>	<ul style="list-style-type: none"> <li>• Trade Study Report</li> <li>• Conduct Iris Pilot based on trade study results</li> </ul>	
2010			2014			



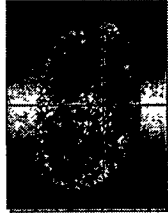
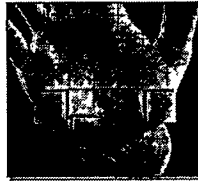


### Potential Barriers and Solutions to Participation

- Availability of State matching funds
  - Most States already conducting background checks
- Legislative hurdles
  - Identify a State legislator who will be a champion of the program
  - Attach needed language to other legislation already on calendar
- State-level rap back and FBI national-level rap back
  - Automated systems designed to accommodate State-level and Federal-level input
- Sustainability
  - Build off of mechanisms used to sustain existing background check systems
  - Explore user fees, legislative appropriations, and the allocation of a share of administrative costs to the State's Medicaid program
- Multiple State agencies are responsible for different long term care facility/provider types
  - Foster collaborations that can extend beyond NBCP

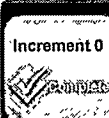








## IAFIS to NGI

- Improved Accuracy
- Faster
- Enhanced IAFIS Repository
- Expanded Biometrics
  - Palm printing
  - Facial recognition
  - Iris scanning

## NGI Implementation Schedule

Increment 0	Increment 1	Increment 2	Increment 3	Increment 4	Increment 5	Increment 6
						
<b>Advanced Technology Workstations</b>	<b>Initial Operational Capability</b>	<b>RISC and Initial NGI Infrastructure</b>	<b>Palms and Latents</b>	<b>Rap Back, Facial, Photo/SMT Search Capabilities</b>	<b>Iris Pilot</b>	<b>Full Operational Capability</b>
<ul style="list-style-type: none"> <li>• Replace obsolete hardware</li> <li>• Provide high resolution of biometrics</li> </ul>	<ul style="list-style-type: none"> <li>• Identification Fingerprint Search Capability</li> <li>• More accurate searches</li> <li>• Better support for rolled/flat processing</li> </ul>	<ul style="list-style-type: none"> <li>• Repository for Individuals of Special Concern (RISC)</li> <li>• Rapid mobile searches</li> <li>• RISC Web Services</li> </ul>	<ul style="list-style-type: none"> <li>• Investigative Palm Print search capabilities</li> <li>• National Palm Print repository</li> <li>• Latent Enhancements</li> <li>• Unsolved Latent File cascaded searches</li> <li>• Rapid DHS CBP response</li> </ul>	<ul style="list-style-type: none"> <li>• Increased Response Times</li> <li>• Facial and SMT searches</li> <li>• IAFIS Functionality Replaced</li> <li>• Verification</li> <li>• Enhanced Interoperability</li> <li>• Disposition type of transactions</li> <li>• Web Services</li> </ul>	<ul style="list-style-type: none"> <li>• Conduct Iris Pilot based on trade study results</li> </ul>	<ul style="list-style-type: none"> <li>• Technology refreshment</li> </ul>
2010			2014			



FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206918-0

Total Deleted Page(s) = 1  
Page 209 ~ b7E;

XXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXX

## Transition to NIEM

---

- Moved to support moving to NIEM but to ensure that this is performed in a method that does not disenfranchise those states that have already invested in the Global Justice Extensible Markup Language Data Model (GJXDM) 3.0.3.
- CJIS will prepare a plan to define a strategy to migrate to NIEM, including a versioning policy.
- CJIS will prepare a plan to define the strategy to migrate all CJIS systems to NIEM.

## Next Generation Identification - Rap Back

---

- ❑ Should use the same dissemination protocols currently in place for criminal/civil fingerprint submissions.
- ❑ Should be optional.
- ❑ Should send a pre-notification and notification for purges.
- ❑ Should send a pre-notification to the submitting agency prior to sending a notification to the authorized agency.

## Next Generation Identification - Rap Back (cont.)

---

- ❑ The event that triggered the Rap Back notification should be highlighted within the response.
- ❑ Submission of disposition data should trigger a Rap Back notification.

## IAFIS Expungements

---

- ❑ Moved to discontinue generation of hard copy rap sheets to the arresting agency when a date of arrest has been expunged.

**Bill Name:** No Child Left Behind Act of 2007  
**Designation:** S 1775  
**Sponsor:** Richard Burr (R-NC) 07/12/07  
**Cosponsor:** 0-D, 1-R (as of 08/24/07)

Sections 4222 and 4223 would require the Office of Justice Programs to develop model screening guidelines to include a criminal background check. The Secretary of Education is authorized to award grants to those entities that have conducted background checks on mentors in accordance with these guidelines. The bill does not indicate how these checks would be conducted.

**Bill Name:** Patient Safety & Abuse Prevention Act of 2007  
**Designation:** S 1577  
**Sponsor:** Herb Kohl (D-WI) 06/07/07  
**Cosponsor:** 8-D, 4-R (as of 08/24/07)

Section 3 of the bill expands the pilot program, as established under Section 307 of the Medicare Prescription Drug, Improvement, & Modernization Act of 2003, to be conducted on a nationwide basis. Section 4 of the bill requires a state and FBI fingerprint criminal history background check on direct patient access applicants and employees of skilled nursing facilities and long-term care facilities. It also requires the state to develop "rap back" capability. Section 5 also requires the FBI to develop "rap back" capability by January 1, 2011. The FBI would only be authorized to charge the actual costs of conducting the criminal history background check.

**Bill Name:** Patient Safety & Abuse Prevention Act of 2007  
**Designation:** HR 3078  
**Sponsor:** Timothy Mahoney (D-FL) 07/18/07  
**Cosponsor:** 3-D, 0-R (as of 08/24/07)

House version of S 1577.



## Rap Back Enrollment Time Period



### IIETF Recommendation

- Unlimited with the capability to set an expiration date

UNCLASSIFIED / FOR OFFICIAL USE ONLY



## Rap Back Subscription Renewal Notification and Optional Pre-notification



- Follow-up notification on Subscription Renewal
- Follow-up notification on Pre-notification
  - Resend Pre-notification follow-up after 15 days of no response
  - Follow-up by FBI

UNCLASSIFIED / FOR OFFICIAL USE ONLY





## Additional Rap Back Recommendations



- States should be provided with the ability to opt out of receiving state triggered events
- Agency has option to receive entire Identity History Summary or only the event that triggered Rap Back Response

UNCLASSIFIED / FOR OFFICIAL USE ONLY



Bill Name: Patient Safety & Abuse Prevention Act of 2007  
Designation: S 1577  
Sponsor: Herb Kohl (D-WI) 06/07/07  
Cosponsor: 11-D, 4-R (as of 04/16/08)

Section 3 of the bill expands the pilot program, as established under Section 307 of the Medicare Prescription Drug, Improvement, & Modernization Act of 2003, to be conducted on a nationwide basis. Section 4 of the bill requires a state and FBI fingerprint criminal history background check on direct patient access applicants and employees of skilled nursing facilities and long-term care facilities. It also requires the state to develop "rap back" capability. Section 5 also requires the FBI to develop "rap back" capability by January 1, 2011. The FBI would only be authorized to charge the actual costs of conducting the criminal history background check.

Bill Name: Patient Safety & Abuse Prevention Act of 2007  
Designation: HR 3078  
Sponsor: Timothy Mahoney (D-FL) 07/18/07  
Cosponsor: 5-D, 0-R (as of 04/16/08)

House version of S 1577.

Bill Name: National Defense Authorization Act for Fiscal Year 2008  
Designation: HR 1585  
Sponsor: Ike Skelton (D-MO) 03/20/07  
Cosponsor: 0-D, 1-R (as of 04/16/08)  
**Status: The President withheld approval of the measure, 12/28/07**

Section 831 of the bill requires a Memorandum of Understanding (MOU) between Department of Defense (DoD), Department of State (DOS), and the U.S. Agency for International Development concerning matters of contracts in Iraq or Afghanistan. The MOU will include the minimum qualifications, which includes a background check, for personnel carrying weapons in performance of these contracts. Section 1056 of the bill would authorize background investigations of unescorted civilians or civilian employees of a contractor or vendor who access military installations or facilities. The background investigation would be conducted by the DoD through the NCIC. The background investigation may be waived for persons attending base-sponsored community activities.

	<p><b>Consolidated Response Process FAST Enrollment</b></p>

b7E

	<p><b>FAST User Agreements</b></p>



	<h2 style="text-align: center;">Email Notifications: New Activity / Rap Back</h2>
<p><del>Original Message</del> From: [REDACTED] Sent: Friday, May 09, 2008 5:31 PM To: [REDACTED] Subject: FACT Clearinghouse: Subscription Activity</p> <p>This message is from the Crime Records Service Secure Website.</p> <p>----- The FACT Clearinghouse has received activity for one or more applicants that your agency is subscribed to. Applicants: 02949402 WILLIAM,TEST RECORD.....(CCH Event)</p> <p>View the current record for these applicants by signing into the Secure Site and clicking on "FACT Clearinghouse".</p> <p>Applicants no longer affiliated with your agency should have their subscriptions disabled. It is unlawful to view criminal history records for persons who are no longer affiliated with your agency.</p> <p>If you have any questions please contact our Criminal History Inquiry Unit at 512/424-2365.</p>	

b6  
b7C  
b7E

	<h2 style="text-align: center;">Applicant Clearinghouse Inquiry From a Qualified Entity</h2>

## Next Generation Identification - Rap Back

---

- Accepted the IETF recommendations:
  - Unlimited enrollment time period with the ability to set an expiration date.
  - Follow-up notification on Subscription Renewal
  - Follow-up notification on Prenotification
  - Resend Prenotification follow up after 15 days with no response
  - Follow up by the FBI

## Next Generation Identification - Rap Back (cont.)

---

- States should be provided the ability to opt out of receiving the state triggered events
- The agency has the option to receive the entire Identity History Summary or only the event that triggered the RAP Back response

Bill Name: No Child Left Behind Act of 2007  
Designation: S 1775  
Sponsor: Richard Burr (R-NC) 07/12/07  
Cosponsor: 0-D, 3-R (as of 10/31/08)

Sections 4222 and 4223 would require the Office of Justice Programs to develop model screening guidelines to include a criminal background check. The Secretary of Education is authorized to award grants to those entities that have conducted background checks on mentors in accordance with these guidelines. The bill does not indicate how these checks would be conducted.

Bill Name: Patient Safety & Abuse Prevention Act of 2007  
Designation: S 1577  
Sponsor: Herb Kohl (D-WI) 06/07/07  
Cosponsor: 12-D, 4-R (as of 10/31/08)  
Status: **Reported in the Senate, as amended 09/22/08**

Section 3 of the bill expands the pilot program, as established under Section 307 of the Medicare Prescription Drug, Improvement, & Modernization Act of 2003, to be conducted on a nationwide basis. The bill requires a state and FBI fingerprint criminal history background check on applicants and employees of skilled nursing facilities and long-term care facilities, who have direct access to patients. It also requires the state to develop "rap back" capability. **Section 5 of the bill, which required the FBI to develop "rap back" capability by January 1, 2011, was deleted when the bill was amended.**

Bill Name: Patient Safety & Abuse Prevention Act of 2007  
Designation: HR 3078  
Sponsor: Timothy Mahoney (D-FL) 07/18/07  
Cosponsor: 6-D, 0-R (as of 10/31/08)

House version of S 1577.

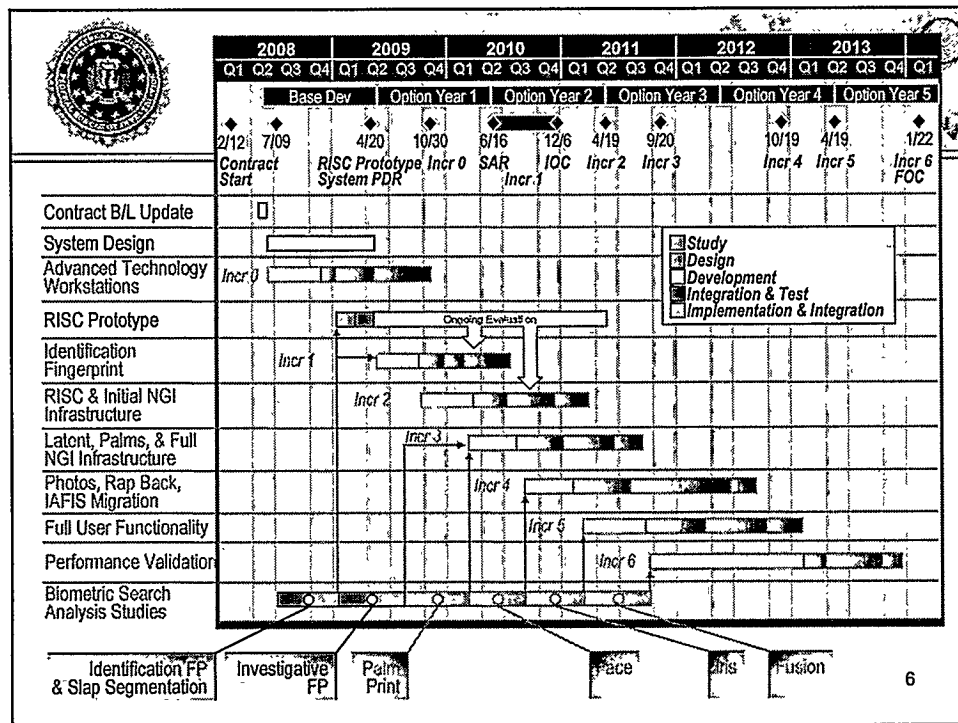


## Biometric Search Analysis Studies



- Identification Fingerprint and Slap Fingerprint Segmentation Study
- Investigation (Latent) Fingerprint Study
- Palmprint Study
- Facial Recognition Study
- Iris Recognition Study
- Fusion Study

5

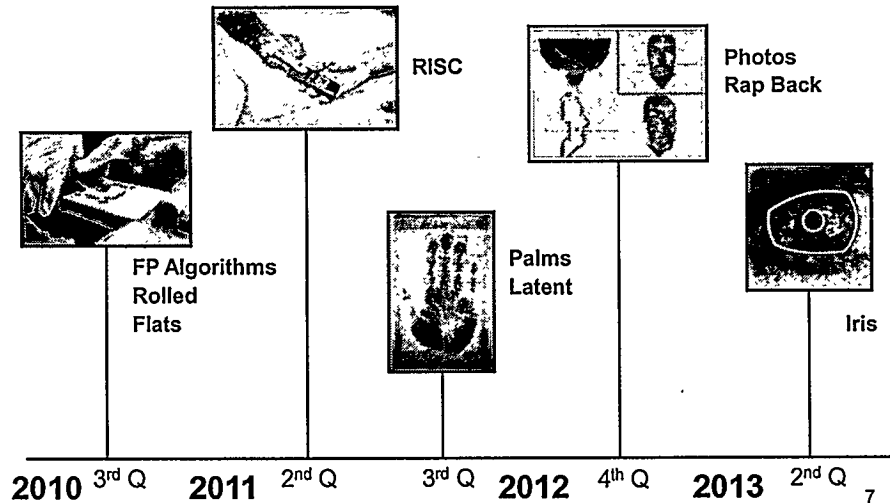


6



## Tentative Implementation Dates

NEXT  
GENERATION  
IDENTIFICATION



## NGI Privacy Considerations

NEXT  
GENERATION  
IDENTIFICATION

- **Privacy Impact Assessment (PIA)**
  - Section 208 of the E-Government Act of 2002 requires that U.S. Government agencies conduct PIAs before procuring or developing information technology systems that collect, maintain, or disseminate identifiable information.
  - PIA examines the type of information that will be collected, its intended use, and who will use the information.
- **System of Records Notice (SORN)**
  - Required by the Privacy Act
  - Lets the public know:
    - What information is being stored
    - Under what authority the information is being collected
    - How long the information will be used/retained
    - How it is routinely used
    - To whom the information is being provided

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206918-0

Total Deleted Page(s) = 4  
Page 88 ~ Duplicate;  
Page 95 ~ Duplicate;  
Page 111 ~ Duplicate;  
Page 173 ~ Duplicate;

XXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXX

# IDENT Overview

- **DHS Is Large IAFIS User**
  - 1,057 ORIs
  - 5,340,935 Transactions (2005)
    - 2,345,987 (Criminal)
    - 2,904,948 (Civil)
  
- **Significant Positive Impact For Data Sharing**
  - >200K IAFIS Hits for Criminal Trxs (2005)
  - >35K IDENT Hits Against Wants & Warrants (Since 2002)
  
- **New Enhancements Will Expand and Improve Sharing**
  - Transition to 10-Print/Interoperability
  - Unified IDENT
  - Pilot Data Sharing (iDSM)
    - Expungements
    - Rap Back



b7E



# IAFIS Interoperability Requirements

## ○ **Provide New Functionality**

- **Automated Updates between Systems**
- **Civil and Criminal File Linking**
- **Response format with most recent information listed first**
- **DHS Biometric Unique Identifier added to IAFIS**
- **Capture multiple biographic fields**
- **Return photo with response**
- **Identify rolled, flats, slaps, latents**
- **Identify why a record was changed**
- **RapBack**



## Action Item Follow Up (Continued)

### Action Items Update From Last DIRB:

3. Evaluate use on N-DEx subscription and search/investigative capabilities
  - NGI objectives are formally defined by higher authority (Executive Directive, Congressional Mandate, DOJ/FBI Strategic Plans, etc.)
  - NGI will not duplicate data that is managed by N-DEx.
  - NGI will provide common services for N-DEx (and other CJIS SOS environments) to seamlessly access NGI-managed data
  - No functional overlap exists between NGI and N-DEx (or other CJIS SOS environments)





# NGI: IIETF Prioritization



1. Advanced Fingerprint Identification Technology
2. Enhanced Repository
  - Civil File Enhancements and Rapback
  - National Palm Print System (NPPS)
  - Multi-Modal Framework
  - Interstate Photo System (Mugshots)
2. Disposition Reporting Improvements
4. Latent Services
5. QC Automation

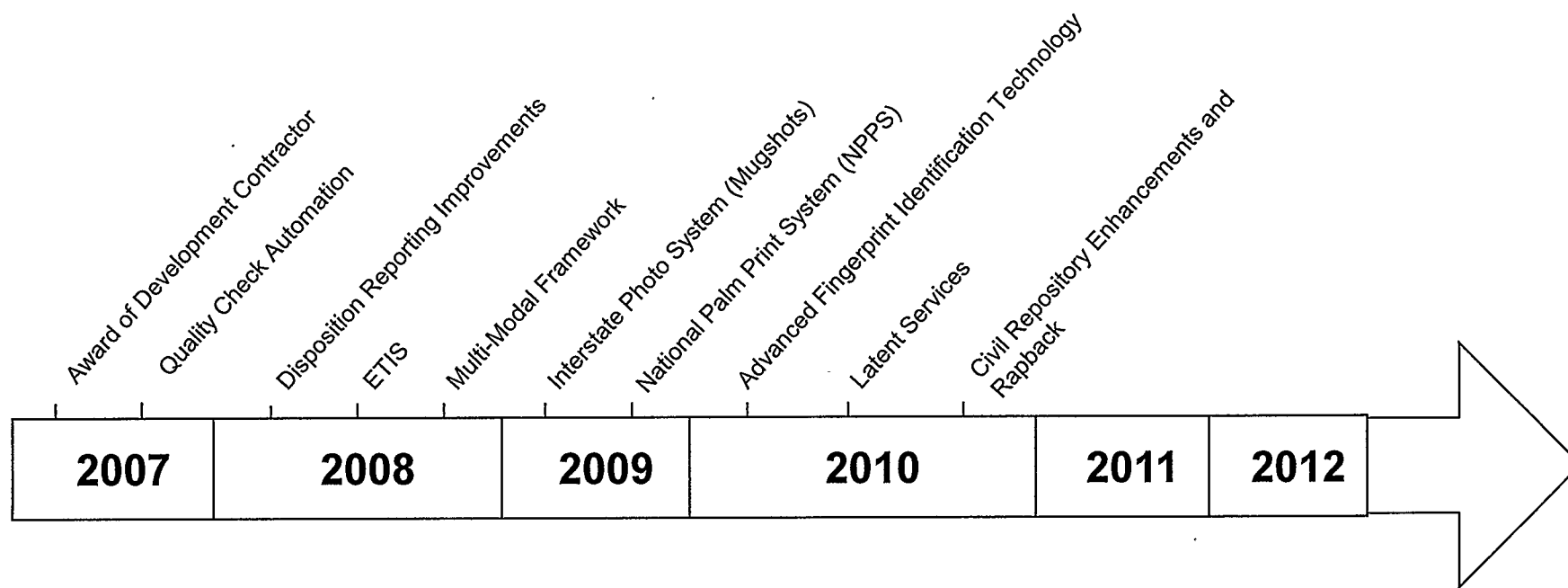
4/25/2012

Restricted Information  
FBI/CJIS Employees Only – No Contractors

18



# NGI Time Line



\*Implementation dates are estimates and may change based on the results of the NGI study and based on funding availability.



# Summary



Business Line	FY2008	FY2009	FY2010	FY2011	FY2012
Next Generation Identification	<ul style="list-style-type: none"><li>• Disposition Reporting</li><li>• ETIS</li><li>• Multi-Modal Frame-work</li></ul>	<ul style="list-style-type: none"><li>• Interstate Photo System</li><li>• National Palm Print System</li></ul>	<ul style="list-style-type: none"><li>• Advanced Fingerprint Technology</li><li>• Civil Repository Enhancements and Rapback</li></ul>		
Biometric Interoperability	<ul style="list-style-type: none"><li>• Initial Operating Capability</li></ul>		Full Operating Capability		

Rqt #	Requirements as of 04/24/2006	Dependent on NGI (The column is pending per 02/22/06 meeting)	Reason NGI dependent as of 05/03/06	Phase 1
31	The solution shall match captured prints to any stored prints within in-scope systems for identification, with a True Accept Rate of greater than 98 percent and a False Accept Rate of less than .1 percent.	YES	IAFIS accuracy will be improved and the algorithm will be used in the fingerprint searches	Yes
43	The solution shall identify records as flat prints.	YES	Improvement of processing efficiency for flats	No
74	The solution shall notify the entity that enumerated an individual when the biographic data of a subsequent civil background check is discrepant from the biographic data associated with the enumerated individual.	YES	Due to the Civil information	No
75	The solution shall notify the user if a civil background check on an individual has been submitted by an entity dealing with critical infrastructure.	YES	Due to the Civil information	No
79	The solution shall display any biometrically-linked information on an enumerated individual to a DOS consular official:  - Digital facial photograph  - IDENT watchlist and recidivist information  - Minimum biographic information - First Name, Last	YES	Due to the digital facial photograph and civil information	Yes - Digital facial
80	The solution shall display any biometrically-linked information on an enumerated individual at POE primary. This information shall include:  - Digital facial photograph  - Minimum biographic information - First Name, Last Name, Date of Birth, Gender, Associated Identity Document Number (e.g., passport numbers, BCC	YES	Due to the digital facial photograph and civil information	Yes - Digital facial
81	The solution shall provide the ability to expand the display of any biometrically-linked information on an enumerated individual at POE primary. This information shall include:  - Other biographic information that currently exists within IDENT - AKA, Associated Number(s), FBI Number, Alien Number, Social Security, Visa Number, Additional Number(s) and Sources, Biographic Descriptors, Sex, Race, Skin Tone, Height, Eye Color, Place of Birth,	YES	Due to the digital facial photograph and civil information	Yes - Digital facial



# Agenda - Day 1

## March 27, 2012

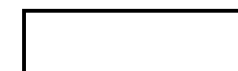


- 01:00 PM Service Provider HMIs
- 02:30 PM Workload Management
- 02:45 PM Break
- 03:00 PM Universal Facial Workstation
- 03:30 PM User Fee Billing HMI & Reports
- 03:45 PM Special Processing/Stops Design
- 04:00 PM Rap Back Conops & Design
- 05:00 PM Adjourn



b6  
b7C

NoblisTBD /



CJIS TBD /



CJIS TBD /

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206918-0

Total Deleted Page(s) = 1  
Page 298 ~ b7E;

XXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXX





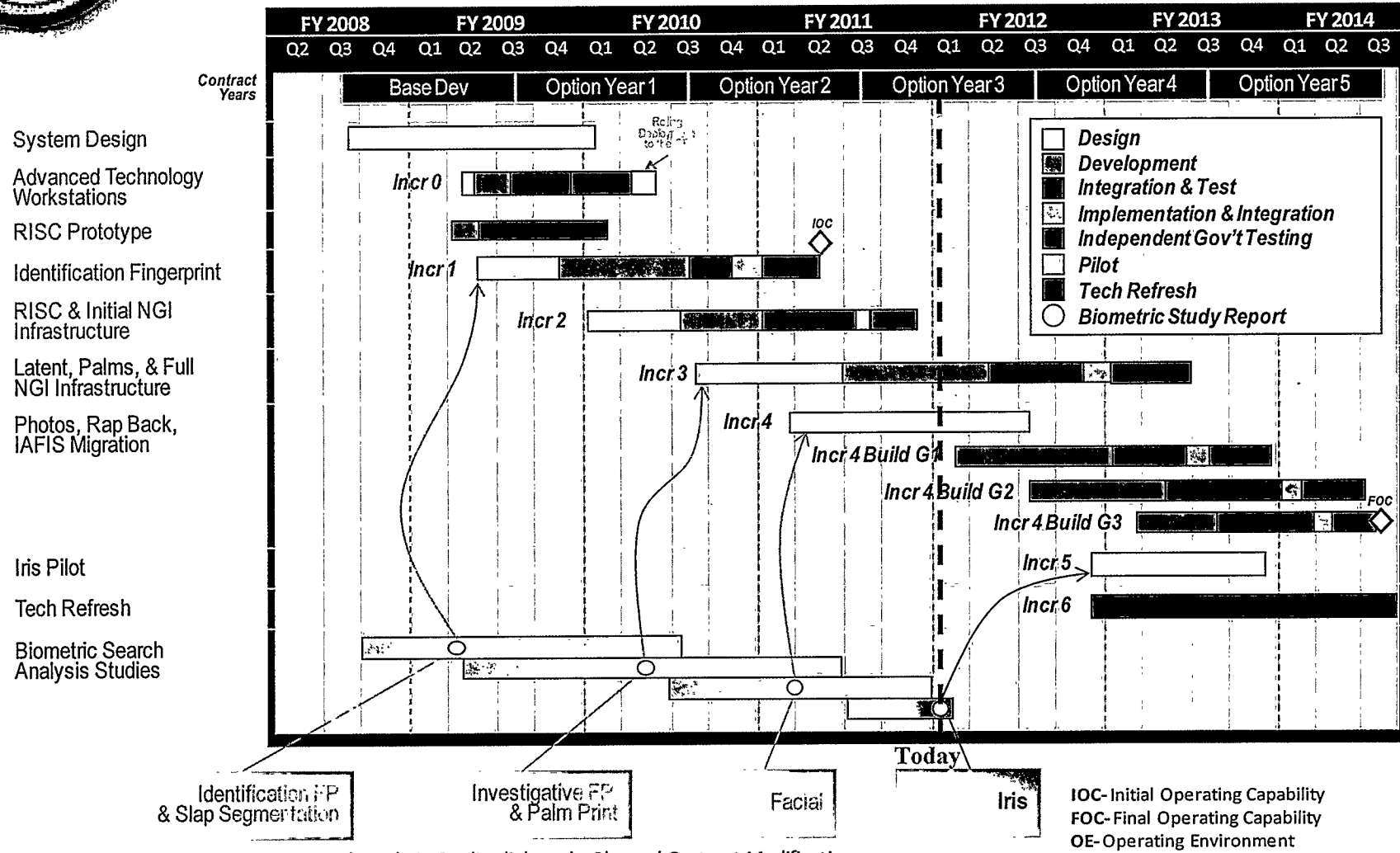
# NGI Implementation Schedule

Increment 0	Increment 1	Increment 2	Increment 3	Increment 4	Increment 5	Increment 6
Complete	Complete	Complete	In Progress	In Progress	In Progress	
<b>Advanced Technology Workstations</b>	<b>Initial Operational Capability</b>	<b>RISC and Initial NGI Infrastructure</b>	<b>Palms and Latents</b>	<b>Rap Back, Facial, Photo/SMT Search Capabilities</b>	<b>Iris Pilot</b>	<b>Technology Refreshment</b>
<ul style="list-style-type: none"> <li>Replace obsolete hardware</li> <li>Provide high resolution of biometrics</li> </ul>	<ul style="list-style-type: none"> <li>Identification Fingerprint Search Capability</li> <li>More accurate searches</li> <li>Better support for rolled/flat processing</li> </ul>	<ul style="list-style-type: none"> <li>Repository for Individuals of Special Concern (RISC)</li> <li>Rapid mobile searches</li> <li>RISC Web Services</li> </ul>	<ul style="list-style-type: none"> <li>Investigative Palm Print search capabilities</li> <li>National Palm Print repository</li> <li>Latent Enhancements</li> <li>Unsolved Latent File cascaded searches</li> <li>Rapid DHS CBP response</li> </ul>	<ul style="list-style-type: none"> <li>Improved Response Times</li> <li>Facial and SMT searches</li> <li>IAFIS Functionality Replaced</li> <li>Verification</li> <li>Enhanced Interoperability</li> <li>Disposition type of transactions</li> <li>Web Services</li> </ul>	<ul style="list-style-type: none"> <li>Trade study report</li> <li>Conduct Iris Pilot based on trade study results</li> </ul>	

2010 2014



# NGI Development Timeline

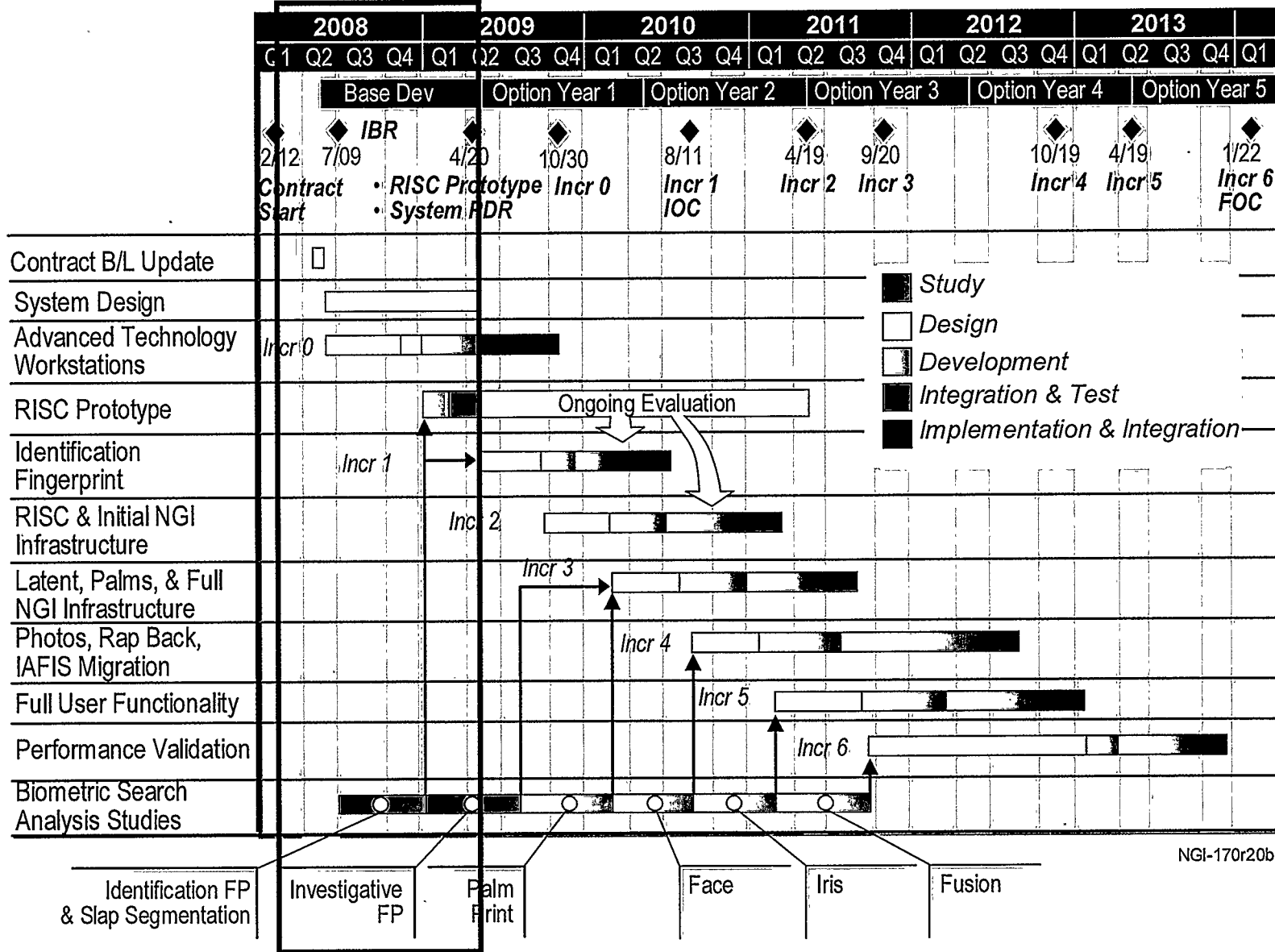


Biometric Search Analysis Studies link to the Planned Contract Modifications.

IOC- Initial Operating Capability  
 FOC- Final Operating Capability  
 OE- Operating Environment



# Project Schedule Overview



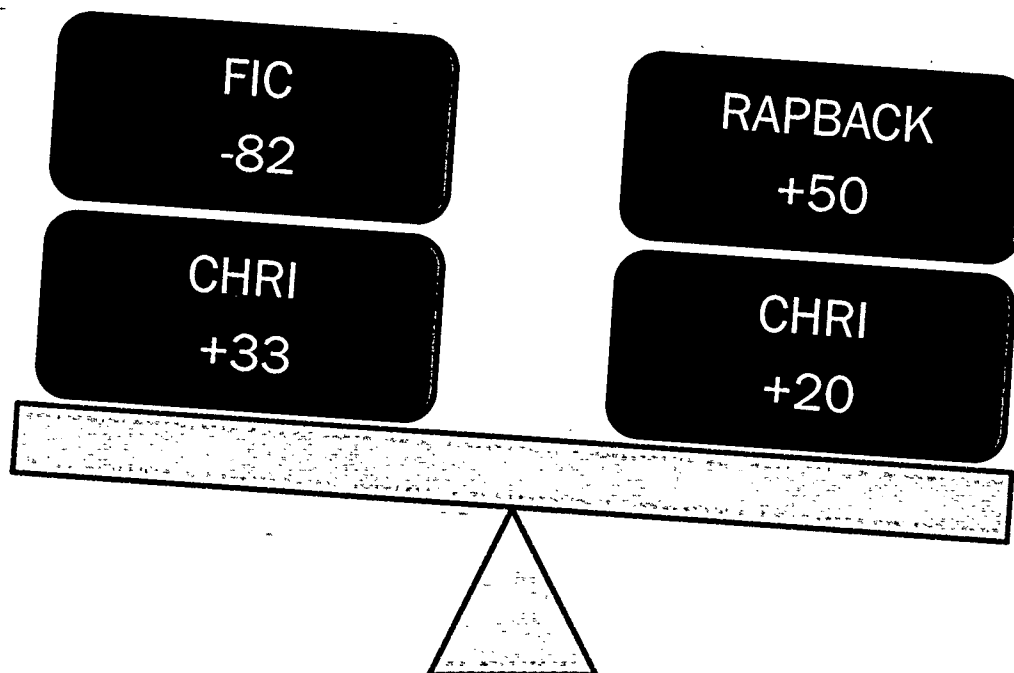
# ~~RAPBACK SERVICE~~

---

- Establish a Rapback service to provide national fingerprint based criminal history background checks on civil applicants.
- By 2014, conversion project will be complete and automation of flashes, expungements and dispositions should have occurred which will dedicate staff to be reutilized for this service.
- If this should occur, 50-100 employees would be available to standup Rapback Team.

2011

2014/2015



FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206918-0

Total Deleted Page(s) = 1  
Page 125 ~ b7E;

XXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXX

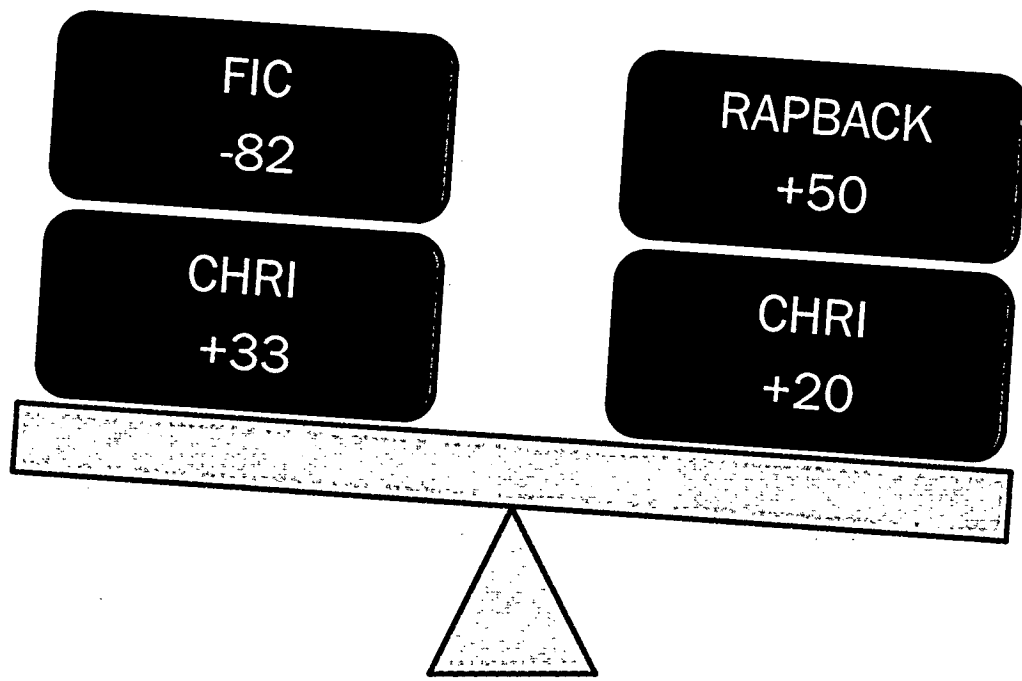
# RAPBACK SERVICE

---

- Establish a Rapback service to provide national fingerprint based criminal history background checks on civil applicants.
- By 2014, conversion project will be complete and automation of flashes, expungements and dispositions should have occurred which will dedicate staff to be reutilized for this service.
- If this should occur, 50-100 employees would be available to standup Rapback Team.

2011

2014/2015





7/27/2011

## RAPBACK SERVICE

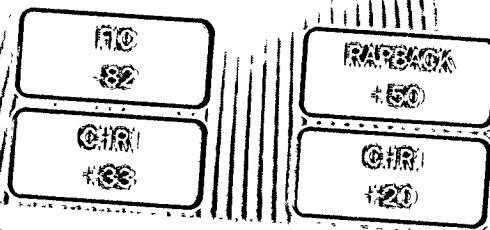
- Establish a Rapback service to provide national fingerprint based criminal history background checks on civil applicants.
- By 2014, conversion project will be complete and automation of flashes, expungements and dispositions should have occurred which will dedicate staff to be reutilized for this service.
- If this should occur, 50-100 employees would be available to standup Rapback Team.

51

7/27/2011

2011

2014/2015



52

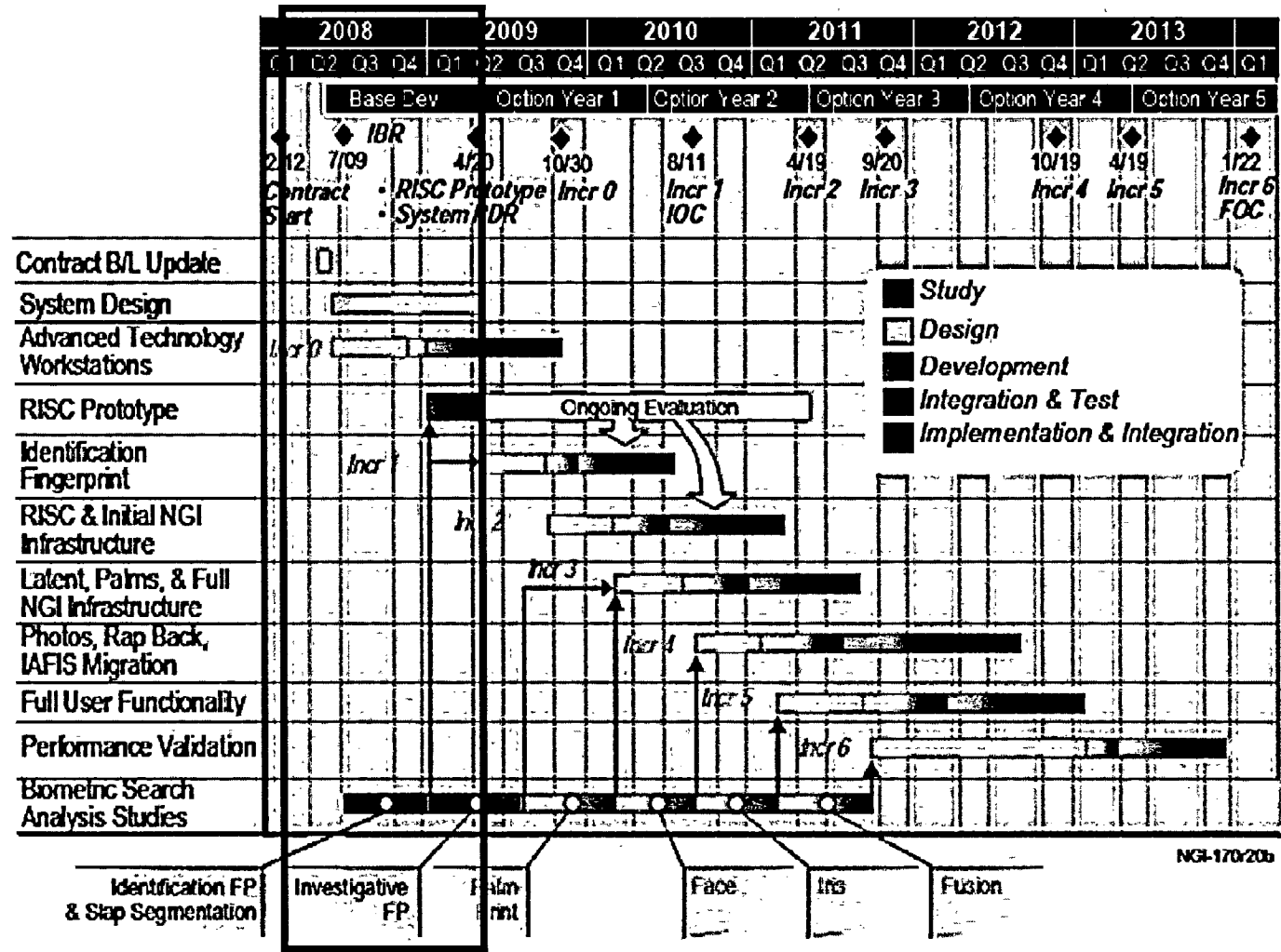
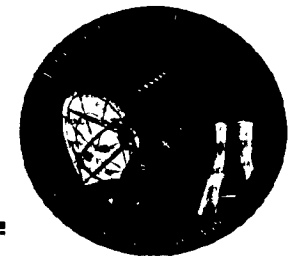
# Initiative II



- More Complete Criminal History Record Information Database
  - **Enhance Civil File**
    - **Expand functionality to provide new services**
      - Ability to search and modify records
      - Rap Back for those in positions of trust
      - Advanced search capabilities
      - Assist victims of identity theft
      - ETIS
    - **Four Zones**



# Proposed Functional Deployment



October 14, 2004

**Questions from the Office of Management and Budget  
Relating to the FBI's policy on Reinvestigations and Fingerprinting**

**Question:** What is the FBI's policy on reinvestigations and fingerprinting? Does an individual who previously underwent a criminal history record check need to be re-fingerprinted each time he/she undergoes a re-investigation?

There is no FBI policy that requires an individual to be fingerprinted each time there is a re-investigation. However, the FBI does strongly recommend re-printing to ensure the FBI's master fingerprint records are reflective of current fingerprints. Differences between the master fingerprint record maintained by the FBI and a subject's current fingerprints, such as new scars and/or amputations can slow a fingerprint background check.

In recognition of agencies needs to simplify the background check process, the FBI's Fiscal Year 2006 budget request for the Next Generation Integrated Automated Fingerprint Identification System (IAFIS) includes a proposal to implement a "RapBack" functionality whereby interested employment and licensing agencies will allow the FBI to retain civil fingerprint records based on a state or federal statute. The FBI would automatically notify the interested agency if an individual who has attained a position of trust has subsequently been arrested (and that arrest record has been reported to the FBI).

On 04/14/2008, the CJIS Division initiated an Activity Based Costing and User Fee Analysis study to determine, justify, and document the full cost of providing IAFIS billable services so that a fair and equitable price can be set. This effort is currently in the final stages and includes a cost analysis as well as a pricing analysis which will impact the level of the current user fees being charged.

The CJIS Division is considering to propose a separate fee for the RapBack functionality; however, not enough information was available concerning the exact business practices to determine the cost, price, and fee amounts at this time. As a result, RapBack was not included in the current study and will be revisited in the FY 2010 study. However, the CJIS Division has examined several options for billing this service to include the following: 1) an annual enrollment fee, 2) monthly maintenance fee, or 3) fee charge for each RapBack transaction. In addition, the CJIS Division plans to followup with states the are currently utilizing RapBack to gain best practices, lessons learned, and additional ideas on how to charge for RapBack. As more information becomes available, the CJIS Division will also work with the FBI's Finance Division, Department of Justice, and Office of Management and Budget to ensure compliance with all necessary procedures to implement this fee.

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206919-0

Total Deleted Page(s) = 10

- Page 12 ~ b7E;
- Page 13 ~ b7E;
- Page 17 ~ b7E;
- Page 20 ~ b7E;
- Page 39 ~ b7E;
- Page 117 ~ b7E;
- Page 146 ~ b7E;
- Page 150 ~ b7E;
- Page 184 ~ b7E;
- Page 197 ~ b7E;

```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206919-0

Total Deleted Page(s) = 9

- Page 63 ~ b7E;
- Page 64 ~ b7E;
- Page 69 ~ b5; b7E;
- Page 89 ~ b7E;
- Page 93 ~ b7E;
- Page 95 ~ b5; b7E;
- Page 106 ~ b5; b7E;
- Page 154 ~ b7E;
- Page 240 ~ Duplicate;

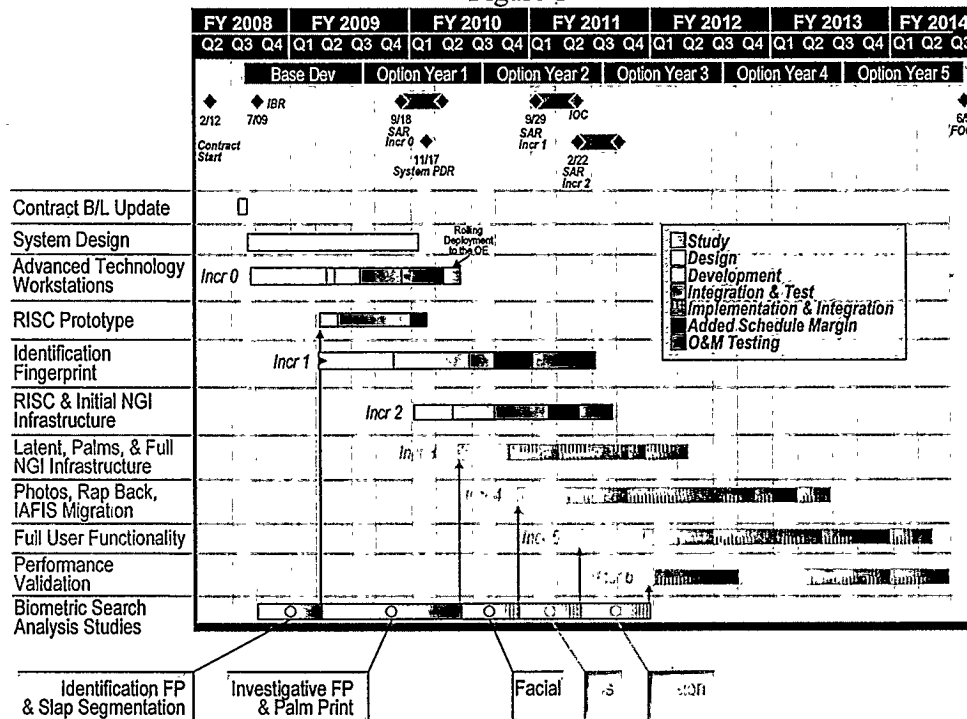
```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

provide a rapid identification search of a limited population using a minimum of two rolled or flat fingerprints. The limited population is anticipated to contain records for Wanted Persons, Known or Suspected Terrorists, Sex Offender Registry Subjects, and other persons of special interest.

- Enhanced IAFIS Repository (EIR) – The EIR capability will allow compatibility between existing civil and criminal repositories as well as new repositories by providing single identity management. The EIR will support the search and retrieval services for new biometric modalities such as iris images and provide administrative functions for special population files. As a new feature, a Rap Back Service will support an authorized contributor's ability to enroll identities and receive notifications regarding subjects based on selected activities.
- National Palm Print System (NPPS) – The NPPS will support the establishment of a centralized repository for palmprint data within the NGI by facilitating the search and storage of both known and unknown palmprints. The NPPS will be accessible by authorized criminal justice and noncriminal justice agencies nationwide. This new capability will enable criminal justice agencies to search latent palmprints obtained from crime scenes against a national repository, enhancing law enforcement's ability to solve crime.

To accomplish this scope, the FBI's NGI Program Office is managing a ten-year (base year plus nine option years) development and integration and operations and maintenance contract that was awarded to Lockheed Martin Corporation (LMC) in May 2008. NGI will be delivered fully in six increments during the first seven years of the project. The NGI Incremental Development Plan (IDP) describes NGI services and capabilities (functions, interfaces, and capacities) that will be available with the deployment of each increment. Figure 1 below shows the overlapping nature of the NGI increments.

Figure 1

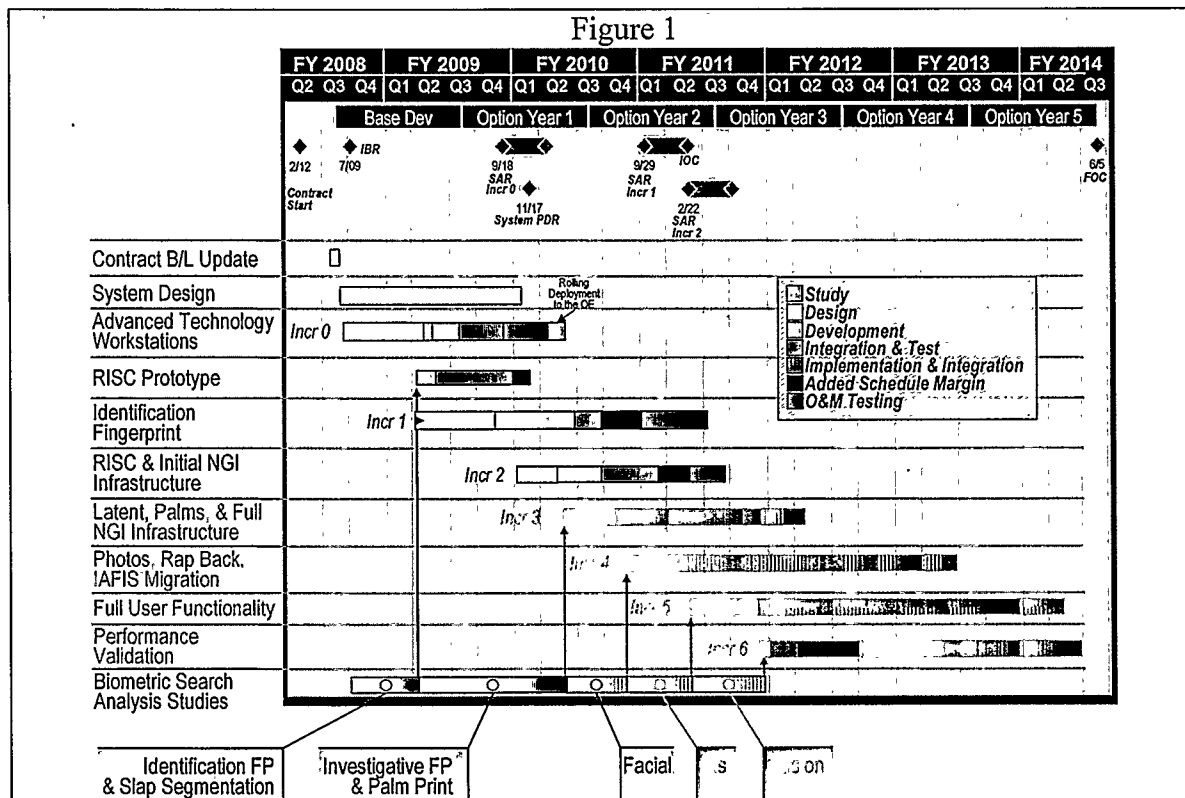




records for Wanted Persons, Known or Suspected Terrorists, Sex Offender Registry Subjects, and other persons of special interest.

- Enhanced IAFIS Repository (EIR) – The EIR capability will allow compatibility between existing civil and criminal repositories as well as new repositories by providing single identity management. The EIR will support the search and retrieval services for new biometric modalities such as iris images, and provide administrative functions for special population files. As a new feature, a Rap Back Service will support an authorized contributor's ability to enroll identities and receive notifications regarding subjects based on selected activities.
- National Palm Print System (NPPS) – The NPPS will support the establishment of a centralized repository for palmprint data within the NGI by facilitating the search and storage of both known and unknown palmprints. The NPPS will be accessible by authorized criminal justice and noncriminal justice agencies nationwide. This new capability will enable criminal justice agencies to search latent palmprints obtained from crime scenes against a national repository, enhancing law enforcement's ability to solve crime.

To accomplish this scope, the FBI's NGI Program Office is managing a ten-year (base year plus nine option years) development and integration contract that was awarded to Lockheed Martin Corporation (LMC) in May 2008. NGI will be delivered fully in six increments during the first seven years of the project. The NGI Incremental Development Plan (IDP) describes NGI services and capabilities (functions, interfaces, and capacities) that will be available with the deployment of each increment. Figure 1 below shows the overlapping nature of the NGI increments.



# Project Baseline Agreement (PBA)

## Project Background Information

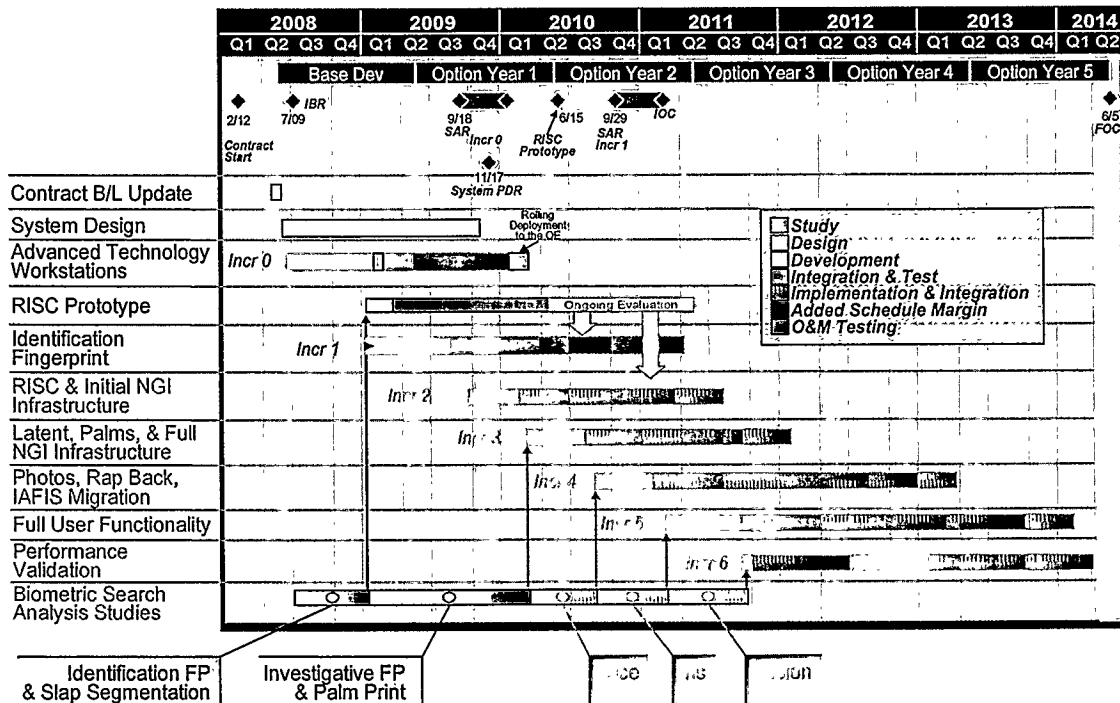
**Program Name:** Next Generation Identification (NGI) Program

**Program Description:** The FBI has initiated the Next Generation Identification (NGI) program in response to advances in technology, customer requirements, and the increasing capacity and performance demands placed upon the Integrated Automated Fingerprint Identification System (IAFIS). This program will advance the FBI's biometric identification services, providing an incremental replacement of IAFIS, while introducing essential new functionality. NGI will offer state-of-the-art biometric identification services and provide a flexible framework of core capabilities that will serve as a platform for multi-modal functionality as well as increased capacities, and shorter response times.

NGI will also allow the FBI to establish a fingerprint identification system that is compatible with other biometric systems; increase the accessibility and number of fingerprint records; and provide latent palmprint search capabilities. NGI will enable the FBI to provide biometric and biographic services to enhance interoperability between stakeholders at all levels of government, including local, state, federal, and international partners. NGI will accommodate the increasing need for pre-employment background checks, licenses, and will support the increase in border patrol and entry/exit checks.

The NGI system will be delivered in six increments as illustrated in Figure 1 below. Table 1 lists the objectives, functionality, and benefits to be delivered by each NGI increment.

**Figure 1: NGI Incremental Development Approach**



FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206919-0

Total Deleted Page(s) = 3  
Page 113 ~ Duplicate;  
Page 114 ~ Duplicate;  
Page 144 ~ Duplicate;

XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX



UNCLASSIFIED (FOUO WHEN FILLED IN)

**FBI IT PROJECT  
REGISTRATION FORM**



**General Information**

The NGI is a compilation of capabilities that will improve, expand, and create new biometric identification services for the criminal justice, national security, and civil communities. The NGI framework will be expandable, scalable, and flexible to be interoperable with existing systems, such as DHS Automated Biometric Identification System (IDENT).

**Increment 4: Photos, Rap Back, IAFIS Migration Design**

- Retirement of legacy IAFIS
- Full deployment of NGI functional requirements

b7E



UNCLASSIFIED (FOUO WHEN FILLED IN)

### FBI IT PROJECT REGISTRATION FORM



General Information	
<b>Justification</b> [List any mandates, legal requirements, or business/technical needs that this project will satisfy.]	Increment 4 will provide for the retirement of the legacy IAFIS and full deployment of the NGI System. The functionality that will be made available will include the Rap Back Service, which will provide timely notification of activity that occurs after the initial processing and retention of criminal or civil fingerprint transactions [redacted]
	[redacted]
	NGI supports priorities one, two, nine, and ten of the FBI's Strategic Plan; and Goals one, two, and three of the DOJ Strategic Plan. The NGI will support Priority one (Protect the United States from terrorist attack) and Priority two (Protect the United States against foreign intelligence operations and espionage) of the FBI's Strategic Plan, along with Goal one (Prevent terrorism and promote the nation's security) of the DOJ Strategic Plan by providing faster, more reliable services. Full [redacted] Shared Services will support Priority one (Protect the United States from terrorist attack) and Priority two (Protect the United States against foreign intelligence operations and espionage) of the FBI's Strategic Plan, along with Goal one (Prevent terrorism and promote the nation's security) of the DOJ Strategic Plan by providing interoperable services.
<b>Start Date</b> [MM/DD/YYYY]	09/29/2010
<b>Estimated Completion Date</b> [MM/DD/YYYY]	12/29/2013 (SAR)

b7E

\*\*\* Email the Capital Planning Unit's BIKR team ([BIKR@fbinet.fbi](mailto:BIKR@fbinet.fbi)) with any questions regarding this form  
January 2011



UNCLASSIFIED



# Project Overview

<b>PROGRAM NAME:</b>	Next Generation Identification (NGI)		
<b>PROJECT NAME:</b>	NGI Increment 4		
<b>ASSOCIATED INVESTMENT NAME:</b>	Next Generation Identification (NGI)		
<b>BRIEF PROJECT DESCRIPTION:</b>	Increment 4: Photos, Rap Back, IAFIS Migration Design - Retirement of legacy IAFIS - Full deployment of NGI functional requirements		
<b>SPONSORING BRANCH / DIVISION:</b>	Science & Technology Branch (STB) / CJIS Division		
<b>BRANCH / DIVISION RANKING:</b>	1st		
<b>PERIOD OF PERFORMANCE:</b>	09/29/2010 to 06/05/2014		
<b>LIFE CYCLE FUNDING (\$M):</b>	<b>Plan/Design:</b> <input type="text"/>	<b>Develop/Deploy:</b> <input type="text"/>	<b>O&amp;M:</b> Managed at the Program Level
			<b>TOTAL:</b> <input type="text"/>

b7E

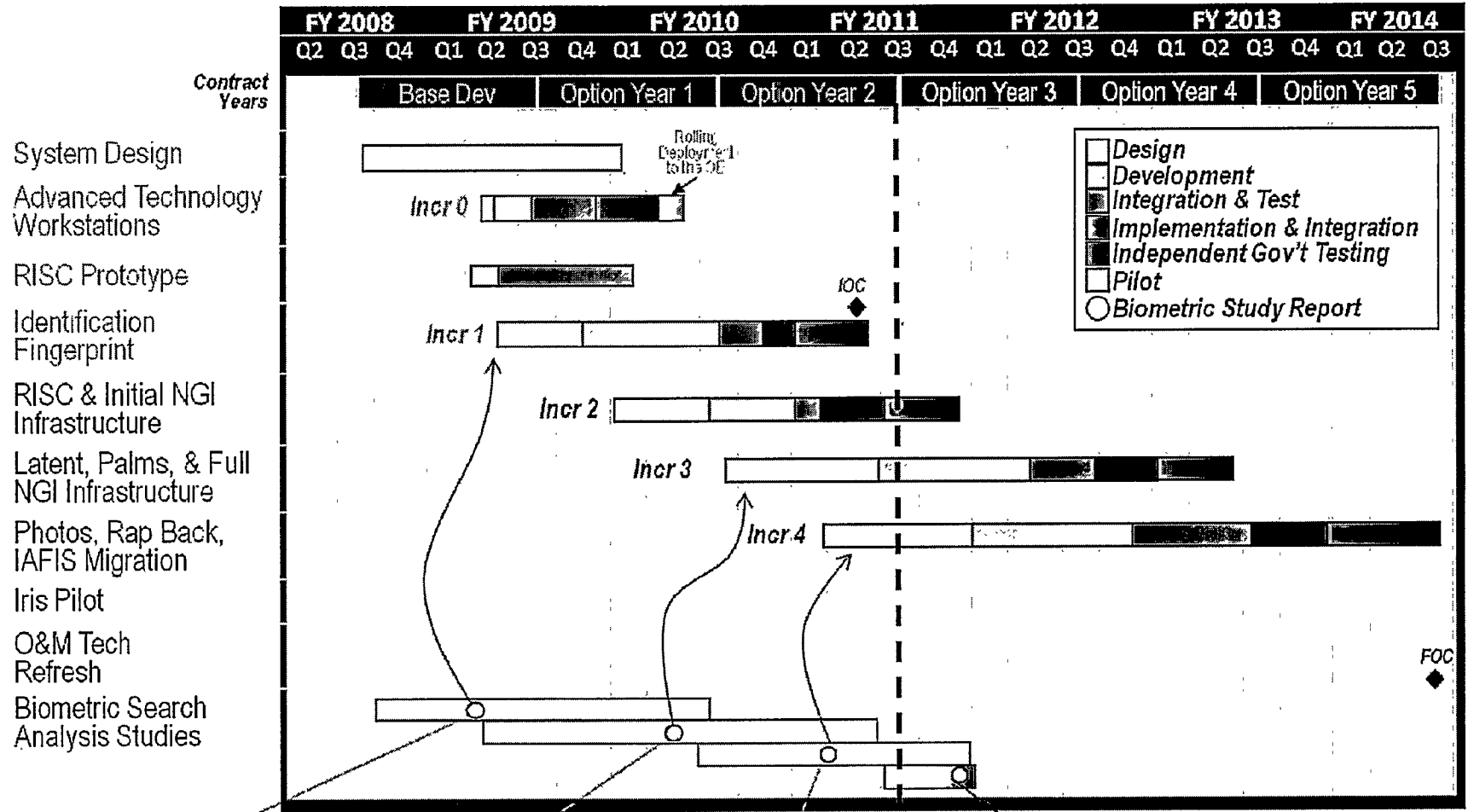
UNCLASSIFIED



UNCLASSIFIED



# Integrated Master Schedule



Identification FF & Slap Segmentation

Investigative FF & Palm Print

Facial As of 8/9/2011

Iris

Biometric Search Analysis Studies link to the Planned Contract Modifications.

IOC- Initial Operating Capability  
 FOC- Final Operating Capability  
 OE- Operat ng Environment

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206919-0

Total Deleted Page(s) = 3  
Page 113 ~ Duplicate;  
Page 114 ~ Duplicate;  
Page 144 ~ Duplicate;

XXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXX





UNCLASSIFIED (FOUO WHEN FILLED IN)

**FBI IT PROJECT  
REGISTRATION FORM**



**General Information**

The NGI is a compilation of capabilities that will improve, expand, and create new biometric identification services for the criminal justice, national security, and civil communities. The NGI framework will be expandable, scalable, and flexible to be interoperable with existing systems, such as DHS Automated Biometric Identification System (IDENT).

**Increment 4: Photos, Rap Back, IAFIS Migration Design**

- Retirement of legacy IAFIS
- Full deployment of NGI functional requirements

b7E



UNCLASSIFIED (FOUO WHEN FILLED IN)

### FBI IT PROJECT REGISTRATION FORM



General Information	
<b>Justification</b> [List any mandates, legal requirements, or business/technical needs that this project will satisfy.]	Increment 4 will provide for the retirement of the legacy IAFIS and full deployment of the NGI System. The functionality that will be made available will include the Rap Back Service, which will provide timely notification of activity that occurs after the initial processing and retention of criminal or civil fingerprint transactions [REDACTED]
	[REDACTED]
	NGI supports priorities one, two, nine, and ten of the FBI's Strategic Plan; and Goals one, two, and three of the DOJ Strategic Plan. The NGI will support Priority one (Protect the United States from terrorist attack) and Priority two (Protect the United States against foreign intelligence operations and espionage) of the FBI's Strategic Plan, along with Goal one (Prevent terrorism and promote the nation's security) of the DOJ Strategic Plan by providing faster, more reliable services. Full DHS Shared Services will support Priority one (Protect the United States from terrorist attack) and Priority two (Protect the United States against foreign intelligence operations and espionage) of the FBI's Strategic Plan, along with Goal one (Prevent terrorism and promote the nation's security) of the DOJ Strategic Plan by providing interoperable services.
<b>Start Date</b> [MM/DD/YYYY]	09/29/2010
<b>Estimated Completion Date</b> [MM/DD/YYYY]	12/29/2013 (SAR)

b7E

\*\*\* Email the Capital Planning Unit's BIKR team ([BIKR@fbinet.fbi](mailto:BIKR@fbinet.fbi)) with any questions regarding this form  
January 2011



UNCLASSIFIED



# Project Overview

<b>PROGRAM NAME:</b>	Next Generation Identification (NGI)		
<b>PROJECT NAME:</b>	NGI Increment 4		
<b>ASSOCIATED INVESTMENT NAME:</b>	Next Generation Identification (NGI)		
<b>BRIEF PROJECT DESCRIPTION:</b>	Increment 4: Photos, Rap Back, IAFIS Migration Design - Retirement of legacy IAFIS - Full deployment of NGI functional requirements		
<b>SPONSORING BRANCH / DIVISION:</b>	Science & Technology Branch (STB) / CJIS Division		
<b>BRANCH / DIVISION RANKING:</b>	1st		
<b>PERIOD OF PERFORMANCE:</b>	09/29/2010 to 06/05/2014		
<b>LIFE CYCLE FUNDING (\$M):</b>	<b>Plan/Design:</b> <input type="text"/>	<b>Develop/Deploy:</b> <input type="text"/>	<b>O&amp;M:</b> Managed at the Program Level
			<b>TOTAL:</b> <input type="text"/>

b7E

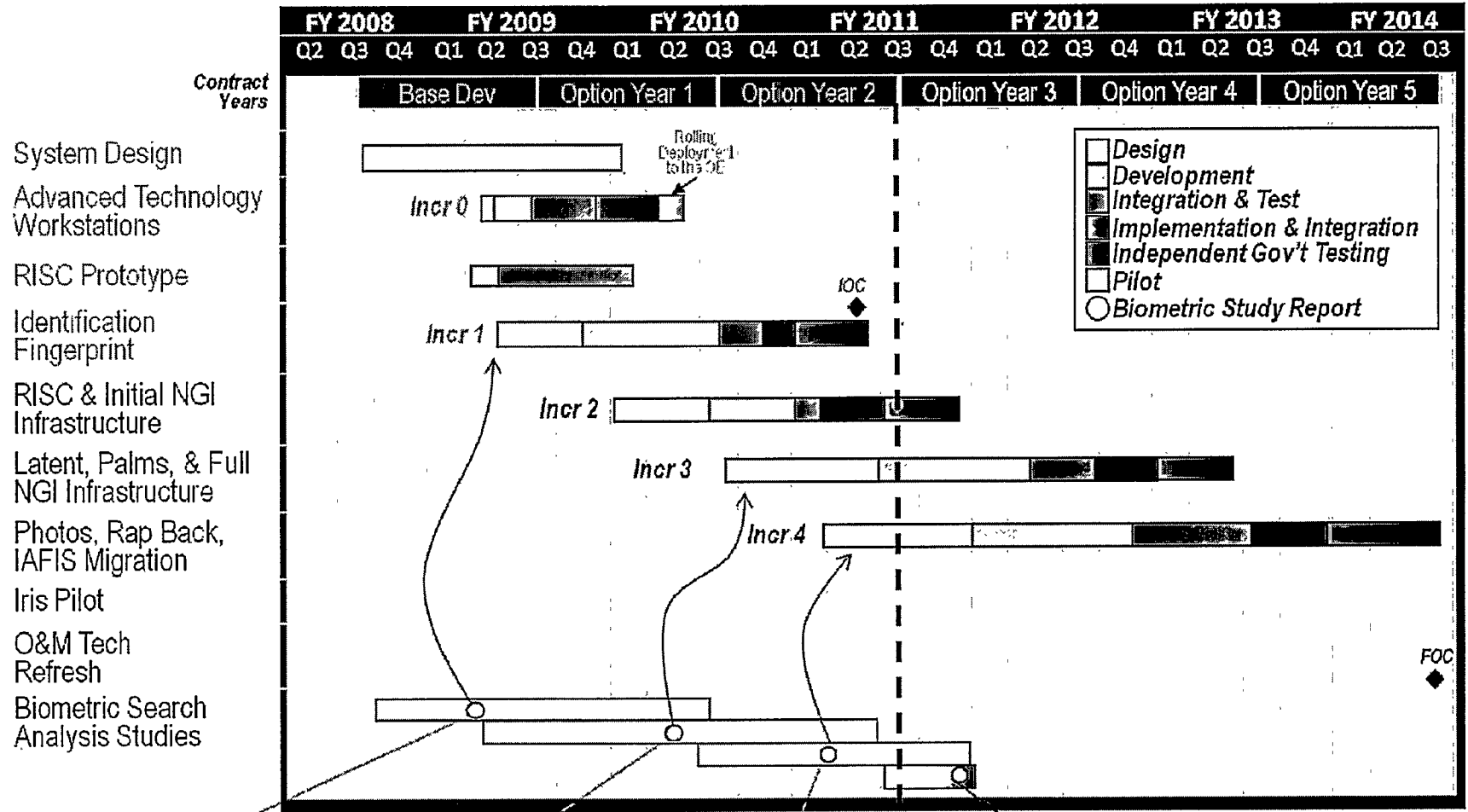
UNCLASSIFIED



UNCLASSIFIED



# Integrated Master Schedule



Identification FF & Slap Segmentation

Investigative FF & Palm Print

Facial As of 8/9/2011

Iris

Biometric Search Analysis Studies link to the Planned Contract Modifications.

IOC- Initial Operating Capability  
 FOC- Final Operating Capability  
 OE- Operat ng Environment

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206919-0

Total Deleted Page(s) = 6

Page 94 ~ b5; b7E;

Page 97 ~ b5; b7E;

Page 117 ~ b5;

Page 211 ~ b5; b7E;

Page 214 ~ b5; b7E;

Page 235 ~ b5;

XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206919-0

Total Deleted Page(s) = 2  
Page 109 ~ b7E;  
Page 184 ~ b7E;

XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206919-0

Total Deleted Page(s) = 4  
Page 19 ~ b7E;  
Page 76 ~ Duplicate;  
Page 81 ~ Duplicate;  
Page 143 ~ b7E;

XXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXX

## Scope and Requirements Management Plan

NGI: Increased number of photo sets accepted; new avenues to add and retrieve photos; ability to search for facial, scar, mark, or tattoo photos

b7E

- **Disposition Reporting Improvements (DRI)**

Current IAFIS: 46% of arrest records have disposition data. There are the following three ways to submit disposition information:

- United State Postal Service
  - State and Federal Court Orders
  - Computerized Forms devised and approved by the State
  - Identification Bureau
  - R-84 Final Disposition Report
- Machine Readable Data (MRD), III
- Including disposition information with the initial fingerprint submission

NGI: Provides electronic alternatives for submitting disposition data to IAFIS

b7E

- **Enhanced IAFIS Repository (EIR)**

Current IAFIS: Two logical areas, Criminal and Civil File; the entire Civil File is not electronically maintained; unable to move data between files; no automated response for Civil searches

NGI: "Rap Back" capability; reorganization of records; ability to handle unique national security needs; able to retain flat fingerprints

b7E



## Scope and Requirements Management Plan

NGI: Increased number of photo sets accepted; new avenues to add and retrieve photos; ability to search for facial, scar, mark, or tattoo photos

b7E

- **Disposition Reporting Improvements (DRI)**

Current IAFIS: 46% of arrest records have disposition data. There are the following three ways to submit disposition information:

- United State Postal Service
  - State and Federal Court Orders
  - Computerized Forms devised and approved by the State
  - Identification Bureau
  - R-84 Final Disposition Report
- Machine Readable Data (MRD), III
- Including disposition information with the initial fingerprint submission

NGI: Provides electronic alternatives for submitting disposition data to IAFIS

b7E

- **Enhanced IAFIS Repository (EIR)**

Current IAFIS: Two logical areas, Criminal and Civil File; the entire Civil File is not electronically maintained; unable to move data between files; no automated response for Civil searches

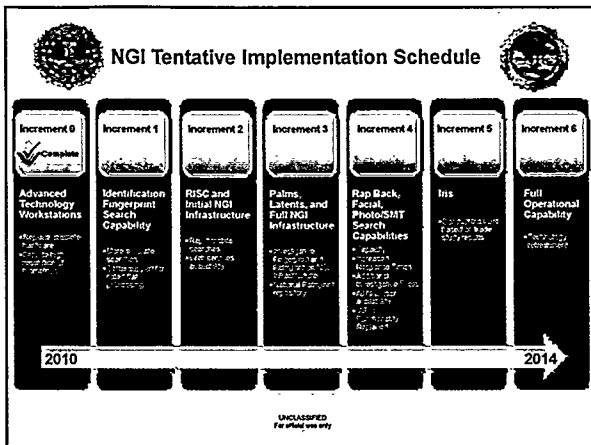
NGI: "Rap Back" capability; reorganization of records; ability to handle unique national security needs; able to retain flat fingerprints

b7E

FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206919-0

Total Deleted Page(s) = 2  
Page 208 ~ b7E;  
Page 275 ~ Duplicate;

XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX



### Increment 0 Advanced Technology Workstations (ATW)

- Installed and currently improving operational effectiveness
- Improved workstations are providing high resolution of biometrics

Completed March 2010

Improved workstations provide a cost effective way to accommodate new technologies for the future

UNCLASSIFIED  
For official use only

### Increment 1 AFIT Deployment

- AFIT deployed to replace legacy AFIS
  - Implements products selected through biometric trade study
  - Resulting changes
    - Faster algorithm processing
    - Improved search accuracy
    - New validation algorithms for image quality and sequence check
    - Improved flat print searching
    - Supports operational comparison prior to cutover to NGI AFIT

UNCLASSIFIED  
For official use only

### Increment 1 AFIT Deployment

- Conversion of IAFIS fingerprint images
  - Prior to operational usage, IAFIS fingerprint images will be re-characterized by AFIT
  - Limited parallel run with AFIS
    - Ensures continuity and stability
    - Supports operational comparison prior to cutover to NGI AFIT
- IAFIS users will experience:
  - No business process changes
  - More accurate fingerprint searches
    - Increased frequency of file maintenance notifications triggered by consolidations

UNCLASSIFIED  
For official use only

### Increment 2 NGI RISC Services

- Critical Design Review (CDR) - Complete
- Currently in design phase
- Provides RISC capability nationally
- RISC Functionality
  - Available to authorized criminal justice agencies
  - New algorithm
  - EBTS unsolicited messages made available
  - Ability to request rap sheet

UNCLASSIFIED  
For official use only

### Rap Back Service Components

- Notification
- Expiration Date
- Subscription Renewal Notification
- Type of Activity
- In-State Activity
- Subscription List
- Maintenance
- User Fees

UNCLASSIFIED  
For official use only



## Rap Back Service Compact Council



- Compact Council formed Rap Back Task Force
  - August 2009
  - Noncriminal justice focus
  - All states invited to attend
- IIETF Rap Back discussions
  - October 2009
  - Criminal focus

UNCLASSIFIED  
For official use only

13



## Rap Back Service



- Rap Back Task Force Meeting
  - March 23, 2010
  - San Antonio, Texas
  - All states invited to attend
- Core issues
  - Civil data
  - Fee assessment
  - Responses and notifications
  - Privacy

UNCLASSIFIED  
For official use only

14



## Rap Back Service



- Issue
  - Providing civil information in response to civil submissions
- Result
  - Endorsed for national security submissions

UNCLASSIFIED  
For official use only

15



## Rap Back Service



- Issue
  - Individual requests to remove civil records
- Result
  - FBI to explore process to provide individuals with copy of their civil record
  - States will still control entry and deletion

UNCLASSIFIED  
For official use only

16



## Rap Back Service



### Rap Back Task Force

- Issue
  - Billing Assessments
- Result
  - Direct enrollment Billing Concept
  - Indirect enrollment Billing Concept
- Overwhelming support

UNCLASSIFIED  
For official use only

17




## NGI Transition




- EBTS Version 9.0
  - Re-organized into NGI User Services
    - Identification
    - Verification
    - Information
    - Investigation
    - Notification
    - Data Management
- EBTS Version 9.1
  - Now available at [www.fbi biospeccs.org](http://www.fbi biospeccs.org)

UNCLASSIFIED  
For official use only

18




## Palm Prints and Latents (Increment 3)



**Establishes the National Palm Print System**


**Status**

- Investigation (Latent) Fingerprint and Palm Print
- Working in Design phase
- Completed successful Preliminary Design Review in December 2010




**Resulting Benefits**

- Enables palm prints to be searched across the U.S.
- Palm prints have the potential of 30% higher conviction rates
- Provides rapid response for DHS Customs and Border Protection transactions
- More latent identifications to support terrorist and violent crime investigations
- Upgraded Universal Latent Workstation software




UNCLASSIFIED  
For official use only

7



## Rap Back, Facial, SMT Search Capabilities, Migration of Remaining IAFIS Functionality (Increment 4)

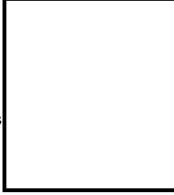


**Status**

- Currently in initial design
- Rap Back notification of criminal activity on previously enrolled individuals
- Facial Search
- Text based scars, marks, and tattoo (SMT) searches
- Enhanced Interoperability to include transition of shared services to NGI
- Fingerprint verification services
- Improved response times


**Resulting Benefits**

- Enhance public safety
- National level investigative searches of photos/SMTs
- More accurate and complete criminal history records
- Flexible and scalable architecture for future needs




UNCLASSIFIED  
For official use only

b6  
b7C




## NGI Face Pilot




- NGI is implementing a Facial Recognition Pilot
  - Target date
    - April 2011
  - Will support facial image searches
  - Return an investigative candidate list
- Universal Facial Workstation software
- Currently soliciting participation

UNCLASSIFIED  
For official use only

9




## NGI Transition




- Electronic Biometric Transmission Specification (EBTS)
  - Version 9.1
    - Released May 25, 2010
    - Vetted through the IETF
    - Available at [www.fbi biospecs.org](http://www.fbi biospecs.org)
- NGI User Conference
  - August 17, 2010
  - San Diego, California
- Next NGI User's Conference
  - To be held in conjunction with the Fall Working Groups

UNCLASSIFIED  
For official use only

10



## Contact Information



**Federal Bureau of Investigation  
Criminal Justice Information Services Division  
Next Generation Identification Program Office**

**Jon Kevin Reid  
Deputy Program Manager**  
Telephone:

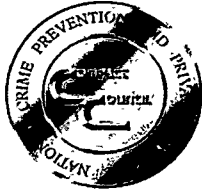
NGI Web Page: <http://www.fbi.gov/hq/cjisd/ngi.htm>  
Email NGI: [FBINGI@leo.gov](mailto:FBINGI@leo.gov)

UNCLASSIFIED  
For official use only

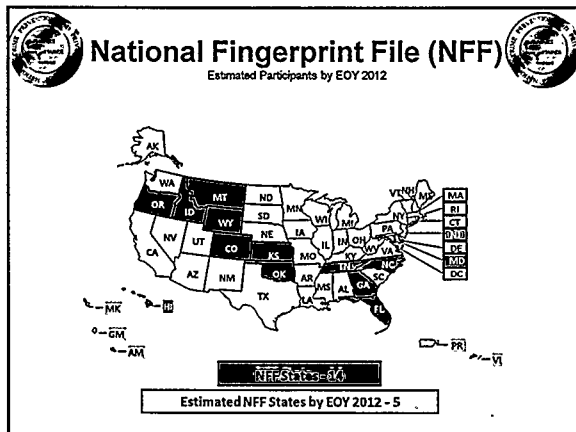
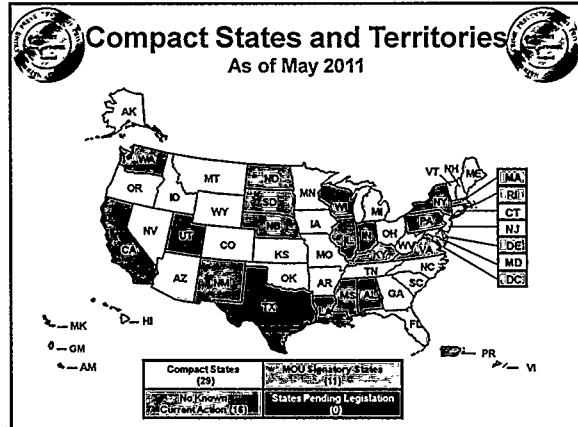
11

b6  
b7C

## National Crime Prevention and Privacy Compact Council Update




Ms. Liane M. Moriyama,  
Compact Council Chairman




- ### Compact Council Direction
- Partnership
  - Collaboration, Innovation, Incentives, True ID
  - Noncriminal justice partners with criminal justice
  - Congressional legislation:
    - FAA Reauthorization
    - Castor amendment reappears in HR 1690
    - White House meetings for National Security

- ### Current Council Initiatives
- Compact Language Review, Clarification of Article IV(c)
  - Documenting Information on Federal Privacy Rights of the Background Check Process
  - Rap Back Task Force

- ### Compact Language Review, Clarification of Article IV(c)
- Council was requested to discuss and provide input regarding:
    - the terms "official purpose" and "new need"
    - how these terms should be applied to background checks of persons with direct/unescorted access to children, elderly, and disabled
  - Sharing background check results for like purposes, biometric/facial image, must participate in federal rap back program, provide adequate notice at time of fingerprinting




## Palm Prints, Latents and Rapid Response (Increment 3)



**Establishes the National Palm Print System**


**Status**

- Completed successful Critical Design Review
- Working towards System Acceptance Review
- Target Deployment - Spring, 2013




**Resulting Benefits**

- Enables palm prints to be searched across the U.S.
- Palm prints have the potential of 30% higher conviction rates
- Provides rapid response for DHS Customs and Border Protection transactions
- More latent identifications to support terrorist and violent crime investigations
- Upgraded Universal Latent Workstation software




UNCLASSIFIED  
For official use only

7




## Rap Back, Facial, SMT Search Capabilities, Migration of Remaining IAFIS Functionality (Increment 4)



**Status**

- Rap Back
- Facial Search
- Text based scars, marks, and tattoo (SMT) searches
- Enhanced Interoperability
- Fingerprint verification services
- Improved response times
- Target Deployment - Summer, 2014




**Resulting Benefits**

- Enhance public safety
- National level investigative searches of photos/SMTs
- More accurate and complete criminal history records
- Flexible and scalable architecture for future needs


UNCLASSIFIED  
For official use only

8

b6  
b7C




## Rap Back Activities



- Reviewing Best Practices and Lessons Learned
  - Currently identified 27 states with Rap Back business lines
  - Strategic discussions to align with a national implementation
- Identifying Business/Policy Focus Areas
- Going Forward
  - Engage IETF and Rap Back Task Force
  - Continue working with Subject Matter Experts

UNCLASSIFIED  
For official use only

9




## NGI Face Pilot




- Face matching system will be available in Summer 2011
  - Currently the repository consists of 7.5 million Local/State/Federal searchable photos
  - Focus on contributor image quality
- Universal Facial Workstation software
- Currently soliciting participation
  - MOU with Michigan has been executed
  - Working with Washington, Florida, North Carolina and Hawaii
  - Contact (304) 625-3437 for more information

UNCLASSIFIED  
For official use only

10




## NGI Users Conference




- August 17, 2011, Pittsburgh, Pennsylvania
  - Held in conjunction with the Fall Working Groups
  - Topics to include:
    - NGI AFIT deployment and related success stories
    - Rapid Mobile Search
    - Palms and Latents
    - Rap Back
    - Photo/Facial

UNCLASSIFIED  
For official use only


11



## Contact Information



Federal Bureau of Investigation  
Criminal Justice Information Services Division  
Next Generation Identification Program Office



Telephone: 

NGI Web Page: <http://www.fbi.gov/hq/cjis/ngi.htm>  
Email NGI: [FBINGI@leo.gov](mailto:FBINGI@leo.gov)

UNCLASSIFIED  
For official use only

12

b6  
b7C

**Rap Back, Facial, SMT Search Capabilities, Migration of Remaining IAFIS Functionality (Increment 4)**

**Status**



- Facial Search
- Text based scars, marks, and tattoo (SMT) searches
- Rap Back
- Enhanced Interoperability
- Fingerprint verification services
- Improved response times

**Resulting Benefits**

- Enhance public safety
- National level investigative searches of photos/SMTs
- More accurate and complete criminal history records
- Flexible and scalable architecture for future needs

UNCLASSIFIED  
For official use only

7

**NGI Face Pilot**



- Face matching system will be available December 2011
  - 8.5 million Local/State/Federal searchable photos at deployment
  - Focus on contributor image quality

– Contact  for more information

UNCLASSIFIED  
For official use only

8

b6  
b7C  
b7E

**Iris Pilot & Technology Refreshment (Increments 5 & 6)**

**Iris Pilot**

- Iris Trade Study Report delivered
- Deploys all remaining NGI user functionality
  - Iris Repository

**Resulting Benefits**



- Enhanced correctional officer safety
- Less interaction
- Quicker acquisition
- Reliable
- Business value

**Technology Refreshment**

- Additional system tuning to meet non-functional requirements
- Review hardware and software to ensure the deployed versions are the latest available

UNCLASSIFIED  
For official use only

9






**NGI Readiness Assessment**

- How prepared are the states to participate in NGI capabilities when deployed?
  - Collecting information to determine the baseline for the nation and each individual state (Ongoing)
  - Develop an implementation strategy for the nation and individual states based on their level of readiness and desired participation (Next Steps)
    - Develop and provide Increment specific Implementation/User Guides

UNCLASSIFIED  
For official use only

10

**Contact Information**

Federal Bureau of Investigation  
Criminal Justice Information Services Division  
Next Generation Identification Program Office

Kevin Reid,  
Deputy Program Manager

Telephone:

NGI Web Page: <http://www.fbi.gov/hq/cjisd/ngi.htm>  
Email NGI: [FBINGI@leo.gov](mailto:FBINGI@leo.gov)

UNCLASSIFIED  
For official use only

11

b6  
b7C



FEDERAL BUREAU OF INVESTIGATION  
FOI/PA  
DELETED PAGE INFORMATION SHEET  
FOI/PA# 1206919-0

Total Deleted Page(s) = 55

Page 4 ~ b5; b6;  
Page 5 ~ b5; b6;  
Page 6 ~ b5; b6;  
Page 7 ~ b5; b6;  
Page 8 ~ b5; b6;  
Page 9 ~ b5; b6;  
Page 10 ~ b5; b6;  
Page 11 ~ b5; b6;  
Page 12 ~ b5; b6;  
Page 13 ~ b5;  
Page 14 ~ b5;  
Page 15 ~ b5;  
Page 16 ~ b5;  
Page 17 ~ b5;  
Page 18 ~ b5;  
Page 19 ~ b5;  
Page 20 ~ b5;  
Page 21 ~ b5;  
Page 22 ~ b5;  
Page 23 ~ b5;  
Page 24 ~ b5;  
Page 25 ~ b5;  
Page 26 ~ b5;  
Page 27 ~ b5;  
Page 28 ~ b5;  
Page 29 ~ b5;  
Page 30 ~ b5;  
Page 31 ~ b5;  
Page 32 ~ b5;  
Page 33 ~ b5;  
Page 34 ~ b5;  
Page 35 ~ b5;  
Page 36 ~ b5;  
Page 37 ~ b5;  
Page 38 ~ b5;  
Page 39 ~ b5;  
Page 40 ~ b5;  
Page 41 ~ b5;  
Page 42 ~ b5;  
Page 43 ~ b5;  
Page 44 ~ b5;  
Page 45 ~ b5;  
Page 46 ~ b5;  
Page 47 ~ b5;  
Page 48 ~ b5;  
Page 49 ~ b5;  
Page 50 ~ b5;  
Page 51 ~ b5; b6;

Page 52 ~ b5; b6;  
Page 53 ~ b5; b6;  
Page 54 ~ b5; b6;  
Page 55 ~ b5; b6;  
Page 56 ~ b5; b6;  
Page 57 ~ b5; b6;  
Page 58 ~ b5; b6;

XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X Deleted Page(s) X  
X No Duplication Fee X  
X For this Page X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX