A STATUS REPORT ON REPLACING THE NORTH CAROLINA STATEWIDE AUTOMATED FINGERPRINT IDENTIFICATION SYSTEM (SAFIS)

Developed by:
The North Carolina Department of Justice and
The North Carolina Criminal Justice Information Network Governing Board

Presented to The Subcommittee on Justice and Public Safety
of the Joint Legislative Commission on Governmental Operations

November 1, 2005

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November 1, 2005

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404 Legislative Office Building
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RE: Report to the Subcommittee for Justice and Public Safety of the Joint Legislative Commission on Governmental Operations regarding the North Carolina Statewide Automated Fingerprint Identification System

Gentlemen:

Pursuant to Section 15.9(b) of Session Law 2005-276, please find a Status Report related to the replacement of the North Carolina Statewide Automated Fingerprint Identification System (SAFIS). This is a joint report developed by the Department of Justice and the Criminal Justice Information Network Governing Board.

We will be happy to respond to any questions you may have regarding this report. Please feel free to contact me at (919) 662-4500 or Mr. Bob Brinson at (919) 716-3500.

Respectfully yours,

Robin P. Pendergraft,
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Enclosure

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EXECUTIVE SUMMARY

North Carolina must preserve this critical crime-fighting tool that supports law enforcement and protects our communities. North Carolina's Statewide Automated Fingerprint Identification System (SAFIS) is a vital law enforcement and public safety resource that serves over 500 law enforcement agencies. This equipment, which is the foundation of the state's fingerprint identification infrastructure, is nearly obsolete and must be replaced. SAFIS protects all North Carolinians by solving crimes and helping to put criminals in jail. It also keeps felons and other dangerous individuals out of positions where they could prey on our state's most vulnerable residents.

Law enforcement can use SAFIS to pinpoint a suspect in a matter of minutes using fingerprints left at a crime scene. That means rapists and murderers are arrested before they can strike again. With SAFIS, criminals have been prevented from working at the bedsides of our senior citizens and in the classrooms with our children. Hundreds of law enforcers, schools, nursing homes, and childcare facilities depend on the automated fingerprint system to disqualify job applicants with criminal records.

During the 2004 calendar year, an average of 190 fingerprint matches per day were made from fingerprint cards submitted after an arrest or in routine pre-employment screenings. Each match represents a potential employee whose name was flagged for further scrutiny or an arrestee whose criminal past was brought to the attention of law enforcement. That same year, 1,532 fingerprints from crime scenes were identified through SAFIS, providing suspects in cases where no arrest had been made. Cases like that of Bryan Christopher Bell, whose crime scene fingerprints led to his arrest and conviction for the murder of an 89 year old woman, prove the necessity of a functioning computerized fingerprint identification system.

Rapid turnaround time is one of SAFIS' most important benefits. Prior to SAFIS, criminal fingerprint searches could take up to 100 days and a full year of processing time for non-law enforcement fingerprint cards was not uncommon. With SAFIS, criminal fingerprint searches can be done in two hours, and the processing of non-law enforcement fingerprint cards is now routinely completed in one week.

SAFIS consists of central processing computer systems and more than 160 remote fingerprint facilities located within law enforcement agencies across the state. The North Carolina State Bureau of Investigation (SBI) serves as the criminal fingerprint repository for the state and has the responsibility of operating and managing SAFIS.

Although the state upgraded SAFIS equipment as recently as the mid and late 1990s, advances in fingerprint technology have outstripped North Carolina's fingerprint system. Efforts to extend the current SAFIS' usefulness and viability are ongoing, but the infrastructure has exceeded its projected lifespan. Already, submissions by law enforcement agencies and non-law enforcement entities must be carefully scheduled to prevent system overload. Although support of the existing infrastructure can be continued via maintenance contracts, this support cannot be guaranteed beyond December 31, 2006.

The increasing potential of full system breakdown, uncertainty in vendor maintenance support, and outdated technology indicate the need for a major hardware and software upgrade to SAFIS' infrastructure. SAFIS replacement requires a substantial state investment, but that investment pays dividends in increased public safety and stronger law enforcement each day the system remains online

and functioning. SAFIS replacement should take advantage of advances in automated identification technology. These technological advances include the ability to integrate palm prints and mug shots into the SAFIS database. In addition, capabilities now exist to link SAFIS to other state and federal databases for purposes of record search and suspect identification.

Funding Options:

There are two options for funding the SAFIS Replacement Project. These options are lease purchase and cash purchase, as described below.

Lease Purchase Option:
A state appropriation of $3.4 million would be required for Fiscal Year 2006-07 and an additional appropriation of $11.05 million for Fiscal Year 2007-08 to address immediate SAFIS replacement needs through a lease purchase option. These amounts include General Assembly authorization of a SAFIS Replacement Fund, which allows DOJ to reserve and set aside year end reversions for SAFIS needs. Under the lease purchase option, SAFIS equipment replacement costs could reach $33.3 million over the next six years. ***Table 1a*** below provides a three year detailed projection of funding based on lease purchase.

Table 1a: Lease Purchase Funding and Financing Option

	State Funded Expenditures	FY0506	FY0607	FY0708
1	State Equipment Lease Costs (SBI, DOC, Mecklenburg County)		$2,166,824	$2,845,699
2	Local SAFIS Replacement Program	$-	$864,000	$8,280,000
3	Operating Costs	$120,000	$3,269,120	$1,429,098
4	**Total State Expenditures**	**$120,000**	**$6,299,944**	**$12,554,797**
	Recommended State Revenue Sources			
1	Office of State Budget Management SAFIS Reserve	$1,495,000	$-	$-
2	SAFIS Replacement Fund	$-	$1,500,000	$1,500,000
3	Prior Year Carry Forward	$-	$1,375,000	$-
4	*Subtotal Annual Revenue Collections*	*$1,495,000*	*$2,875,000*	*$1,500,000*
	Remaining Balance/State Appropriation Recommendation	$-	**$3,424,944**	**$11,054,797**
5	Year End Balance for Carry Forward	($1,375,000)	$-	$-

Cash Purchase Option:
A state appropriation of $11.02 million would be required for Fiscal Year 2006-07 and an additional appropriation of $11.3 million for Fiscal Year 2007-08 to address immediate SAFIS replacement needs through a cash purchase option. Under the cash purchase option, SAFIS equipment replacement costs could reach $31.8 million over the next six years. ***Table 1b*** below provides a three year projection of funding, based on cash purchase.

Table 1b: Cash Purchase Funding and Financing Option

	State Funded Expenditures	FY0506	FY0607	FY0708
1	State Equipment Costs (SBI, DOC, Mecklenburg County)		$9,759,210	$3,057,600
2	Local SAFIS Replacement Program		$864,000	$8,280,000
3	Operating Costs	$120,000	$3,269,120	$1,429,098

4	**Total State Expenditures**	**$120,000**	**$13,892,330**	**$12,766,698**
	Recommended State Revenue Sources			
1	Office of State Budget Management SAFIS Reserve	$1,495,000	$-	$-
2	SAFIS Replacement Fund	$-	$1,500,000	$1,500,000
3	Prior Year Carry Forward	$-	$1,375,000	$-
4	*Subtotal Annual Revenue Collections*	*$1,495,000*	*$2,875,000*	*$1,500,000*
	Remaining Balance/State Appropriation Recommendation	$-	**$11,017,330**	**$11,266,698**
5	Year End Balance for Carry Forward	($1,375,000)	$-	$-

I. SYSTEM DESCRIPTION AND PROJECT STATUS REPORT

A. SYSTEM DESCRIPTION

Prior to SAFIS, processing a positive fingerprint identification of a suspect could take months. Prior to SAFIS, it was not unheard of for a criminal suspect to be placed in jail, released on bond by a magistrate, charged by a district attorney, meet with their defense attorney, and attend the first court appearance before being identified as a person with a criminal record. Since its initial implementation in 1986, SAFIS has resolved this problem by greatly reducing the time it takes to find a positive fingerprint match. The suspect can now be identified within two hours, instead of several weeks or months.

SAFIS receives and processes electronic and manually rolled fingerprint card submissions for criminal identifications, job applications, background checks, and requests for permits to carry a concealed weapon. SAFIS accepts, stores, and retrieves scanned fingerprint data, and performs automated searches and comparisons. In addition, SAFIS maintains a direct secure network link to the Federal Bureau of Investigation (FBI) and the National Crime Information Center (NCIC) to support the exchange of arrest record information and identification results at a national level. SAFIS serves as the statewide resource for positively identifying repeat offenders and unknown criminals using latent fingerprint evidence from crime scenes. ***Appendix A*** provides a graphic illustration of the SAFIS fingerprinting process and how it aides in establishing a suspect's identity.

The SAFIS infrastructure is currently comprised of the following main components:

- 3 central processing systems
- 142 remote Live Scan devices
- 20 remote latent search stations

Table 2 reflects the number of fingerprint card submissions for Fiscal Year 2004-05.

NOTE: During the 2004 calendar year, 69,416 fingerprint matches were made based on fingerprint cards submitted due to arrests or submitted for pre-employment screenings.

Table 2: Total Fingerprint Card Submissions for FY0405

FY0405	Electronic Submissions	Manually Rolled Card Submissions	Total Submissions
Criminal Fingerprint Cards	**86 %**	**14 %**	**180,042**
Non-Criminal Fingerprint Cards*	**17 %**	**83 %**	**117,801**

* Fingerprint cards submitted for job applications, background checks and concealed weapon permits.

TOTAL: 297,843

SAFIS is currently linked to North Carolina's computerized criminal history files (CCH). Once the fingerprint card has been processed by the SBI, personal information and charge-related data are automatically forwarded to CCH. Existing criminal history records are automatically updated or a new

criminal history record is established. Maintaining the link between SAFIS and CCH is essential to the law enforcement community. SAFIS is also linked to the SBI's fingerprint database, which electronically archives criminal fingerprint cards.

The current SAFIS infrastructure is considered obsolete and needs to be replaced. Although current vendor support of the existing infrastructure can be continued via maintenance contracts, the same level of support cannot be guaranteed after December 31, 2006. SAFIS replacement will require a substantial state investment, but that investment will pay dividends in increased public safety and stronger law enforcement each day the system remains online and functioning.

Central Processing Systems

The three central processing systems are responsible for searching, verifying, adding, and updating fingerprint records in the SAFIS database and adding charge-related information to CCH. These systems are comprised of input/verification stations, data entry computers, and servers that control and process the activity and transactions that flow through SAFIS. The central processing systems are located at the SBI, the Mecklenburg County Sheriff's Office (MCSO), and the North Carolina Department of Correction (DOC). Additional database servers, storage devices, and search processors are located at the SBI.

The SAFIS fingerprint database currently contains approximately 1,400,000 fingerprints. Records for those who have either been arrested in North Carolina or have been licensed to carry concealed handguns are stored in the database.

The illustration in ***Appendix B*** reflects a high level overview of SAFIS processing and its components. The infrastructure is configured in such a manner that the simultaneous upgrade to all central processing systems is essential in order to maintain system integrity and the current level of service provided by SAFIS.

Live Scan Devices

There are currently 142 Live Scan devices connected to SAFIS throughout the state. Live Scan devices capture fingerprints electronically without the use of ink and fingerprint card stock. These devices utilize computers and optical lenses to record the fingerprints in a digital format. Identifying information of the person being fingerprinted is also entered into the Live Scan device. The fingerprint images and the descriptive information are then electronically submitted to the SBI, via a state network connection. The information is received by the SBI in a format that meets standards set by FBI for processing at the national level. A Live Scan device is required in order to electronically submit fingerprints to the SBI.

Live Scan devices provide additional benefits to the contributing law enforcement agency and the entire law enforcement community:

- Consistently provide high quality fingerprint images
- Facilitate individuals' criminal history records being updated in an efficient and timely manner
- Reduces the risk of the fingerprint card being rejected due to the poor quality of the captured fingerprints

- Reduces the time required to fingerprint an individual, which saves money and lessens close-quarters contact with a suspect
- Submissions are received by the SBI more quickly than inked fingerprint cards which require mailing through the postal service
- Provide a standard format for descriptive information and associated charges which reduces the risk of a fingerprint card being rejected

In 1997, North Carolina became the first state to allow submissions of electronic fingerprint cards from Live Scan devices of multiple vendors. This has provided a competitive environment for vendors to do business in North Carolina.

Currently, eighteen counties do not have a Live Scan device from which fingerprints can be electronically submitted to the SBI. The initial purchase price of the device and the associated maintenance cost made it prohibitive for smaller law enforcement agencies. ***Table 3*** reflects the North Carolina counties who do not currently have a Live Scan device. Law enforcement officers in those counties must collect fingerprints using the manually rolled ink method. The inked fingerprint cards must then be mailed to the SBI for processing. Once these cards are received at the SBI, they must be scanned in and converted into the appropriate digital format for submission to the FBI. The Electronic Fingerprint Transmission Specification (EFTS) defines the link between the FBI and other agencies' systems and establishes a national standard for fingerprint transmissions. This conversion process is labor-intensive, time-consuming, and places considerable stress on the SAFIS workflow due to the age of the SAFIS central processing systems. ***Appendix C*** illustrates the distribution of Live Scan devices throughout North Carolina.

During the Fiscal Year 2004-05, a total of 3,375 criminal inked fingerprint cards were mailed to the SBI from the eighteen counties, which currently do not have a Live Scan device. This number represents approximately 14% of all the criminal inked fingerprint cards submitted during the past fiscal year.

Installing Live Scan devices in the counties would provide all counties the important capability to rapidly submit criminal fingerprint information and receive real-time fingerprint identification responses. This would provide the most up-to-date criminal history information to law enforcement officers. This would also place North Carolina in position to be more responsive to the ever-growing demands for criminal history information by those concerned with licensing and background checks.

Table 3: North Carolina Counties Without A Live Scan Device

Counties Without A Live Scan Device		
Alleghany	Hyde	Pamlico
Anson	Jones	Perquimans
Bertie	Madison	Scotland
Clay	Mitchell	Stokes
Greene	Montgomery	Tyrrell
Hoke	Northampton	Warren

Latent Search Stations

There are currently 20 latent search stations throughout the state. The term "latent" means hidden or unseen. A latent fingerprint is one that is advertently left at a crime scene by a suspect and then searched for and found by law enforcement personnel. Latent fingerprints require forensic processing in order to be seen with the naked eye. Once a latent fingerprint is visible, it can be searched against the SAFIS database of fingerprints by using a latent search station in an effort to find a match.

A latent search station establishes a remote two-way connection with the SAFIS database. It allows a fingerprint examiner to search a latent fingerprint against fingerprints currently stored in SAFIS. Once the latent fingerprint has been submitted for searching, SAFIS will transmit back to the fingerprint examiner a list of possible identifications. The fingerprint examiner will then conduct a side-by-side comparison to determine if a match exists. ***Appendix D*** illustrates the distribution of the 20 latent search stations throughout North Carolina.

The ability to search latent fingerprints from crime scenes makes SAFIS a remarkable crime-fighting tool. It can pinpoint or eliminate suspects, and enhances the important detective work of law enforcement officers. During the 2004 calendar year, **1,532** latent fingerprints from crime scenes were identified through remote latent search stations. The following are representative examples in which SAFIS technology brought dramatic crime fighting results to communities across North Carolina:

- ***Bryan Christopher Bell***. In January 2000, the body of Elleze Kennedy, an 89-year-old woman, was found dead in the trunk of her car. A fingerprint identified by the SBI via SAFIS was used to arrest Bryan Christopher Bell. Bell was subsequently convicted of first-degree murder and now sits on death row.

- ***Jermaine Gamble***. In July 2004, an 11-year-old boy, Bradley Eugene Way, was kicked to death in an abandoned trailer in Lee County. A fingerprint from the crime scene was identified by the Cumberland County Sheriff's Office via SAFIS. The fingerprint was identified as belonging to Gamble who was subsequently arrested for first-degree murder.

- ***Jose Rivera.*** In February 2004, Wake County City-County Bureau of Identification identified a fingerprint collected from the scene of an armed robbery. The fingerprint was identified as belonging to Jose Rivera. As a result of this SAFIS fingerprint identification, numerous robbery cases along the east coast were subsequently solved.

- ***Andrew Wiggins.*** In January 1999, a nurse was abducted from a Caribou Coffee Shop in the Charlotte area by Wiggins who assaulted her from behind and forced her into a vehicle. She was driven to a secluded spot, severely beaten, thrown in the trunk and left for dead. A fingerprint collected from the trunk-area of the vehicle was identified by the Charlotte/Mecklenburg Police Department via SAFIS as belonging to Andrew Wiggins.

- ***Monterio Outen.*** In 1998, while running *cold* burglary/rape cases from the early 1980s through SAFIS, the Gastonia Police Department identified suspect Monterio Outen. As a result

of the SAFIS fingerprint identification, eight burglary/rape cases were solved. Outen had just been entered in the SAFIS for an arrest in Fayetteville in August of 1997.

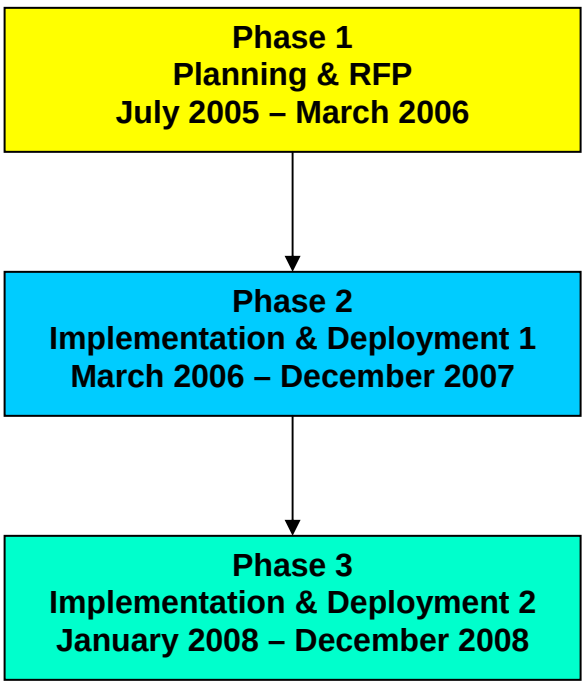
The risks to the citizens of North Carolina and all of the SAFIS stakeholders are critical and profound if SAFIS is no longer operational. SAFIS supports mission critical applications for both law enforcement and non-law enforcement stakeholders. Law enforcement stakeholders utilize SAFIS as an important investigative tool that includes apprehension and prosecution of criminals. Non-law enforcement entities utilize the system to conduct fingerprint-based background checks, which are mandated or authorized by North Carolina General Statutes for specific purposes. They include applications for employment, licenses, adoptions, and permits.

B. PROJECT STATUS REPORT

With sufficient funding, the SAFIS Replacement Project is planned to span approximately three years. The project is designed to be executed in three distinct phases. It is essential that the transition and migration to the upgraded SAFIS environment be seamless, so critical fingerprint services provided to SAFIS stakeholders are not negatively impacted. An incremental approach will be utilized to facilitate managing the complexity of this project. Precise integration of all SAFIS components will be essential. Existing data and history must retain its integrity. Careful planning, applicable checkpoints during execution, and the scheduling of appropriate time for all necessary tasks will be paramount for the project's success.

With adequate funding and after all necessary approvals are received, the project will move forward. Phase 2 and Phase 3 will be executed in sequence. They are dedicated to the incremental implementation and deployment of the new SAFIS infrastructure, which includes the central processing systems and the remote equipment.

Illustration 1: SAFIS Replacement Project Plan



The SAFIS Replacement Project is currently in Phase 1. The SBI and the Department of Justice Information Technology Division (DOJ/ITD) are working in collaboration to procure a fingerprint systems expert to develop the SAFIS Replacement RFP. The RFP will include the business requirements and technical specifications associated with the existing SAFIS environment. Vendors will be requested to submit bid responses that will detail complete solutions and recommendations to replace the SAFIS infrastructure. After all submitted proposals are reviewed and the selection process is completed, a formal recommendation will be presented to The Subcommittee on Justice and Public Safety of the Joint Legislative Commission on Governmental Operations by March 1, 2006.

II. COST ESTIMATES AND OPTIONS FOR FUNDING

A. COST ESTIMATES – REPLACEMENTS, MAINTENANCE, OPERATING COSTS

The following provides estimates on equipment replacement, maintenance, and operating costs. A detailed breakdown of projected costs can be found in ***Appendix H***.

Replacement Equipment - Equipment replacement includes the SBI main central processing system and storage servers, the satellite central processing systems located at DOC and MCSO, the SBI business recovery system, remote Live Scan devices, and latent search stations. Cost of Live Scan devices may be as much as $48,000 each, and may vary depending on the volume of fingerprints processed and the equipment capacity. Latent search station costs per unit range from $100,000 to $120,000 each. ***Table 4*** describes cash purchase estimates for replacing this equipment. These costs may increase by 20% or more depending on final vendor selection and equipment conversion needs. These amounts address the replacement of 130 of 142 Live Scan devices. The difference of 12 devices represents newly purchased devices which may not require immediate replacement. Exact pricing cannot be provided until the competitive bid process is completed in early 2006.

Table 4: Equipment Replacement Estimates

		FY0607	FY0708	TOTAL
	CASH PURCHASE OF SAFIS EQUIPMENT			
1c	SBI Central Hardware/Database	$6,340,455	$-	**$6,340,455**
2c	NC Dept. of Correction System	$1,216,240	$-	**$1,216,240**
3c	Mecklenburg County System	$575,980	$-	**$575,980**
4c	SBI Hardware - Business Continuity	$-	$2,548,000	**$2,548,000**
5c	Replace 130 Remote Live Scan Devices	$-	$5,200,000	**$5,200,000**
6c	Replace 17 Latent Search Stations	$-	$1,700,000	**$1,700,000**
7c	**Total Estimated Cash Expenditures**	**$8,132,675**	**$9,448,000**	**$17,580,675**

SOURCE: Motorola Corporation January 29, 2004, replacement quotation.

Please note that the equipment described above can be purchased through a lease purchase financing approach which can reduce overall expenses for FY0607 and FY0708. While reducing annual payment amounts, lease purchase financing will require additional financing and interest expenses over the term of the lease (three to five years).

Maintenance costs – Most new equipment is expected to be provided with a minimum one-year warranty. After the warranty period, licensing and maintenance costs are projected to range from 10 percent to 20 percent of cash acquisition costs. The SBI will likely have to run parallel SAFIS central processing systems until the new SAFIS central processing systems are installed, tested, and operational and the older systems are dismantled. As a result, in Fiscal Year 2007-08, the SBI will have to maintain two maintenance agreements, one for the older central systems and one for the newer systems. The Department of Correction may also realize a similar increase in its maintenance contract costs that should not exceed 20 percent of cash acquisition costs.

Interface/Data Conversion Costs – Vendors will have to convert fingerprint archive records and develop an interface between older hardware and new central databases developed at the SBI. These interface and conversion costs are estimated to be as high as $3,000,000. Final amounts will not be known until the competitive bid process is concluded.

Operating Costs – For Fiscal Year 2005-06 and Fiscal Year 2006-07, the SBI and DOJ/ITD will require $100,000 a year for technical assistance for project consultant planning, design, and procurement assistance. In Fiscal Year 2006-07, an additional $101,154 in recurring funds is needed to support DOJ/SBI technical staff that will oversee technical operations of the new SAFIS. In Fiscal Year 2007-08, a recurring IT Enterprise Fund charge of $91,311, transferred to the Office of Information Technology Services, will need to be funded as on ongoing operational charge. Local operating costs related to existing SAFIS equipment should already be included in their current operating budgets.

It is not anticipated that any material or significant increase in local operating costs will result from the replacement of SAFIS equipment. For the eighteen counties that currently do not have any SAFIS equipment, their annual operating costs for this new equipment is estimated at 10 to 20 percent of the original purchase price of the equipment.

B. OPTIONS FOR FUNDING SAFIS REPLACEMENT

Funding options should support SAFIS replacement every five to seven years, minimize the need for new appropriations, and eliminate any material financial impact on state or local law enforcement agencies. The following are options for funding SAFIS replacement:

Federal Funding Sources

Federal funding sources include Federal Congressional Earmarks and limited grant programs administered by the United States Department of Justice. The majority of existing state and local SAFIS equipment was acquired through federal earmarks and grants in the late 1980s and 1990s. This initial seed money was provided by Congress with no commitment to cover future replacement costs. Attorney General Cooper and state law enforcement leaders have requested SAFIS replacement funds through the earmark process for the federal Fiscal Year 2005-06 and will continue to do so in the future. To date, no action has been taken on this request. Federal law enforcement grant programs and earmarks have been declining significantly in the past few years. Federal Homeland Security funds are targeted for emergency preparedness and the prevention of man-made or natural disasters. Homeland security funds are not intended to support or supplant core basic state and local law enforcement functions and associated equipment, such as replacement of SAFIS.

State Funding Sources

State Appropriations – General Fund expansion funding can be requested through the Governor's Budget and North Carolina General Assembly appropriations process for SAFIS replacement.

SAFIS Replacement Fund – The General Assembly can provide the Department of Justice recurring authority to retain a range of $1.5 to $3 million in year-end reversions to be reserved for SAFIS replacement purposes. This would provide a dedicated, yet variable funding stream to support the SAFIS project. In 2005, the General Assembly approved a $1.495 million request to reserve and set aside funds that would have normally reverted to support SAFIS replacement.

New Court Fees – The General Assembly can authorize new court of justice fees that can be earmarked for state and local SAFIS replacement. Each dollar in new court of justice fees can generate approximately $1.4 million in annual revenue. Another option would be to establish a new $14 court criminal fingerprint fee assessed against criminal offenders who are required by statute to be fingerprinted upon conviction and serve probation or community correction sentences. It is estimated that 108,000 offenders would be eligible for assessment of this new court fee, which could potentially generate up to $500,000 in annual revenue collections.

The CJIN Governing Board does not recommend new court fees as a funding option for the SAFIS Replacement Project.

Recommended Funding Options for SAFIS Replacement

Funding recommendations are outlined below for SAFIS replacement:

1. State Owned Equipment – Direct state agency appropriations are recommended to replace SBI central hardware, SBI business recovery system, and Department of Correction central hardware. SAFIS provides a broad public safety benefit to all North Carolina citizens and it is appropriate to fund this system through a broad based general fund appropriation source. It is recommended that the General Assembly provide authority for a SAFIS Replacement Fund to be established to offset and minimize the need for direct state agency appropriations.

2. Mecklenburg County Equipment – Mecklenburg County Sheriff's Office has been delegated by the SBI the responsibility for processing criminal fingerprint cards for their jurisdiction. This partnership has been successful and has saved the state considerable operational costs because operational support (staffing, office space, etc.) has been supported by this local government. It is recommended that this partnership be continued into the future and a state appropriation be made for replacing the Mecklenburg County Sheriff's Office's central processing system.

3. Local SAFIS Replacement Program – Eighteen sheriff offices do not currently have any automated Live Scan devices and rely on manually rolled inked fingerprint cards for submission to the SBI. Continued use of these cards requires more time and resources to process and upload fingerprint records to the SBI database and delays criminal investigations in these rural areas. It is recommended that the State establish a policy to automate all fingerprint processing in county sheriff offices.

Starting in Fiscal Year 2006-07, an $864,000 appropriation or grant program should be established in the SBI that would focus on improving automated fingerprint technology in the 18 North Carolina counties who currently have no fingerprint technology. For Fiscal Year 2007-08, another $8.28 million is recommended to support the complete equipment replacement at the local level. A state full funding approach of this type will ensure that all law enforcement agencies will have the same forensic analysis capabilities to investigate and clear criminal cases. ***Table 5*** below summarizes the local SAFIS replacement project.

Table 5: Local SAFIS Replacement Program

Description	FY0607 Amount	FY0708 Amount
Providing Live Scan devices to counties with no Live Scan devices ($48,000 X 18)	$864,000	$0
Replacement Live Scans devices for local governments ($48,000 x 130)	$	$6,240,000
Replacement latent search stations for local governments ($120,000 x 17)	$	$2,040,000
Total Recommended State Funding	**$864,000**	**$8,280,000**

III. INVENTORY, COMPATIBILITY AND TIMELINE

A. SAFIS CURRENT INVENTORY

The SAFIS inventory consists of 3 central processing systems, 142 remote Live Scan devices, and 20 remote latent search stations. Currently, 82 of the 100 North Carolina counties have SAFIS connectivity with the State Bureau of Investigation via a Live Scan device ***(see Appendix C)***. DOC has 17 Live Scan devices and MCSO has 6 devices. In addition, there are 20 remote latent search stations that submit fingerprint searches at various locations throughout the state. The SAFIS central processing systems, all the remote latent search stations and most of the Live Scan devices are Printrak equipment, which were acquired from Motorola Corporation.

Central Processing Systems

The three central processing systems are owned and operated by the SBI, DOC, and MCSO. As previously stated, the last major upgrade of this equipment occurred in 1995 and 1998. Upgrading this equipment simultaneously is essential in order to maintain the level of service SAFIS currently provides the law enforcement community. Due to the age of the current central processing equipment, the volume of fingerprints submitted must be monitored to ensure that the equipment can handle the current workflow. It is a common occurrence for personnel with the SBI to limit the amount of fingerprints being processed by SAFIS at a given time so the system can continue to operate without being overloaded. ***Appendix E*** reflects the complete inventory of the SAFIS central processing systems.

The age of the SAFIS equipment, along with the current volume of fingerprint submissions, places a considerable amount of stress on the current infrastructure. This stress makes the SAFIS equipment more prone to system failure. Coupled with the increase in authorizations for non-law enforcement criminal history checks and the widening scope of pre-employment screening requests, it is imperative to replace the SAFIS central processing systems.

The central processing systems currently deployed across North Carolina are obsolete. The life expectancy of a central processing system is considered to be five years.

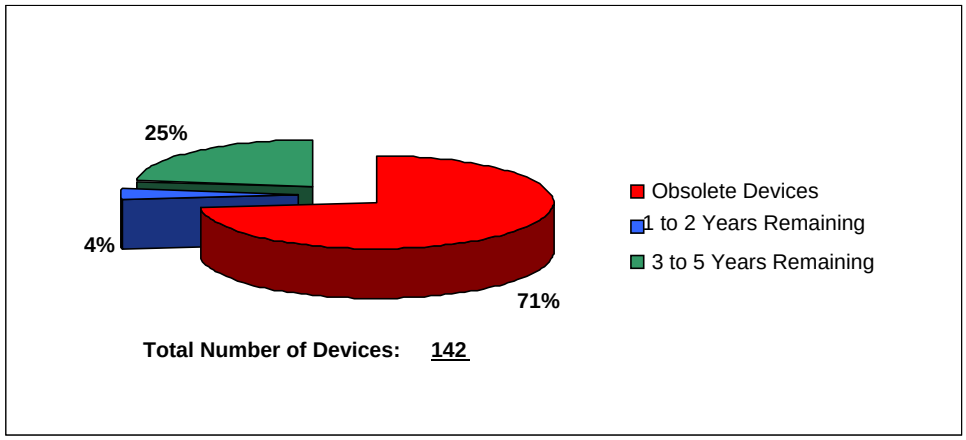
Live Scan Devices

There are 142 Live Scan devices currently deployed throughout North Carolina. Seventeen are owned by the DOC, one by the SBI, one hundred twenty-three by local law enforcement, and one device by a non-law enforcement agency, the Onslow County school system. This device is used to electronically submit fingerprint cards for employment purposes. ***Appendix F*** illustrates a complete inventory and device status of all the Live Scan devices throughout North Carolina.

Installing Live Scan devices in the counties would provide all counties the important capability to rapidly submit criminal fingerprint information and receive real-time fingerprint identification responses. This would provide the most up-to-date criminal history information to law enforcement officers. This would also place North Carolina in position to be more responsive to the ever-growing demands for criminal history information by those concerned with licensing and background checks.

Of the 142 Live Scan devices deployed throughout North Carolina, 102 of these devices have surpassed their 5-year life expectancy. Of the remaining 40 devices, 35 are currently expected to be in service for at least 3 to 5 more years and the remaining 5 for at least 1 to 2 more years. However, more of these devices will have surpassed their life expectancy by the time Live Scan devices are deployed as part of the SAFIS Migration Project. ***Illustration 2*** below reflects this breakdown by percentage.

Illustration 2: Life Expectancy of NC Live Scan Devices

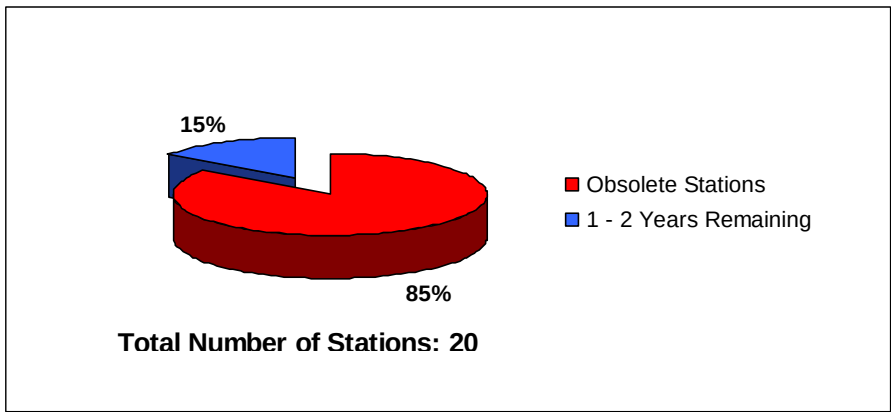


Latent Search Stations

There are twenty latent search stations throughout North Carolina. Seventeen of these stations are owned and operated by local sheriffs' offices and police departments, and three are owned by the SBI. As articulated in an earlier section, these stations allow for searching latent fingerprints against the existing SAFIS fingerprint database. All of these stations are Motorola Printrak products due to compatibility issues with the central processing systems.

Seventeen of these devices are two years past their life expectancy of five years. The remaining three devices have been deployed for at least three years and only have two years left in their life expectancy. The latent search stations are an integral part of the overall SAFIS network and are an extremely valuable investigative tool for both state and local agencies. ***Illustration 3*** below reflects the life expectancy of the latent search stations currently deployed across North Carolina. The life expectancy of a latent search station is considered to be five years. ***Appendix G*** illustrates a complete inventory and status of all the latent search stations throughout North Carolina.

Illustration 3: Life Expectancy of NC Latent Search Stations



B. COMPATIBILITY

Live Scan Devices

Of the 142 Live Scan devices that transmit fingerprints, 100 are sent in a Motorola Printrak proprietary format. This format is generally referenced as "native mode." Devices that submit in native mode will require implementation of a data conversion interface so they can properly communicate with the new SAFIS central processing systems selected. This interface must remain in place until all native mode devices are replaced. This conversion interface will greatly add complexity to the infrastructure, and will be an additional SAFIS component that will require maintenance. The replacement schedule of Live Scan devices will be dependent on the SAFIS Replacement solution strategies and procurement timelines chosen.

The remaining Live Scan devices submit fingerprints in the current industry standard format. Although verification will be required, it is expected that these devices will be compatible with any vendor's SAFIS central processing system selected.

Latent Search Stations

All twenty latent search stations currently operate in Motorola Printrak proprietary native mode. As with the native mode Live Scan devices, a complex conversion interface must be implemented for these latent search stations to properly communicate with the new SAFIS central processing systems. The replacement schedule will be dependent on the SAFIS Replacement solution strategies and procurement timelines chosen.

C. PROCUREMENT TIMELINE

As noted in the Project Status Report in Section II.B and reflected in the Project Timeline in Section V, the implementation and deployment of the new SAFIS infrastructure is to span two project phases and currently is planned from mid 2006 through the end of 2008. The procurement table below is in consideration of the project timeline and lists the main SAFIS infrastructure components and the corresponding fiscal years when associated hardware and software will be procured. The strategy reflected takes into account the five-year life expectancy of each device. In addition, Live Scan devices are to be deployed in the 18 counties where they do not exist today.

Cost estimates and proposed sources of funding can be found in Section II, while procurement options are discussed in Section IV of this document.

Table 6: SAFIS Procurement Timeline

SAFIS Infrastructure Component	FY0506	FY0607	FY0708	FY0809	FY0910	FY1011
Central Processing Systems	0	4[1]	0	0	0	0
Live Scan Devices	0	18[2]	130	0	0	0
Latent Search Stations	0	3[3]	17	0	0	0

1 - Of the 4 central processing systems to be implemented, one will be dedicated to SAFIS business continuity.

2 - 18 represent additional Live Scan Devices to be deployed in the NC counties that do not currently have at least one device

3 - The 3 latent search stations will be included in the SBI central processing system purchase.

IV. PROCUREMENT OPTIONS

Pursuant to legislative direction, all aspects of SAFIS replacement will be managed on a competitive procurement basis. The project will be phased to replace the most critical SBI, Department of Correction, and Mecklenburg County Sheriff's Office equipment first. Follow-up phases will provide for the replacement of remote Live Scan devices and latent search stations.

Latent Search Station Compatibility - The latent search stations may have to be replaced during the first phase due to hardware compatibility issues associated with the SBI central hardware. If the SBI central hardware is not compatible with the latent search station hardware, a separate software conversion or interface component may be required to provide that compatibility. Prospective SBI hardware and latent search station vendors will be required to provide compatibility and interface solutions that will ensure that old equipment can still function properly with all new equipment.

Cash Acquisition vs. Lease Purchase Acquisition – Prospective SAFIS component vendors will be required to provide cash acquisition pricing and lease purchase pricing. Lease purchase terms should not exceed five years. Utilizing a lease purchase approach can ensure that annual funding commitments are more manageable year to year; however, the overall costs will exceed cash acquisition costs because of interest and financing charges.

V. PROJECT TIMELINE

Phase 1 – Planning & RFP (07/05 – 03/06)

1) Procure an Automated Fingerprint Identification System (AFIS) subject matter expert (SME)
2) Planning, requirements, and documentation development
3) Prepare a Joint Status Report to be presented by November 1, 2005
4) Create the SAFIS Replacement RFP
5) Review vendor submitted proposals
6) Prepare and present a recommendation for SAFIS Replacement by March 1, 2006

Phase 2 – Implementation & Deployment 1 (03/06 – 12/07)

1) Replace existing SAFIS central processing systems
2) Implement SBI SAFIS Business Continuity system
3) Replace existing SBI remote latent search stations
4) Implement data conversion interface

Phase 3 - Implementation & Deployment 2 (01/08 – 12/08)

1) Replace remaining latent search stations
2) Deploy new remote Live Scan devices
3) Replace existing remote Live Scan devices

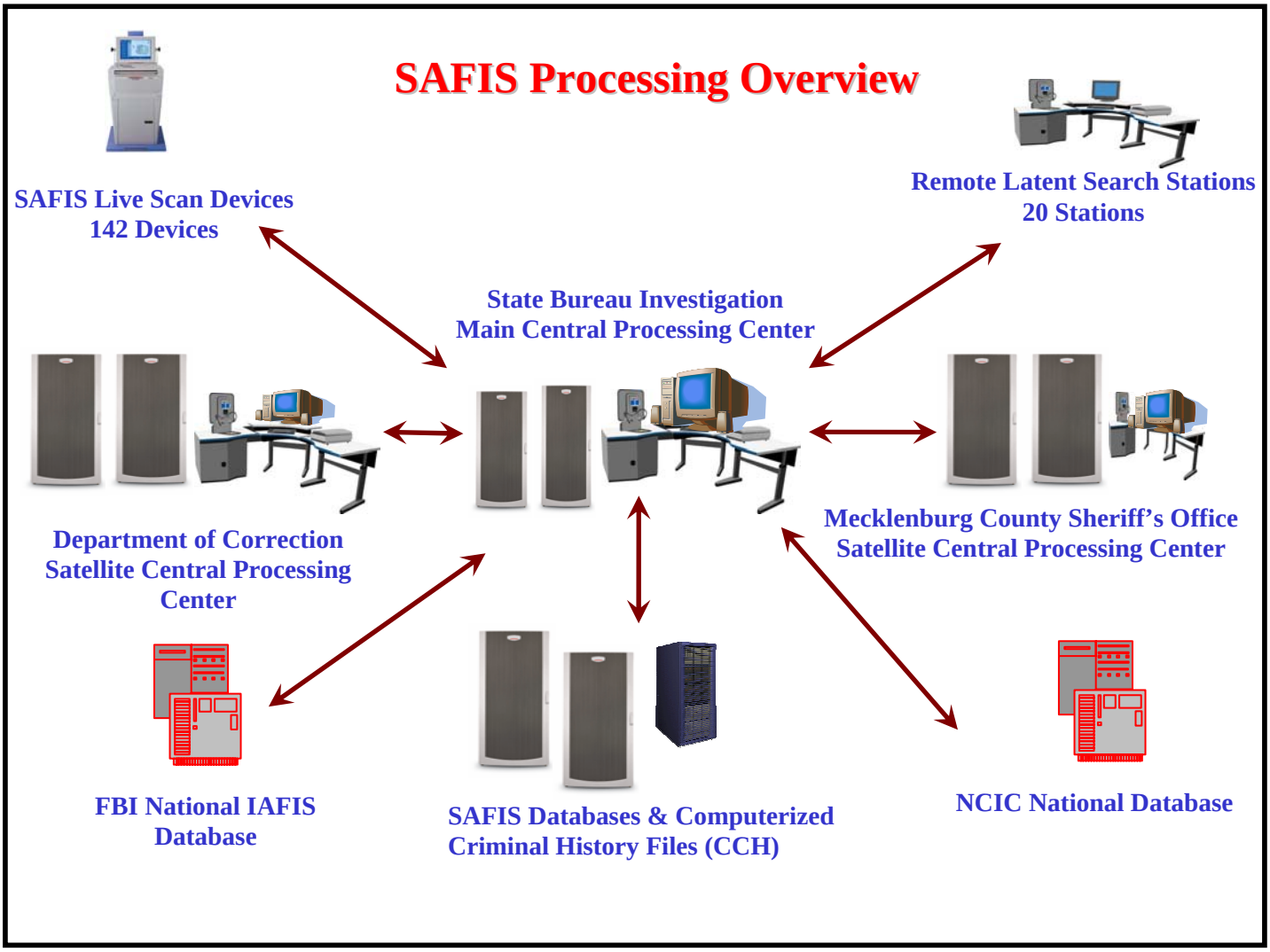
VI. APPENDICES

A. SAFIS Fingerprint Process
B. SAFIS Processing Overview
C. North Carolina SAFIS Live Scan Devices Distribution
D. North Carolina SAFIS Latent Search Stations Distribution
E. North Carolina SAFIS Central Processing Systems
F. North Carolina SAFIS Remote Live Scan Devices
G. North Carolina SAFIS Remote Latent Search Stations
H. N.C. Department of Justice – Estimate of SAFIS Long Term Expense Options & Financial Plan

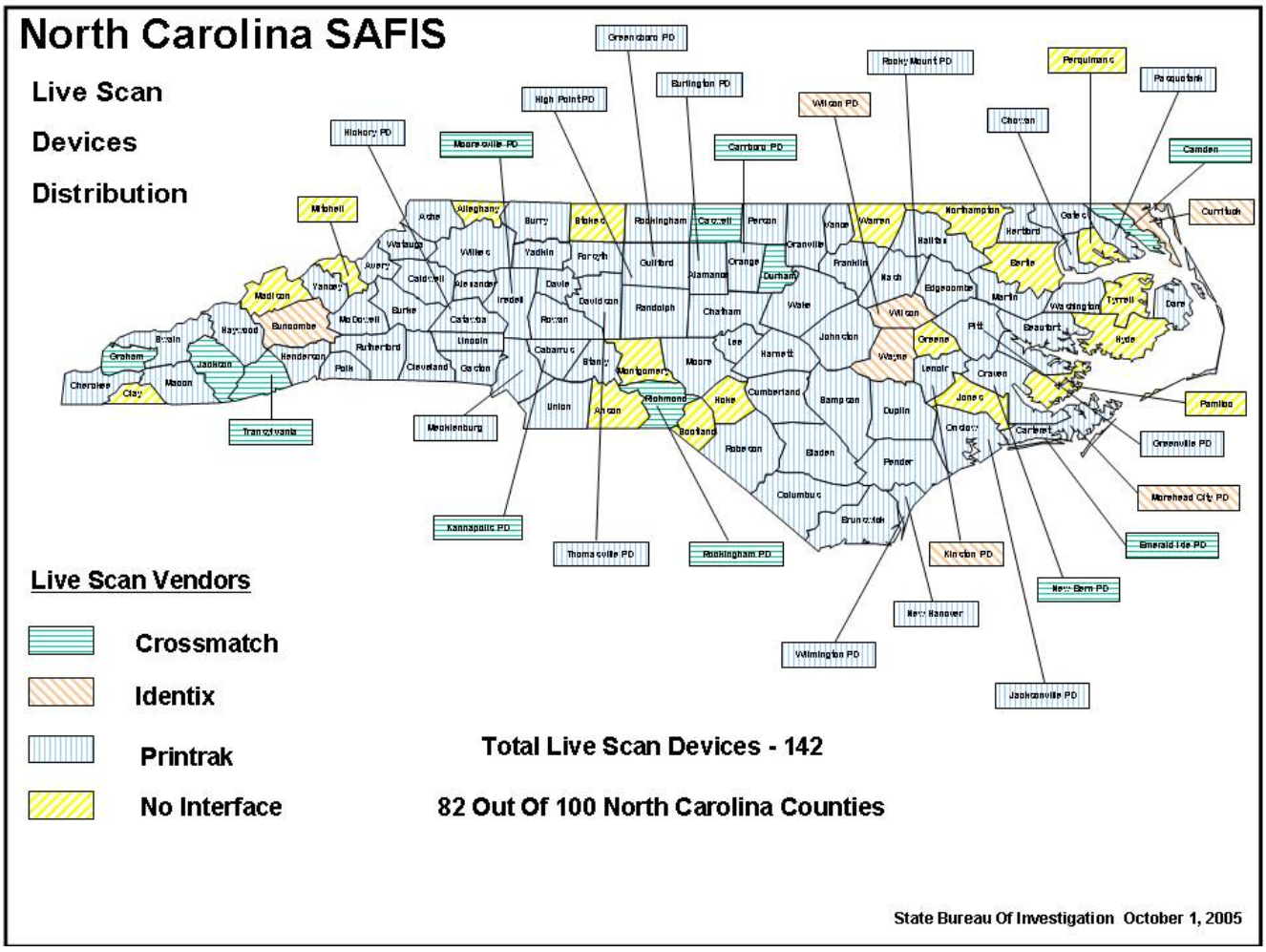
Appendix A.


North Carolina SAFIS
Fingerprint Process
FBI IAFIS
Arrest
Fingerprint Capture
SBI SAFIS
Jail
Identity Confirmed
N.C. Criminal History Database

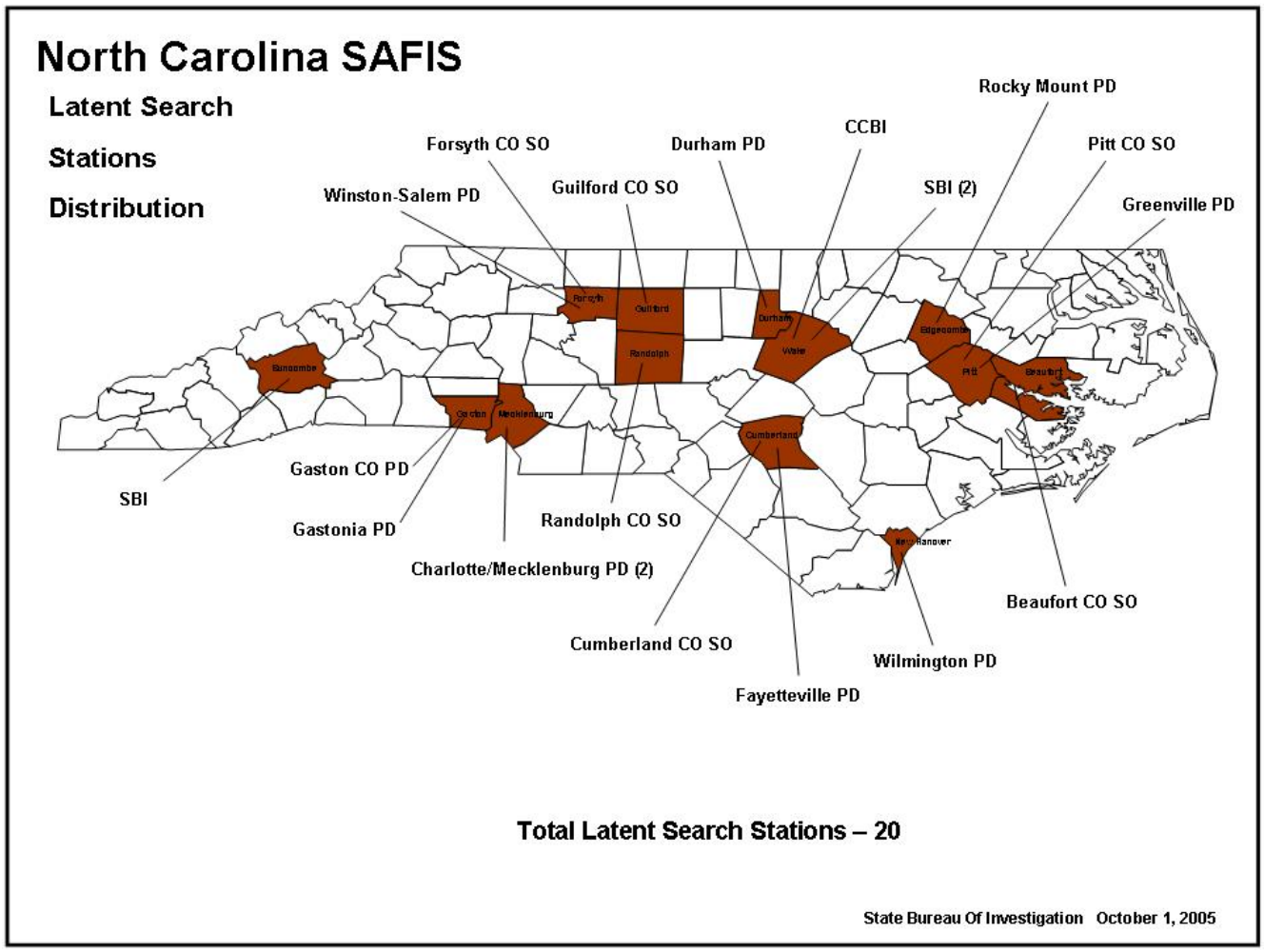
Appendix B.


SAFIS Processing Overview
SAFIS Live Scan Devices
142 Devices
Remote Latent Search Stations
20 Stations
State Bureau Investigation
Main Central Processing Center
Department of Correction
Satellite Central Processing
Center
Mecklenburg County Sheriff's Office
Satellite Central Processing Center
FBI National IAFIS
Database
SAFIS Databases & Computerized
Criminal History Files (CCH)
NCIC National Database

Appendix C.


North Carolina SAFIS
Live Scan
Devices
Distribution
Live Scan Vendors
Crossmatch
Identix
Printrak
No Interface
Total Live Scan Devices - 142
82 Out Of 100 North Carolina Counties
State Bureau Of Investigation October 1, 2005

Appendix D.


North Carolina SAFIS
Latent Search
Stations
Distribution
Rocky Mount PD
CCBI
Forsyth CO SO
Durham PD
Pitt CO SO
SBI (2)
Winston-Salem PD
Guilford CO SO
Greenville PD
Forsyth
Guilford
Durham
Edgecombe
Randolph
Wake
Pitt
Beaufort
Buncombe
Gaston
Mecklenburg
Cumberland
New Hanover
SBI
Gaston CO PD
Gastonia PD
Randolph CO SO
Charlotte/Mecklenburg PD (2)
Beaufort CO SO
Cumberland CO SO
Wilmington PD
Fayetteville PD
Total Latent Search Stations – 20
State Bureau Of Investigation October 1, 2005

Appendix E.

North Carolina SAFIS Central Processing Systems

County	Location	Number of Systems*	Vendor	Proprietary vs Standard Format	Years In Use	Systems Beyond Life Expectancy**
Mecklenburg	Mecklenburg CO SO	1	Printrak	Proprietary	9	√
Wake	NC DOC	1	Printrak	Proprietary	9	√
	NC SBI	1	Printrak	Proprietary	9	√

Total Number Of Systems: 3 **Total Beyond Life Expectancy:** 3

Analysis: All of the central processing systems in the SAFIS network have passed their life expectancy.

Notes: *A central processing system is comprised of input/verification stations, data entry computers and servers. The SBI location consists of additional servers to accommodate fingerprint data storage.

**The industry life expectancy standard is 5 years.

Appendix F.

North Carolina SAFIS Remote Live Scan Devices						
County	**Location**	**Number of Devices**	**Vendor**	**Proprietary vs Standard Format**	**Years In Use**	**Devices Beyond Life Expectancy***
Alamance	Alamance CO SO	1	Printrak	Proprietary	8	√
	Burlington PD	1	Printrak	Standard	1	
Alexander	Alexander CO SO	1	Printrak	Proprietary	8	√
Ashe	Ashe CO SO	1	Printrak	Proprietary	7	√
Avery	Avery CO SO	1	Printrak	Proprietary	8	√
Beaufort	Beaufort CO SO	1	Printrak	Proprietary	7	√
Bladen	Bladen CO SO	1	Printrak	Proprietary	8	√
Brunswick	Brunswick CO SO	1	Printrak	Proprietary	8	√
Buncombe	Buncombe CO SO	2	Identix	Standard	9	√
Burke	Burke CO SO	1	Printrak	Proprietary	8	√
	NC DOC	1	Printrak	Proprietary	8	√
Cabarrus	Cabarrus CO SO	1	Printrak	Proprietary	7	√
	Kannapolis PD	1	Crossmatch	Standard	3	
Caldwell	Caldwell CO SO	1	Printrak	Proprietary	8	√
	NC DOC	1	Printrak	Proprietary	8	√
Camden	Camden CO SO	1	Crossmatch	Standard	1	
Carteret	Carteret CO SO	1	Printrak	Proprietary	7	√
	Emerald Isle PD	1	Crossmatch	Standard	0	
	Morehead City PD	1	Identix	Standard	6	√
Caswell	Caswell CO SO	1	Crossmatch	Standard	2	
Catawba	Catawba CO SO	1	Printrak	Proprietary	8	√
	Hickory PD	1	Printrak	Proprietary	4	
Chatham	Chatham CO SO	1	Printrak	Proprietary	7	√
Cherokee	Cherokee CO SO	1	Printrak	Proprietary	7	√
Chowan	Chowan CO SO	1	Printrak	Proprietary	7	√
Cleveland	Cleveland CO SO	1	Printrak	Proprietary	7	√
Columbus	Columbus CO SO	1	Printrak	Proprietary	8	√
Craven	Craven CO SO	1	Printrak	Proprietary	8	√
	New Bern PD	1	Crossmatch	Standard	0	
	NC DOC	2	Printrak	Proprietary	8	√
Cumberland	Cumberland CO SO	3	Printrak	Proprietary Proprietary Proprietary	10 10 7	√
Currituck	Currituck CO SO	1	Identix	Standard	9	√
Dare	Dare CO SO	1	Printrak	Proprietary	8	√
Davidson	Davidson CO SO	1	Printrak	Proprietary	8	√
	Thomasville PD	1	Printrak	Standard	1	

Appendix F.

North Carolina SAFIS Remote Live Scan Devices

County	Location	Number of Devices	Vendor	Proprietary vs Standard Format	Years In Use	Devices Beyond Life Expectancy*
Davie	Davie CO SO	1	Printrak	Standard	1	
Duplin	Duplin CO SO	1	Printrak	Proprietary	8	√
Durham	Durham CO SO	3	Crossmatch	Standard	1	
Edgecombe	Edgecombe CO SO	1	Printrak	Proprietary	8	√
Forsyth	Forsyth CO SO	2	Printrak	Proprietary Proprietary	9 9	√
	Forsyth CO SO	1	Printrak	Proprietary	4	
	NC DOC	1	Printrak	Proprietary	8	√
Franklin	Franklin CO SO	1	Printrak	Proprietary	8	√
Gaston	Gaston CO SO	1	Printrak	Proprietary	8	√
Gates	Gates CO SO	1	Printrak	Proprietary	7	√
Graham	Graham CO SO	1	Crossmatch	Standard	0	
Granville	Granville CO SO	1	Printrak	Proprietary	8	√
	NC DOC	1	Printrak	Proprietary	8	√
Guilford	Guilford CO SO	1	Printrak	Proprietary	8	√
	Guilford CO SO	2	Printrak	Standard Standard	1 1	
	Greensboro PD	1	Printrak	Standard	1	
	High Point PD	1	Printrak	Proprietary	6	√
Halifax	Halifax CO SO	1	Printrak	Proprietary	8	√
Harnett	Harnett CO SO	1	Printrak	Proprietary	8	√
Haywood	Haywood CO SO	1	Printrak	Standard	0	
Henderson	Henderson CO SO	2	Printrak	Standard	0	
Hertford	Hertford CO SO	1	Printrak	Proprietary	8	√
Hoke	NC DOC	1	Printrak	Proprietary	8	√
Iredell	Iredell CO SO	3	Printrak	Standard	1	
	Mooresville PD	2	Crossmatch	Standard	0	
Jackson	Jackson CO SO	1	Crossmatch	Standard	2	
Johnston	Johnston CO SO	1	Printrak	Proprietary	8	√
Lee	Lee CO SO	1	Printrak	Proprietary	8	√
Lenoir	Lenoir CO SO	1	Printrak	Proprietary	8	√
	Kinston PD	1	Identix	Standard	4	
Lincoln	Lincoln CO SO	1	Printrak	Proprietary	9	√
Macon	Macon CO SO	1	Printrak	Standard	0	
	Macon CO SO	1	Printrak	Proprietary	7	√

Appendix F.

North Carolina SAFIS Remote Live Scan Devices						
County	**Location**	**Number of Devices**	**Vendor**	**Proprietary vs Standard Format**	**Years In Use**	**Devices Beyond Life Expectancy***
Martin	Martin CO SO	1	Printrak	Proprietary	7	√
McDowell	McDowell CO SO	1	Printrak	Proprietary	8	√
Mecklenburg	Mecklenburg Co. SO	4	Printrak	Proprietary Proprietary Proprietary Proprietary	8 6 6 6	√
Mecklenburg	Mecklenburg Co. SO	2	Printrak	Standard Standard	0 0	
Moore	Moore CO SO	1	Printrak	Proprietary	8	√
Nash	Nash CO SO	1	Printrak	Proprietary	7	√
	Rocky Mount PD	1	Printrak	Proprietary	7	√
	NC DOC	1	Printrak	Proprietary	8	√
New Hanover	New Hanover CO SO	2	Printrak	Proprietary	8	√
	Wilmington PD	1	Printrak	Proprietary	9	√
Onslow	Onslow CO SO	1	Printrak	Proprietary	9	√
	Jacksonville PD	1	Printrak	Proprietary	2	
	Onslow CO Schools	1	Crossmatch	Standard	0	
Orange	Orange CO SO	1	Printrak	Proprietary	8	√
	Carrboro PD	1	Crossmatch	Standard	2	
Pasquotank	Pasquotank CO SO	1	Printrak	Proprietary	7	√
Pender	Pender CO SO	1	Printrak	Proprietary	8	√
	NC DOC	1	Printrak	Proprietary	8	√
Person	Person CO SO	1	Printrak	Proprietary	7	√
Pitt	Pitt CO SO	1	Printrak	Proprietary	8	√
	Greenville PD	1	Printrak	Proprietary	7	√
	NC DOC	1	Printrak	Proprietary	8	√
Polk	Polk CO SO	1	Printrak	Proprietary	8	√
Randolph	Randolph CO SO	1	Printrak	Proprietary	9	√
Richmond	Rockingham PD	2	Crossmatch	Standard	0	
Robeson	Robeson CO SO	1	Printrak	Proprietary	8	√
Rockingham	Rockingham CO SO	1	Printrak	Proprietary	8	√
Rowan	Rowan CO SO	1	Printrak	Proprietary	7	√
	NC DOC	1	Printrak	Proprietary	8	√
Rutherford	Rutherford CO SO	1	Printrak	Proprietary	8	√
Sampson	Sampson CO SO	1	Printrak	Proprietary	8	√
Stanly	Stanly CO SO	1	Printrak	Proprietary	8	√

Appendix F.

North Carolina SAFIS Remote Live Scan Devices						
County	**Location**	**Number of Devices**	**Vendor**	**Proprietary vs Standard Format**	**Years In Use**	**Devices Beyond Life Expectancy***
Surry	Surry CO SO	1	Printrak	Proprietary	8	√
Swain	Swain CO SO	1	Printrak	Proprietary	8	√
Transylvania	Transylvania CO SO	2	Crossmatch	Standard	1	
Union	Union CO SO	1	Printrak	Standard	0	
Vance	Vance CO SO	1	Printrak	Proprietary	7	√
Wake	City/County Bureau of ID	3	Printrak	Proprietary Proprietary Proprietary	13	√
	NC DOC	4	Printrak	Proprietary	8	√
	NC SBI	1	Printrak	Proprietary	8	√
Washington	Washington CO SO	1	Printrak	Proprietary	8	√
Watauga	Watauga CO SO	1	Printrak	Proprietary	9	√
Wayne	Wayne CO SO	1	Identix	Standard	0	
	NC DOC	2	Printrak	Proprietary	8	√
Wilkes	Wilkes CO SO	1	Printrak	Proprietary	9	√
Wilson	Wilson CO SO	1	Identix	Standard	6	√
	Wilson PD	1	Identix	Standard	6	√
Yadkin	Yadkin CO SO	1	Printrak	Proprietary	7	√
Yancey	Yancey CO SO	1	Printrak	Proprietary	4	

Total Number Of Live Scans: 142

Total Beyond Life Expectancy: 102

Analysis: Approximately 74% of the 142 Live Scan devices in the SAFIS network have passed their life expectancy. 18% of the Live Scan devices have 3 - 5 years of life expectancy remaining. 8% of the Live Scan devices have 1 - 2 years of life expectancy remaining.

Note: *The industry life expectancy standard for these devices is 5 years.

Appendix G.

North Carolina SAFIS Remote Latent Search Stations						
County	**Location**	**Number of Stations**	**Vendor**	**Proprietary vs Standard Format**	**Years In Use**	**Devices Beyond Life Expectancy***
Beaufort	Beaufort CO SO	1	Printrak	Proprietary	7	√
Buncombe	NC SBI	1	Printrak	Proprietary	7	√
Cumberland	Cumberland CO SO	1	Printrak	Proprietary	7	√
	Fayetteville PD	1	Printrak	Proprietary	3	
Durham	Durham PD	1	Printrak	Proprietary	7	√
Forsyth	Forsyth CO SO	1	Printrak	Proprietary	7	√
	Winston-Salem PD	1	Printrak	Proprietary	7	√
Gaston	Gaston CO PD	1	Printrak	Proprietary	7	√
	Gastonia PD	1	Printrak	Proprietary	7	√
Guilford	Guilford CO SO	1	Printrak	Proprietary	7	√
Mecklenburg	Charlotte/Mecklenburg PD	2	Printrak	Proprietary	7	√
Nash	Rocky Mount PD	1	Printrak	Proprietary	7	√
New Hanover	Wilmington PD	1	Printrak	Proprietary	4	
Pitt	Pitt CO SO	1	Printrak	Proprietary	7	√
	Greenville PD	1	Printrak	Proprietary	7	√
Randolph	Randolph CO SO	1	Printrak	Proprietary	3	
Wake	City/County Bureau of ID	1	Printrak	Proprietary	7	√
	NC SBI	2	Printrak	Proprietary	7	√

Total Number Of Latent Stations: 20 **Total Beyond Life Expectancy** 17

Analysis: Approximately 85% of the 20 latent search stations in the SAFIS network have passed their life expectancy. The remaining 15% of the latent search stations have 1 - 2 years of life expectancy remaining.

Note: *The industry life expectancy standard for these devices is 5 years.

Appendix H.

NC DEPARTMENT OF JUSTICE - ESTIMATE OF SAFIS LONG TERM EXPENSE OPTIONS & FINANCIAL PLAN

October 25, 2005 Version

		FY0506	FY0607	FY0708	FY0809	FY0910	FY1011	FY1112	TOTAL
OPTION 1a - CASH PURCHASE LOW RANGE									
1c	SBI Central Hardware/Database	$ -	$ 6,340,455	$ -	$ -	$ -	$ -	$ -	$ 6,340,455
2c	N.C. DOC Central Hardware	$ -	$ 1,216,240	$ -	$ -	$ -	$ -	$ -	$ 1,216,240
3c	Mecklenburg Co Central Hardware	$ -	$ 575,980	$ -	$ -	$ -	$ -	$ -	$ 575,980
4c	SBI Hardware - Business Continuity	$ -	$ -	$ 2,548,000	$ -	$ -	$ -	$ -	$ 2,548,000
5c	Replace 130 Remote Livescan Devices	$ -	$ -	$ 5,200,000	$ -	$ -	$ -	$ -	$ 5,200,000
6c	Replace 17 Latent Fingerprint Stations	$ -	$ -	$ 1,700,000	$ -	$ -	$ -	$ -	$ 1,700,000
7c	**Total Estimated Cash Expenditures**	**$ -**	**$ 8,132,675**	**$ 9,448,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 17,580,675**
OPTION 1b - CASH PURCHASE HIGH RANGE									
1c	SBI Central Hardware/Database	$ -	$ 7,608,546	$ -	$ -	$ -	$ -	$ -	$ 7,608,546
2c	N.C. DOC Central Hardware	$ -	$ 1,459,488	$ -	$ -	$ -	$ -	$ -	$ 1,459,488
3c	Mecklenburg Co Central Hardware	$ -	$ 691,176	$ -	$ -	$ -	$ -	$ -	$ 691,176
4c	SBI Hardware - Business Continuity	$ -	$ -	$ 3,057,600	$ -	$ -	$ -	$ -	$ 3,057,600
5c	Replace 130 remote Live Scan Devices	$ -	$ -	$ 6,240,000	$ -	$ -	$ -	$ -	$ 6,240,000
6c	Replace 17 remote Latent Search Stations	$ -	$ -	$ 2,040,000	$ -	$ -	$ -	$ -	$ 2,040,000
8c	**Total Estimated Cash Expenditures**	**$ -**	**$ 9,759,210**	**$ 11,337,600**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 21,096,810**
OPERATING COST ESTIMATES - LOW RANGE									
1o	SBI Project Management/Operating Costs	$ 100,000	$ 201,154	$ 192,465	$ 192,465	$ 192,465	$ 192,465	$ 192,465	$ 1,263,479
2o *	SBI Hardware Maintenance Contract	$ -	$ 23,113	$ 998,450	$ 871,007	$ 871,007	$ 871,007	$ 871,007	$ 4,505,592
3o	N.C. DOC Project Management/Operating Costs								
4o	N.C. DOC Hardware Maintenance Contract								
	OPERATING EXPENSE TOTALS	**$ 100,000**	**$ 224,267**	**$ 1,190,915**	**$ 1,063,472**	**$ 1,063,472**	**$ 1,063,472**	**$ 1,063,472**	**$5,769,071**

* These maintenance costs reflect expenditures above the present recurring budget for the SBI.

Appendix H.

OPERATING COST ESTIMATES - HIGH RANGE								
1o SBI Project Management/Operating Costs	$ 120,000	$ 241,385	$ 230,958	$ 230,958	$ 230,958	$ 230,958	$ 230,958	**$ 1,285,217**
2o SBI Hardware Maintenance Contract	$ -	$ 27,736	$ 1,198,140	$ 1,045,208	$ 1,045,209	$ 1,045,209	$ 1,045,209	**$ 4,361,501**
3o N.C. DOC Project Management/Operating Costs								
4o N.C. DOC Hardware Maintenance Contract								
6o System Integration/File Conversion Costs	$ -	$ 3,000,000	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 3,000,000**
OPERATING EXPENSE TOTALS	**$ 120,000**	**$ 3,269,120**	**$ 1,429,098**	**$ 1,276,166**	**$ 1,276,167**	**$ 1,276,167**	**$ 1,276,167**	**$ 8,646,718**
OPTION 2a - LEASE PURCHASE EQUIPMENT - LOW RANGE								
1l SBI Central Hardware/Database - Lease Pmts	$ -	$ 1,407,763	$ 1,407,763	$ 1,407,763	$ 1,407,763	$ 1,407,763	$ -	**$ 7,038,814**
2l N.C. DOC Central Hardware - Lease Pmts	$ -	$ 270,040	$ 270,040	$ 270,040	$ 270,040	$ 270,040	$ -	**$ 1,350,201**
3l Mecklenburg Co Central Hardware - Lease Pmts	$ -	$ 127,884	$ 127,884	$ 127,884	$ 127,884	$ 127,884	$ -	**$ 639,420**
4l SBI Hardware - Business Continuity - Lease Pmts	$ -	$ -	$ 565,729	$ 565,729	$ 565,729	$ 565,729	$ 565,729	**$ 2,828,645**
5l Replace 130 remote Live Scan Devices	$ -	$ -	$ 865,912	$ 865,912	$ 865,912	$ 865,912	$ 865,912	**$ 4,329,560**
6l Replace 17 remote Latent Search Stations	$ -	$ -	$ 377,449	$ 377,449	$ 377,449	$ 377,449	$ 377,449	**$ 1,887,244**
7l Total Estimated Lease Expenditures	**$ -**	**$ 1,805,687**	**$ 3,614,777**	**$ 3,614,777**	**$ 3,614,777**	**$ 3,614,777**	**$ 1,809,090**	**$ 18,073,884**
OPTION 2b - LEASE PURCHASE EQUIPMENT - HIGH RANGE								
1l SBI Central Hardware/Database - Lease Pmts	$ -	$ 1,689,315	$ 1,689,315	$ 1,689,315	$ 1,689,315	$ 1,689,315	$ -	**$ 8,446,576**
2l N.C. DOC Central Hardware - Lease Pmts	$ -	$ 324,048	$ 324,048	$ 324,048	$ 324,048	$ 324,048	$ -	**$ 1,620,241**
3l Mecklenburg Co Central Hardware - Lease Pmts	$ -	$ 153,461	$ 153,461	$ 153,461	$ 153,461	$ 153,461	$ -	**$ 767,304**
4l SBI Hardware - Business Continuity - Lease Pmts	$ -	$ -	$ 678,875	$ 678,875	$ 678,875	$ 678,875	$ 678,875	**$ 3,394,374**
5l Replace 130 remote Live Scan Devices	$ -	$ -	$ 1,039,094	$ 1,039,094	$ 1,039,094	$ 1,039,094	$ 1,039,094	**$ 5,195,472**
6l Replace 17 remote Latent Search Stations	$ -	$ -	$ 452,938	$ 452,938	$ 452,938	$ 452,938	$ 452,938	**$ 2,264,692**
7l Total Estimated Lease Expenditures	**$ -**	**$ 2,166,824**	**$ 4,337,732**	**$ 4,337,732**	**$ 4,337,732**	**$ 4,337,732**	**$ 2,170,908**	**$ 21,688,660**
STATE FUNDING SHARE RECOMMENDATIONS								
1 State Equipment Lease Costs (SBI, DOC, Meck County)	$ -	$ 2,166,824	$ 2,845,699	$ 2,845,699	$ 2,845,699	$ 2,845,699	$ 678,875	**$ 14,228,496**
2 Local SAFIS Replacement Program	$ -	$ 864,000	$ 8,280,000	$ -	$ -	$ -	$ -	**$ 9,144,000**
3 File Conversion and Operating Costs	$ 120,000	$ 3,269,120	$ 1,429,098	$ 1,276,166	$ 1,276,167	$ 1,276,167	$ 1,276,167	**$ 9,922,885**
4 Total State Share Recommended	**$ 120,000**	**$ 6,299,945**	**$ 12,554,797**	**$ 4,121,866**	**$ 4,121,866**	**$ 4,121,866**	**$ 1,955,042**	**$ 33,295,381**

Appendix H.

RECOMMENDED STATE FUNDING SOURCES								
1 OSBM SAFIS Reserve	$ 1,495,000	$ -	$ -	$ -	$ -	$ -	$ -	**$ 1,495,000**
2 SAFIS Replacement Fund	$ -	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	**$ 9,000,000**
3 Prior Year Carryforward	$ -	$ 1,375,000	$ -	$ -	$ -	$ -	$ -	**$ 1,375,000**
4 Subtotal Annual Revenue Collections	*$ 1,495,000*	*$ 2,875,000*	*$ 1,500,000*	*$ 1,500,000*	*$ 1,500,000*	*$ 1,500,000*	*$ 1,500,000*	*$ 11,870,000*
5 Remaining Balance/State Appropriation Recommendation	**$ (1,375,000)**	**$ 3,424,945**	**$ 11,054,797**	**$ 2,621,866**	**$ 2,621,866**	**$ 2,621,866**	**$ 455,042**	**$ 21,425,381**

NOTES:

1. Assumes Contract/RFP Execution in July 2006.
2. High range equipment and lease expenses assume a 20% increase over low range estimates.
3. Lease purchase options assume 5 year lease payment term @ 4.19% APR.
4. Total State share recommended could be reduced by OSBM SAFIS reserve of $1.495 million.