COMMITTEE REPORT

HOUSE

4/6/81

(11)

FURTHER:

Date: 1/28/82

Mr. Speaker:

The Committee on FINANCE has had HB 344

"An Act making a special appropriation to the Department of Public Safety for a computerized fingerprint system; and providing for an effective date."

under consideration and reports it back as follows:

[ ] do pass [ ] do not pass

[ ] do pass with attached amendments(s)

[X] replace with CS for HB 344 (FIN) [X] same title [ ] new title

and recommends do pass

[ ] AND attaches a "Letter of Intent" [X] New Fiscal Note 64.1 1/22/82

[ ] reports it back without recommendation

[ ] referred to the _____ Committee

MEMBERS SIGNING
DO PASS

MEMBERS HAVING
OTHER RECOMMENDATIONS:

CHAIRMAN

H 60 (Rev. 3/81)

Funding Information
General Fund $2,718,200
Other Funds -0-
$2,718,200

IN THE HOUSE BY THE FINANCE COMMITTEE

CS FOR HOUSE BILL NO. 344 (Finance)

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWELFTH LEGISLATURE - SECOND SESSION

A BILL

For an Act entitled: "An Act making a special appropriation to the Department of Public Safety for a computerized fingerprint system; and providing for an effective date."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

* Section 1. The sum of $2,718,200 is appropriated from the general fund to the Department of Public Safety for a computerized fingerprint identification system.

* Sec. 2. The appropriation made by this Act is for a capital project and is subject to AS 37.25.020.

* Sec. 3. This Act takes effect immediately in accordance with AS 01.10.-070(c).

~~DRAFT~~

Introduced: 3/16/81
Referred: Judiciary and Finance
FINANCE

Funding Information
General Fund $4,282,900
Other Funds -0-
$4,282,900

BY ANDERSON, ADAMS, GRUSSENDORF, ABOOD, ~~BARNES, BEIRNE, BROWN, CHUCKWUK, FULLER, HALFORD,~~ HAUGEN, HAYES, MALONE, ~~MARTIN,~~ MONTGOMERY, MOSS, PHILLIPS AND SUTCLIFFE

IN THE HOUSE

CS HOUSE BILL NO. 344 (FIN)

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWELFTH LEGISLATURE - FIRST SESSION

A BILL

For an Act entitled: "An Act making a special appropriation to the Department of Public Safety for a computerized fingerprint system; and providing for an effective date."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

* Section 1. The sum of ~~$4,282,900~~ $2,713,200 is appropriated from the general fund to the Department of Public Safety for a computerized fingerprint identification system.

* Sec. 2. The appropriation made by this Act is for a capital project and is subject to AS 37.25.020.

* Sec. 3. This Act takes effect immediately in accordance with AS 01.10.-070(c).

THE LEGISLATURE OF THE STATE OF ALASKA
TWELFTH LEGISLATURE

FISCAL NOTE

I. REQUEST CSHB 344 (Finance)
Bill/Resolution No.
Title Spec. Approp. for a computerized fingerprint system
Requested by House Finance Date 1/22/82

II. FISCAL DETAIL
Agency Affected Department of Public Safety
Program Category Affected
BRU, Program, Or Subprogram(s) Affected Laboratory Services
(Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

	FY 82	FY 83	FY 84	FY 85	FY 86	FY 87
100 PERSONAL SERVICES			105.3	115.8	127.4	140.1
200 TRAVEL		20.6	21.2	2.2	2.4	2.7
300 CONTRACTUAL		38.2	480.4	103.5	103.9	104.3
400 COMMODITIES		5.3	4.5	9.3	10.2	11.2
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS,CLAIMS,ETC.						
TOTAL		64.1	611.4	230.8	243.9	258.3

FUNDING (Thousands of Dollars)

GENERAL FUND		64.1	611.4	230.8	243.9	258.3
FEDERAL FUNDS						
OTHER (Specify Source)						

POSITIONS

FULL TIME			2	2	2	2
PART TIME						
TEMPORARY						

III. ANALYSIS (See Fiscal Note Preparation Instruction, Section III)

The proposed legislation would create the Automated Fingerprint Identification Network which would utilize a Rockwell 250 S Printak Central System in AST Headquarters with a Read/Edit Sub-system in the Anchorage Police Department. In acquiring this tested, proved and highly reliable system, law enforcement agencies can automatically search their already existing extensive fingerprint files to locate matches and print out identities of respondents. Search time will be reduced and match rate increased by at least 15%.

The initial cost of ~~$3,042,200~~ 2,718,208 as provided by this bill would provide all costs of the equipment and its installation through the end of FY 83 (see attached schedule "Capital Project Cost Estimate"). The FY 83 - FY 87 cost noted above is the expected operating cost for these years including the cost for two positions.

IV. DATE 01/22/82 PREPARED BY Robert F. Schroeder
AGENCY Legislative Finance Division
PHONE 465-3795

Original: Legislative Finance
cc: Budget and Management
Prime Sponsor (First Legislator Named)
33-001 (Rev. 12/81)

AUTOMATED FINGERPRINT IDENTIFICATION NETWORK
CAPITAL PROJECT COST ESTIMATE

250S Central System - unit cost including air shipment	$1,700.0
Latent print subsystems - 1 each in Anchorage, Fairbanks & Juneau at $124,000 per unit	372.0
Installation cost	200.0
Site preparation	177.4
Spare parts inventory	207.3
Fingerprint file conversion	61.5
CAPITAL PROJECT TOTAL	$2,718.2

AUTOMATED FINGERPRINT IDENTIFICATION NETWORK
OPERATING COST ESTIMATE

CODE	DESCRIPTION	FY 83	FY 84
100	Personal Services		
	111 Reg. Comp. (2x19AGGU)		74.9
	121 Overtime (180 hrs. X 26.19)		5.2
	121 Shift Differential (19AX3.75)		1.4
	Subtotal		81.5
	VAR. Benefits (17.67%)		14.4
	184 FICA (6.65%)		5.4
	185 Group Medical (1800X2)		4.0
	100 TOTALS		105.3
200	Travel and Moving		
	211 In State Travel	2.4	
	212 In State Per Diem	3.2	
	223 Out of State Travel	5.0	6.8
	224 Out of State Per Diem	5.3	14.4
	291 Transportation	2.5	
	292 Technician Per Diem	2.2	
	200 TOTALS	20.6	21.2
300	Contractual Services		
	311 Phone	.7	5.1
	314 Postage		.4
	326 Subscription & Info.		.2
	349 Main. Contract & File Conver.	22.3	424.7
	*389 Training	3.6	50.0
	394 Conference Registration	.3	
	397 Freight	11.3	
	300 TOTALS	38.2	480.4
400	Supplies and Materials		
	425 Janitorial Supplies	.9	.9
	481 Stationary & Supplies	4.4	
	483 Computer Commodities		3.6
	400 TOTALS	5.3	4.5
	PROJECT TOTALS	64.1	611.4

*Contractor training of state employee to maintain the system.

Introduced: 3/16/81
Referred: Judiciary and Finance

Funding Information
General Fund $4,282,900
Other Funds -0-
$4,282,900

BY ANDERSON, ADAMS, GRUSSENDORF, ABOOD, BARNES, BEIRNE, BROWN, CHUCKWUK, FULLER, HALFORD, HAUGEN, HAYES, MALONE, MARTIN, MONTGOMERY, MOSS, PHILLIPS AND SUTCLIFFE

IN THE HOUSE

HOUSE BILL NO. 344

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWELFTH LEGISLATURE - FIRST SESSION

A BILL

For an Act entitled: "An Act making a special appropriation to the Department of Public Safety for a computerized fingerprint system; and providing for an effective date."

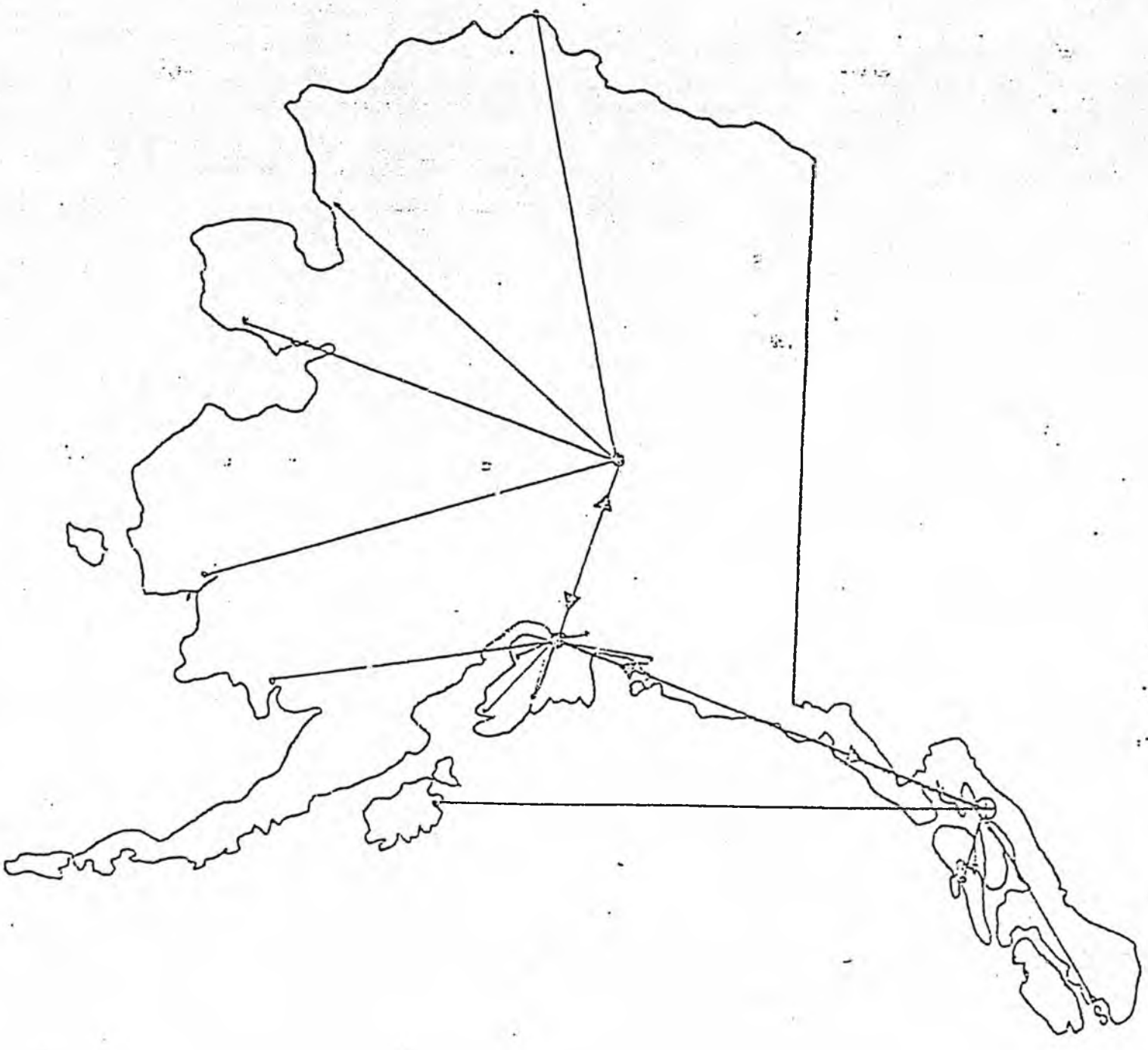
BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

* Section 1. The sum of $4,282,900 is appropriated from the general fund to the Department of Public Safety for a computerized fingerprint identification system.

* Sec. 2. The appropriation made by this Act is for a capital project and is subject to AS 37.25.020.

* Sec. 3. This Act takes effect immediately in accordance with AS 01.10.-070(c).

AUTOMATED FINGERPRINT IDENTIFICATION NETWORK OF ALASKA



WE HAVE A PROBLEM...

Law enforcement agencies in Alaska are like all law enforcement agencies everywhere, large and small. Our prime concern with every crime is: "Who committed this crime?"

Most - around 60% in fact - of the crimes committed in the State are perpetrated by "recidivists". That is, they are committed by people who tend to be arrested and re-arrested repeatedly as the years go by. Thus, when a crime takes place, our expereienced investigators may sometimes have a good mental list of suspects.

If Alaska police investigators were like the detectives in paperbacks, movies, and TV shows, they would solve every crime they encounter - by an unerring combination of ESP, James Bondian scientific gadgetry, and a set of unbelievably fortunate coincidences. In real life, however, detectives' lives are not so smooth.

Increasingly, police are forced, by such Supreme Court rulings as the Miranda and Escobedo decisions, to rely on physical evidence. Most real-life cases are cleared as a result of on-the-scene identifications by victims or witnesses, with the remainder being cleared through administrative investigatory methods such as fingerprinting.

Every time an arrest takes place in Alaska the alleged lawbreaker's fingerprints are rolled onto a 10-print file card. Altogether, the State files in 1980 contained a total of around 110,000 ten-print cards, also Anchorage had on filed more than 90,000 such cards. Thus, the city and State police departments had on file a total of 200,000 ten-print cards (or 2,000,000 individual prints) of known offenders. In addition the combined agencies have on file more than 25,000 individual, unidentified "latent" prints "lifted" at the scenes of crime.

When a police officer is able to find a good latent at a crime scene, it is possible in many cases to pull from file the cards of all those on his mental list of likely suspects and, try by manual handling and simple visual examination of the prints, to achieve a "hit" - that is, a match between the latent and a file print - in only a few hours. In 1979, around 3% of all the latents picked up by law enforcement officers in Alaska were identified by means of such manual processing.

Latent prints are found at just about 50% of all crime scenes, but, on the average, only a very small portion of the evidence is matched against a known print and results in a clearance. Even so, the matching of latents with known prints represents the majority of clearances that we make through administrative investigatory methods.

Why aren't more of the latents matched and more crimes cleared thereby? The answer lies in the time it takes to match a single unknown print against files containing literally millions of prints. To look for a match, by manual methods, among the more than 2 million fingerprints in the combined files would require a total number of hours and dollars obviously beyond the limits of practicality. It is not too surprising that, unless the police investigator has a pretty good idea of where to look before he starts, he usually simply doesn't start the time-consuming search.

Our problem in Alaska - is to find a way to search for matches with latents, through hundreds of thousands, even millions, of prints, in a practical amount of time, and at a practical expenditure of the dollars to pay for that time - is not our problem alone. It is still the problem of almost every law enforcement agency throughout the world. Its solution has the potential to dramatically increase crime clearance rates ... to slash law enforcement costs and, eventually, to act as a powerful deterrent to the commission of crimes.

A SOLUTION TO THE PROBLEM...

Our solution will save us hundreds of manhours and thousands of operational expense dollars - while upping our "hit" rate by more than 30% annually.

By acquiring an automated system - a tested, proven, highly reliable system that's faster, more efficient, and less costly to operate. The system would automatically search our extensive files in only minutes .... automatically find the most likely matches ... automatically print out identities of respondents, listed in descending order of their match probabilities.

By a conservative estimate, our search time will be reduced and our hit rate will be improved to at least 10 to 15%.

But ... reduced search times and more hits are not the only benefits of the automated system.

The automatic search techniques of this new system will also tend to eliminate the part that investigators play in the analysis of fingerprint evidence, since their input is no longer necessary to create lists of suspects. This will free investigators for their prime purpose - investigation. As a corollary, it will cut the amount of investigator costs involved in the fingerprint process.

SELECTION OF AUTOMATED EQUIPMENT

Fingerprints are universally recognized as the most positive means of identification in existence. In the first place, no two fingerprints in the entire world are alike. Furthermore, the "minutiae" within any given fingerprint remain unchanged throughout an individual's lifetime.

In 1980, Alaska law enforcemnt agencies were obtaining "latents" at approximately 50% of all crime scenes. The combined files of the Alaska State Troopers and Anchorage Police Department held a total of 25,000 unidentified latent prints, and more than 2 million identified, rolled prints.

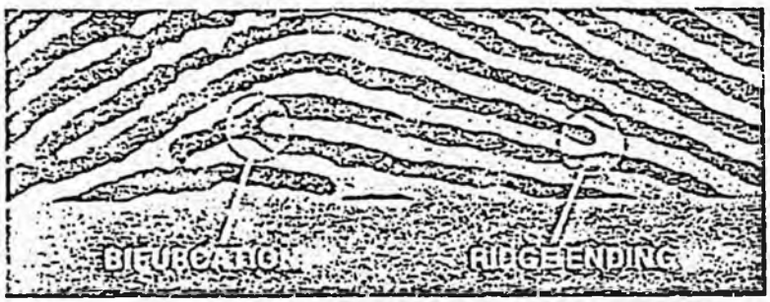
And yet - in spite of the extensive fingerprint file resources, the ability to lift latents at least half the time, and the unquestioned ability of fingerprints to positively identify, Alaska State Troopers and Anchorage Police Department were unable to put fingerprints effectively to work to solve crimes and to cut crime-clearance costs. With existing manual fingerprint processing, it simply takes too long. To find a match for a single latent, with no other clues to the criminal's identity than the print itself, it is more difficult than finding the proverbial haystack needle - and certainly a lot more expensive!

The crying need is for a way to search the files and obtain a match rapidly. It is increasingly evident that the only way to achieve the necessary search speeds would be by means of some sort of computerized system - in other words, through automation of the existing search-and-match process.

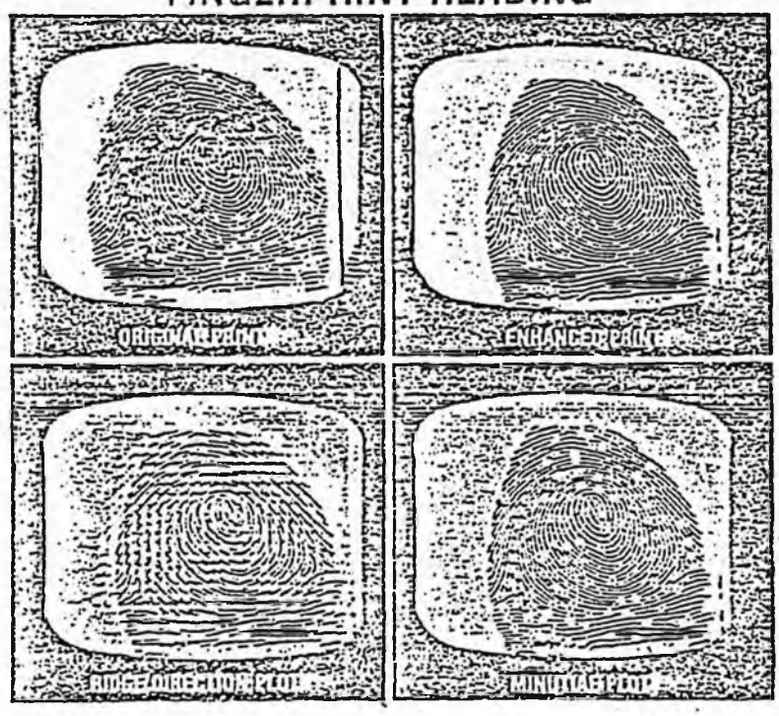
HOW DOES IT WORK?

The approach taken by the automated fingerprint identification equipment to fingerprint identification is based on the use of minutiae data consisting of the location and orientation of fingerprint ridges at points of termination (ridge endings) or branching into two ridges (bifurcation). Patterns of such minutiae uniquely characterize individual fingerprints and are the universal means whereby fingerprint experts are able to positively identify specific persons.

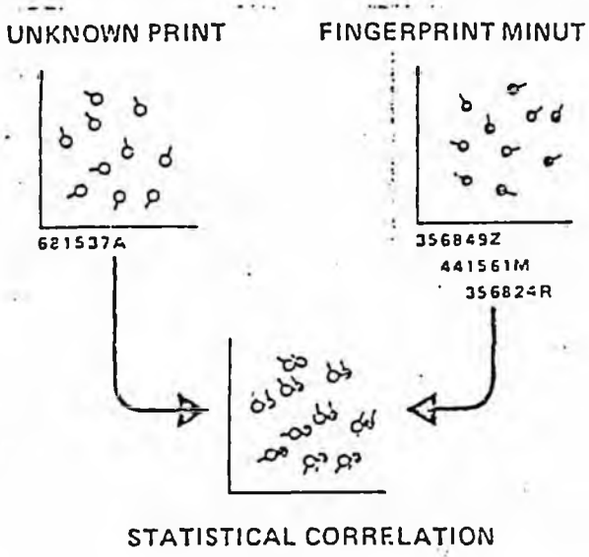
THE PRINTRAK 250S SYSTEM'S "MINUTIAE"-BASED APPROACH OFFERS ACCURACY ... SPEED ... AND ECONOMICAL TRANSMISSIBILITY OF DATA.



FINGERPRINT READING



FINGERPRINT MATCHING



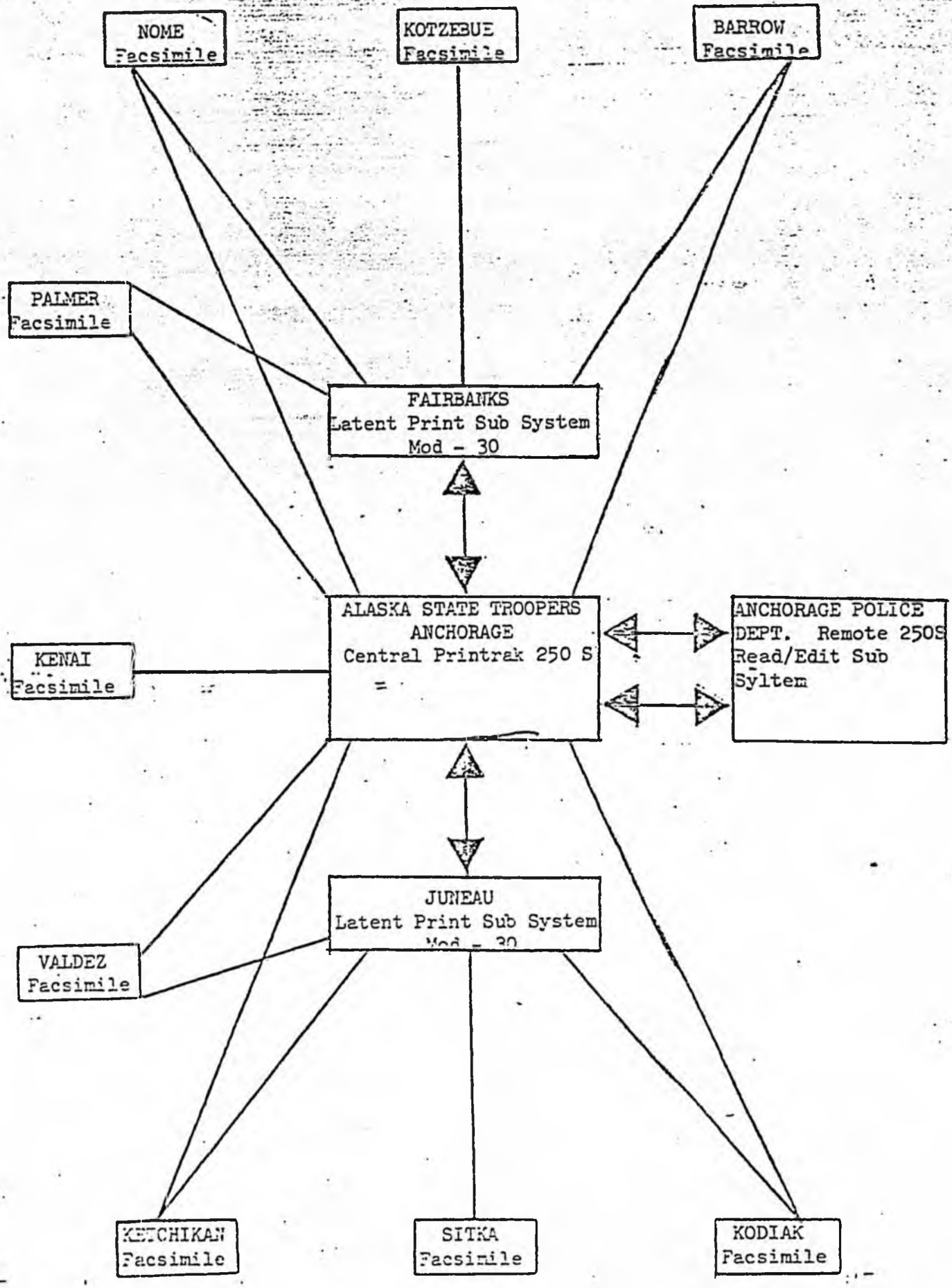
The equipment reads directly from card or paper input, which means there is no need for costly and time-consuming photographic processing of input information. The data which is stored for each fingerprint, and which is subsequently used for matching, are digital, binary-encoded descriptors, and is amenable to high-speed computer processing. In addition, sophisticated algorithms and dedicated processors make possible an extremely high processing speed which, in turn, makes the system highly cost-effective.

The minutia-based approach for automatically processing and matching fingerprints offers many significant advantages over other approaches. Foremost among these advantages is the discriminability of minutia-based systems which permits them to select with high accuracy one person, or a very few candidates from a very large file. All other current approaches must identify a large number of candidates in order to provide any reasonable assurance that the individual of interest is among them.

Because the automated system uses digitally encoded data and only 2500 bits of information are needed to uniquely describe a fingerprint, the system provides a means for transmitting fingerprint data both rapidly and inexpensively over ordinary telephone lines.

Another valuable feature of the system is its ability to maintain its own file of fingeprints for subsequent comparison with unknown prints. Conversion from card or paper format to digital records for permanent storage in system files is performed at the rate of up to sixty 10-print sets per hour. Once established, the file can be developed and updated on a continual basis.

Not least among the system's features are its compatibility with the minutia based system hardware/software of a rapidly growing number of users throughout the U.S.A. and abroad ... including the Federal Bureau of Investigation, a number of major U.S. cities, and the Royal Canadian Mounted Police. It is possible to tie these units together at selected times for cross-jurisdictional searches, if such are necessary.


NOME
Facsimile
KOTZEBUE
Facsimile
BARROW
Facsimile
PALMER
Facsimile
FAIRBANKS
Latent Print Sub System
Mod - 30
ALASKA STATE TROOPERS
ANCHORAGE
Central Printrak 250 S
ANCHORAGE POLICE
DEPT. Remote 250S
Read/Edit Sub
Syltem
KENAI
Facsimile
JUNEAU
Latent Print Sub System
VALDEZ
Facsimile
KETCHIKAN
Facsimile
SITKA
Facsimile
KODIAK
Facsimile

THE ALASKA SYSTEM....

At present Alaska has two departments that have fingerprint files and the personnel to maintain them. The Anchorage Police Department and the Alaska State Troopers in Juneau and Anchorage, have Certified Fingerprint Examiners to maintain their fingerprint and latent print files. With possible expansion in mind and the number of trained fingerprint personnel, Anchorage, Juneau and Fairbanks are the most effective areas to place processing equipment.

The Rockwell 250S Printrak "Central" System would operate from the Alaska State Troopers Headquarters in Anchorage. All fingerprint cards taken by police departments and jails throughout Alaska would be entered.

Anchorage Police having the second largest files and trained personnel to maintain these files, would have a Rockwell Printrak 250S Read/Edit Sub-system. This would give A.P.D. the same ability as A.S.T. to enter it's files and search it's latent cases using the data storage at A.S.T. Head- quarters.

In Fairbanks and Juneau there should be a Rockwell Printrak Model 30 Remote Latent Subsystem in addition to the Anchorage Systems.

Making a truly Statewide Network that would bring every community in the State minutes away from fingerprints identifications a network of facsimile machines throughout Alaska. Using commercial phone lines, or micro-wave communication, fingerprint cards and latents can be sent from anywhere in the State to any latent system or subsystem in a matter of minutes. Communities like Sitka, Ketchikan, Valdez, Seward, Kodiak, Kenai, Nome, Kotzebue, Point Barrow and Palmer could be getting responses on their latents as well as those communities with main system components. Also, portable units can be obtained that would permit investigators to go to a crime scene any where in the State and be able to send latent information to be searched in the Central files.

OVERALL DESCRIPTION OF HARDWARE/SOFTWARE

Hardware

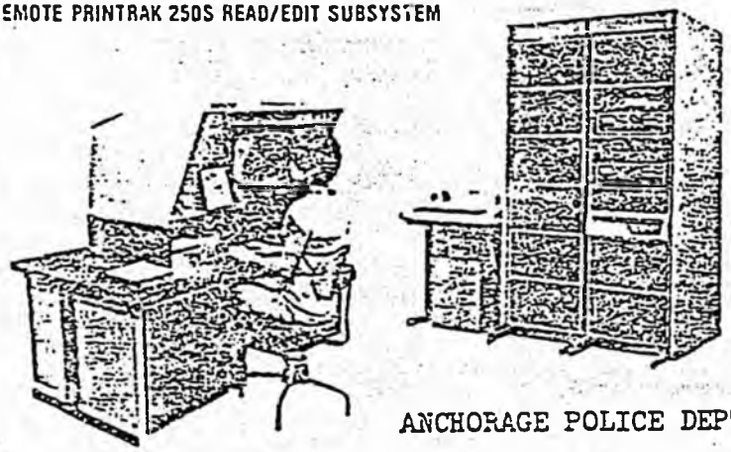
Three types of subsystems:

Read/Edit Subsystem; is made up of a Print Processor, a Read/Edit Operator Console, and a Printer. The subsystem is used to automatically examine fingerprints, extract their minutiae, enter descriptor data, initiate search requests, and obtain search requests. One Read/Edit Subsystem is located in the "Central" facility, A.S.T. Anchorage, and another at the Anchorage Police Department facility would be connected to the Search-and-Match Subsystem at A.S.T. Anchorage via voice-frequency telephone lines. The Read/Edit Subsystem is capable of processing both rolled prints and latents. This subsystem can enhance the quality of the prints using the Processor's computer.

Latent Subsystem; which includes a Latent Terminal and a Printer, gives the user automated assistance in entering descriptor data via keyboard, in encoding locations of minutiae in latent fingerprints, and in receiving results of file searches. A Latent Subsystem would be located at Juneau and Fairbanks facility and would be connected to the Central Search-and-Match Subsystem via a voice-frequency telephone line or microwave communications.

Search-and-Match Subsystem; consists of a Search-and-Match Processor, Data Storage, and a Line Printer. There is only one Search-and-Match Subsystem in the entire network. Located in the Central facility, the Subsystem controls overall system operation, maintains the files, performs search-and-match functions, and reports results of searches to system operators at the various terminals.

REMOTE PRINTRAK 250S READ/EDIT SUBSYSTEM



ANCHORAGE POLICE DEPT.

"CENTRAL" PRINTRAK 250S SYSTEM

PRINT PROCESSOR

SEARCH PROCESSOR

READ/EDIT CONSOLE

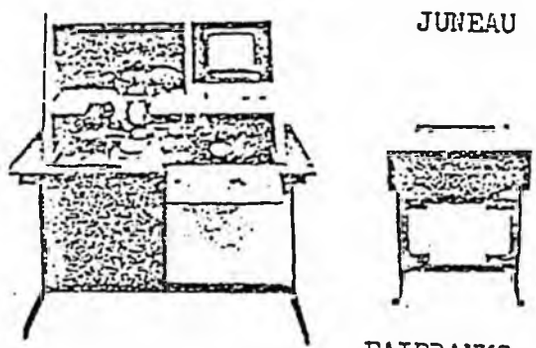
PRINTER

DATA STORAGE

ALASKA STATE TROOPERS ANCHORAGE

REMOTE LATENT SUBSYSTEM

JUNEAU



FAIRBANKS

Software

Automated operation is achieved via its software, that contains all the necessary programs for controlling and coordinating the systems's processes. The software is human-operated-oriented and makes extensive use of display messages, in ordinary English language, to "cue" (i.e., "prompt") the operator with questions which help him in following the proper operational procedures at all times. Thus, no complicated code needs to be learned, and operators need no software experience in order to operate the system.

The software programs, as executed by computers in the Print Processor and Search-and-Match Processor (see drawing), provide an orderly sequential control of all data flows between the hardware equipments, including those to the operator interfaces.

THE SEVEN "MODULES" ... WHAT EACH DOES AND HOW IT DOES IT

Read/Edit Operator Console

The Read/Edit Operator Console serves as the "interface" between the Automated Fingerprint ID System and the human operator. The console contains a keyboard, a TV-type CRT (cathode-ray tube) display and video mixer, a card indexer, a video scanner, a cursor control, and console electronics.

Upon receipt of a latent print or a 10-print card, the operator selects the desired mode of operation and interactively enters data through the keyboard in response to "cues" displayed to him on the display. Ten-print cards are placed on the card indexer platform, and the video images of the prints are transmitted to the Print Processor, which returns to the automatically encoded locations and orientations of the minutiae for each print, overlaid on a magnified image of the print on the display screen.

The console provides the operator with the capability to edit the displayed image by adding or removing minutiae. Encoding of poor-quality prints may be performed manually, if desired, by means of the console controls.

Printer

Each Read/Edit and Latent Console operator is provided with a Printer unit to print out the lists of respondents and other data required in operation of the system.

Line Printer

The Line Printer is a 300-line-per-minute, dot matrix printer/plotter, capable of printing alpha-numeric text. Its function is to print out, when so commanded by the System Files Supervisor, records from the Data Storage disks and other file-related data, e.g., minutiae patterns.

Data Storage

Data Storage contains the records of all data that have previously been encoded. In addition to the encoded minutiae for each fingerprint on file, these records include personal descriptors (e.g., suspect's sex, date of birth, etc), identification numbers and classification data for each print.

Records in Data Storage are grouped by single-finger classification, by finger number, and by descriptors. This data organization decreases the number of separate accesses to the file, and thus reduces the time required for any given latent search. An index provides file location information to individual finger records, and also provides the means whereby card searches can be performed. Employing four movable-head, direct-access disk units, Data Storage has an on-line storage capacity of

350,000 persons (3,500,000 prints). In addition, 25% of one of the four disks is available for storage of latents. Total capacity of Data Storage can be increased by the addition of more disk sets.

A particularly notable feature is the fact that unidentified latents can be stored on disks on-line, and subsequently can be compared against all new 10-fingerprint cards entered into the system. Thus, it is only a matter of time until hits can be obtained for almost all crime "repeaters".

Print Processor

The Print Processor works with the Read/Edit Operator Console in the Read/Edit Subsystem. Its functions are to receive video fingerprint images from the scanner in the Read/Edit Operator console, to process the images, and to locate minutiae. The Print Processor also accumulates a file of minutiae records on disk for later transfer via telephone line to the Search-and-Match Processor as a search inquiry or for distribution to the Central Data Storage fingerprint files. The Print Processor includes video storage, an image processor, a minicomputer, a disk memory, and a multiplexer, all contained in a single, upright cabinet.

Search-and-Match Processor

The Search-and-Match Processor is used in conjuction with the system's Data Storage and a Line Printer to form the Search-and-Match Subsystem. The Search-and-Match Processor consists of a minicomputer (PDP 11/34), a magnetic tape unit, an operating disk set, a computer console, a high-speed minutiae matcher, a multiplexer for communicating with the Read/Edit and Latent Subsystems, and a disk controller for communicating with the Read/Edit and Latent Subsystems, and a disk controller for communicating with Data Storage.

The Search-and-Match Processor uses a general-purpose minicomputer to perform all data processing not specifically assigned to special-purpose subsystems. It handles all transfers of data among major system elements, and coordinates and controls all system operations. Among it's functions are: placing data in Data Storage files, retrieving data from Data Storage files, sorting minutiae records by descriptor data, feeding sets of minutiae to the high-speed minutiae matcher, sorting match-score data into the sequence of descending match-score values for presentation of search results in compliance with the selected decision rule, sending and receiving data and commands over the telephone line interconnections to and from remotely located Read/Edit and Latent Subsystems, handling data transfers, and performing diagnostic tests on itself and on other system components.

Latent Terminal

The Latent Terminal handles latent prints only. Encoding of the prints is performed by the operator manually, rather than automatically as with the Read/Edit Subsystem. The encoding is accomplished by means of controls on the Latent Terminal console which permit the operator to locate, relocate, and erase minutiae that appear on the console's TV-type CRT display screen.

In addition to providing all of the functions necessary for encoding a latent fingerprint, the Latent Terminal also permits the operator to have an automatic search made of Central Data Storage from a remote location. The Terminal's self-contained, high-resolution TV camera scans each fingerprint presented to it, and then shows the operator an enlarged image of

the print on the console display. Brightness and contrast controls may be adjusted to provide an enhanced TV image of the latent print. The operator sends both descriptor data and commands to the Search-and-Match Processor from the Latent Terminal by means of the Terminal console's typewriter-type keyboard. The Search-and-Match Processor, in turn, can write text on the Latent Terminal's display screen - including data formats, input keystrokes, status messages, and search results.

COST

The Rockwell 250S Printrak system was developed with only one purpose; FINGERPRINT IDENTIFICATION. Because the equipment is custom made, the cost is high. Each machine is made to specifications of fingerprint identification as required by the Department.

Rockwell 250S Central System With extra Latent Terminal		$1,700,000.00
Rockwell 250S Remote Read/Edit Subsystem		$ 696,000.00
Two Rockwell 250S Latent Subsystems	#1	$ 126,000.00
	#2	$ 122,000.00
17 Facsimile Machines		$ 320,000.00
Conversion of Fingerprint Files		$ 200,000.00
Maintenance: Facsimile (per year)		$ 40,000.00
250S (82-83) 9 months		$ 282,825.00
Installation Cost		$ 200,000.00
Miscellaneous Cost (electric, travel, supplies etc.)		$ 300,000.00

This system could be operational by 1983. The facsimile machines could be operational before 1983 and could be used for transmission of fingerprint evidence, photos, mugshots, and reports long before the Rockwell system is operational.

This system should be considered a State system similar to the Alaska Justice Informatin System (AJIS) in that a central area of responsibility is needed to control the effectuality of the system. This system should be financially maintained by the State as a State system. Even though the Anchorage Police have a subsystem at their Department their files are being made availabe to the rest of the State by the entry of their files

into the "Central" system. This responsibility of future maintenance by the State would ensure that all areas of the State benefit equally from the Automated Fingerprint Identification Network of Alaska.

AUTOMATED FINGERPRINT IDENTIFICATION NETWORK OF ALASKA

COST ANALYSIS

250S Central System	unit cost including air shipment		$ 1,700,000.00
	Maintenance Fiscal (82-83) 9 mos.		$ 204,300.00
250S Subsystem (A.P.D.)	unit cost including air shipment		$ 696,000.00
	Maintenance Fiscal (82-83) 9 mos.		$ 35,480.00
250S Latent Sybsystem Juneau and Fairbanks		Unit #1	$ 126,000.00
		Unit #2	$ 122,000.00
Maintenance Fiscal (82-83) 9 mos.		Unit #1	$ 20,880.00
		Unit #2	$ 18,435.00
Facsimile Bush Systems	unit cost @ 11,137 x 13		$ 144,781.00
Maintenance Fiscal (82-83) 12 mos. @ $1,480 x 13			$ 19,240.00
Facsimile Main Units	Anchorage P.D., Anchorage AST		
	Fairbanks & Juneau AST @ 32,112 x 4		$ 128,448.00
Maintenance Fiscal (82-83) 12 mos. $5,300 x 4			$ 21,200.00

Installation cost 250S and Facsimile	$ 200,000.00
Conversion of Fingerprint Files	$ 200,000.00
250S System Cost Total	$ 2,840,000.00
Facsimile System Cost Total	$ 320,000.00
Maintenance Fiscal (82-83)	$ 338,900.00
Miscellaneous Cost	$ 300,000.00
TOTAL	$ 4,282,900.00
Maintenance Fiscal (83-84)	$ 412,540.00
Miscellaneous Cost (83-84)	$ 100,000.00

If A. S. T. or D. P. S. personnel trained on the maintenance of the Rockwell system and the facsimile system, a savings of $300,000.00 could be saved a year.

Training	$ 50,000.00
Maintenance fiscal (83-84)	100,000.00
Miscellaneous Cost (83-84)	100,000.00

THE LEGISLATURE OF THE STATE OF ALASKA
TWELFTH LEGISLATURE

FISCAL NOTE

I. REQUEST
Bill/Resolution No. House Bill No. 344
Title Special Appropriation for a Computerized Fingerprint Identification System
Requested by Various Date 04/21/81

II. FISCAL DETAIL
Agency Affected Department of Public Safety
Program Category Affected Administration of Justice
BRU, Program, or Subprogram(s) Affected Laboratory Services
(Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

		FY 81	FY 82	FY 83	FY 84	FY 85	FY 86
100	PERSONAL SERVICES				105,265	115,791	127,370
200	TRAVEL				2,000	2,200	2,420
300	CONTRACTUAL				3,500	3,850	4,235
400	COMMODITIES				9,235	10,159	11,175
500	EQUIPMENT						
600	LAND & STRUCTURES						
700	GRANTS, CLAIMS, ETC.						
	TOTAL				120,000	132,000	145,200

FUNDING (Thousands of Dollars)

GENERAL FUND				120,000	132,000	145,200
FEDERAL FUNDS						
OTHER (Specify Fund Source)						

POSITIONS

FULL TIME		2	2	2	2	2
PART TIME						
TEMPORARY						

III. ANALYSIS (See Fiscal Note Preparation Instructions, Section III)
The proposed legislation would create the Automated Fingerprint Identification Network which would utilize a Rockwell 250 S Printak Central System in AST Headquarters with a Read/Edit Sub-system in the Anchorage Police Department. Juneau and Fairbanks AST would utilize remote later subsystems. In acquiring this tested, proved and highly reliable system, law enforcement agencies can automatically search their already existing extensive fingerprint files to locate matches and print out identities of respondents. Search time will be reduced and match rate increased by at least 15%.

The initial cost of $4,282,900 as provided by this bill should provide all costs of the equipment and its installation plus operating cost through the end of FY'83. (See the attached schedule - "Capital Project Cost Estimate"). The FY'84 - FY'86 cost noted above is the expected operating cost for these years including the cost for two positions.

DEPT. OF PUBLIC SAFETY
APR 24 PM 1:30
FINANCE SECTION
JUNEAU, ALASKA

IV. DATE April 24, 1981 PREPARED BY Francis C. Allan Francis Allan
AGENCY Administrative Services/AST
PHONE 269-5691

Original: Legislative Finance
cc: Budget and Management
Prime Sponsor (First Legislator Named)

33-001 (Rev. 12/80

Automated Fingerprint Identification Network
Capital Project Cost Estimate

Code	Description	FY 82	FY 83	Total
100	Personnel Services			
	111 Reg. Comp. (2x19AGGU)		68088	68088
	121 Overtime (180 hrs x 26.19)		4714	4714
	121 Shift Differential (19Ax3.75)		1277	1277
	sub total		74079	74079
	VAR. Benefits (17.67%)		13090	13090
	184 FICA (6.65%)		4926	4926
	185 Group Medical (1800x2)		3600	3600
	100 TOTALS	-0-	95695	95695
200	Travel and Moving			
	211 In State Travel	2243	9348	11591
	212 In State Per Diem	2878	6460	9338
	223 Out of State Travel	4544	6223	10767
	224 Out of State Per Diem	4820	13050	17870
	291 Transportation	2255	-	2255
	292 Technician Per Diem	2015	-	2015
	200 TOTALS	18755	35081	53836
300	Contractual Services			
	311 Phone	625	5130	5755
	314 Postage	-	420	420
	326 Subscription & Info	-	141	141
	339 Space/Sight Preparation	-	177390	177390
	349 Main. Contract & File Conver.	20220	494743	514963
	389 Training	3254	-	3254
	394 Conference Registration	325	-	325
	397 Freight	10275	13205	23480
	300 TOTALS	34699	691029	725728
400	Supplies & Materials			
	425 Janitorial Supplies	855	855	1710
	469 Spare Parts Inventory	-	207295	207295
	481 Stationary & Supplies	3962	-	3962
	483 Computer Commodities	-	3604	3604
	400 TOTALS	4817	211754	216571
500	Equipment			
	522 Data Proc (70%-82 & 30%-83)	1988000	852000	2840000
	522 Power Stabilizer	-	41500	41500
	522 Facsimile	309570	-	309570
	500 TOTALS	2297570	893500	3191070
	PROJECT TOTALS	2355841	1927059	4282900

REQUEST
Bill/Resolution No. House Bill No. 344
Title Special Appropriation for a Computerized Fingerprint Identification System
Requested by Various Date 3/16/81

II. FISCAL DETAIL
Agency Affected Department of Public Safety
Program Category Affected Administration of Justice
BRU, Program, or Subprogram(s) Affected Laboratory Services
(Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

		FY 81	FY 82	FY 83	FY 84	FY 85	FY 86
100	PERSONAL SERVICES			95,695			
200	TRAVEL		18,755	35,081			
300	CONTRACTUAL		34,699	691,029			
400	COMMODITIES		4,817	211,754			
500	EQUIPMENT	2	297,570	893,500			
600	LAND & STRUCTURES						
700	GRANTS, CLAIMS, ETC.						
	TOTAL		2,355,841	1,927,059			

FUNDING (Thousands of Dollars)

	2,355,841	1,927,059				
GENERAL FUND						
FEDERAL FUNDS						
OTHER (Specify Fund Source)						

POSITIONS

FULL TIME	–		2			
PART TIME						
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III. ANALYSIS (See Fiscal Note Preparation Instructions, Section III)

The proposed legislation would create the Automated Fingerprint Identification Network which would utilize a Rockwell 250 S Printak Central System in AST Headquarters with a Read/Edit Su system in the Anchorage Police Department. Juneau and Fairbanks AST would utilize remote late subsystems. In acquiring this tested, proven and highly reliable system, law enforcement agencies can automatically search their already existing extensive fingerprint files to locat matches and print out identities of respondents. Search time will be reduced and match rate increased by at least 15%.

No personnel costs are expected to be incurred in FY82 while the system is being installed. In FY83 two Range 19A's, would be hired to operate the system. Total establishment costs expected to be incurred during FY82 and FY83 is $4,282,900. Operating costs in subsequent yea are expected to be approximately $120,000 each year.

See attached sheet for further fiscal support.

IV. DATE March 25, 1981 PREPARED BY Francis Allan
AGENCY Administrative Services/AST
PHONE 269-5691

Original: Legislative Finance
cc: Budget and Management
Prime Sponsor (First Legislator Named)

33-001 (Rev. 12/80

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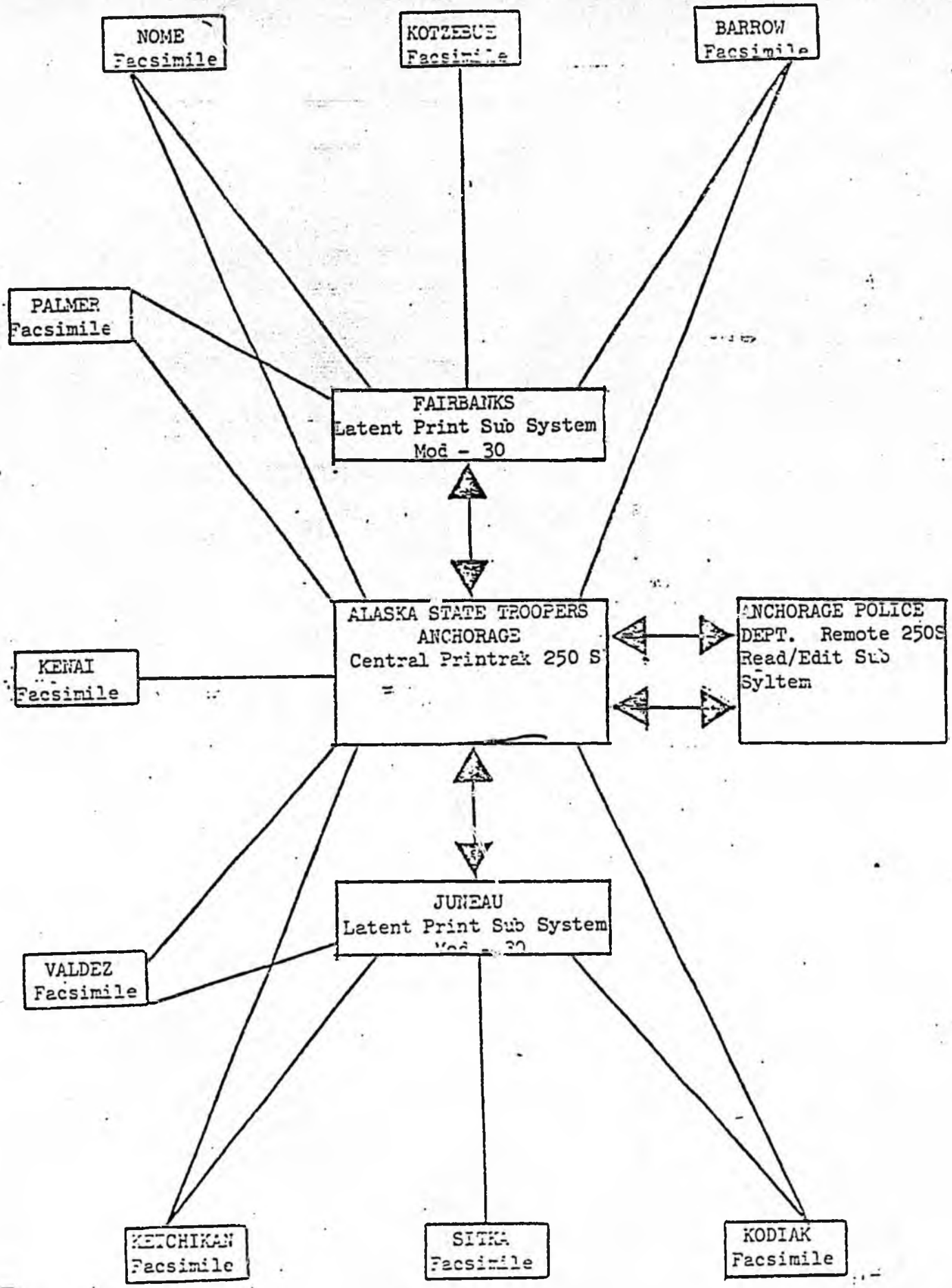
NOME
Facsimile
KOTZEBUE
Facsimile
BARROW
Facsimile
PALMER
Facsimile
FAIRBANKS
Latent Print Sub System
Mod - 30
ALASKA STATE TROOPERS
ANCHORAGE
Central Printrak 250 S
ANCHORAGE POLICE
DEPT. Remote 250S
Read/Edit Sub
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JUNEAU
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Facsimile
SITKA
Facsimile
KODIAK
Facsimile