North Carolina Criminal Justice Information Network Governing Board Report

Submitted to the

Co-Chairs of the Senate and House Appropriations Committees

and the

Co-Chairs of the Senate and House Appropriations Subcommittees on Justice and Public Safety

April 2004

Table of Contents

Introduction

During the 1994 Special Crime Session, the North Carolina General Assembly created the Criminal Justice Information Network Study Committee and appropriated monies to study and develop a plan for a statewide criminal justice information network. The legislation was enacted based on the recognition of the need for further coordination and cooperation in establishing standards for sharing criminal justice information between state and local agencies.

The Criminal Justice Information Network Study Final Report, dated April 7, 1995, outlined a comprehensive strategic plan that provided the vision for the statewide Criminal Justice Information Network in North Carolina. Based on recommendations and strategies identified in the plan, the General Assembly established the Criminal Justice Information Network (CJIN) Governing Board in Section 23.3 of Chapter 18 of the Session Laws of the 1996 Second Extra Session.

The Criminal Justice Information Network Governing Board created pursuant to Section 23.3 of Chapter 18 of the Session Laws of the 1996 Second Extra Session shall report by April 1, 2004, to the Chairs of the Senate and House Appropriations Committees, the Chairs of the Senate and House Appropriations subcommittees on Justice and Public Safety, and the Fiscal Research Division of the General Assembly on:

- The operating budget of the Board, the expenditures of the Board as of the date of the report, and the amount of funds in reserve for the operation of the Board; and

- A long-term strategic plan and the cost analysis for statewide implementation of the Criminal Justice Information Network. For each component of the Network, the initial cost estimate of the component, the amount of funds spent to date on the component, the source of funds for expenditures to date, and a timetable for completion of that component, including additional resources needed at each point.

CRIMINAL JUSTICE INFORMATION NETWORK

North Carolina is recognized today in the Nation as one of the leading states in developing a statewide Criminal Justice Information Network (CJIN). Our success is due directly in part to the North Carolina General Assembly recognizing the need for further coordination and cooperation between state and local agencies in establishing standards for sharing of criminal justice information. During the 1994 Special Crime Session, the General Assembly mandated a visionary study to develop a long-range plan for a statewide CJIN. One of the distinguishing aspects of this study was that it took into account the existing major components of the criminal justice information network and the fact that a statewide CJIN would provide a mechanism for targeting and coordinating expenditures.

The CJIN Study Report dated April 1995 outlined major steps and supporting projects needed to complete the development of a statewide criminal justice information network in North Carolina. One of these steps was to create a Governing Board to oversee, coordinate, and direct the statewide efforts for building a CJIN. Based on this recommendation, the General Assembly established the CJIN Governing Board. The 2004 Annual Report highlights the major accomplishments and activities of the CJIN Governing Board.

How Does CJIN Improve Public Safety and Promote Interoperability?

- Eighty counties, representing approximately 87% of the State's population, have at least one Live Scan device that is connected to the **Statewide Automated Fingerprint Identification System (SAFIS).** In most instances, an agency submitting an electronic live scan fingerprint card through the SAFIS network will know in less than four hours if an individual has a previous criminal record on file at the state level and/or at the Federal Bureau of Investigation. During 2003, the City-County Bureau of Identification (Raleigh), the Mecklenburg County Sheriff's Office (MCSO), the North Carolina Department of Correction (DOC), and the State Bureau of Investigation (SBI) conducted 214,986 fingerprint searches resulting in 62,463 identifications. Eighteen North Carolina law enforcement agencies and the Rock Hill South Carolina Police Department performed 27,173 remote latent searches resulting in 1,239 identifications. As of December 31, 2003 the SAFIS database totaled 1,142,523 fingerprint records. The currently deployed equipment is nearing its obsolescence and must be refreshed in 2007.

- **CJIN – Mobile Data Network (CJIN-MDN)** provides public safety agencies across North Carolina with a "life line" for support and individual officer safety. Additionally, this service allows smaller departments with limited financial resources to have the same high tech assets to fight crime and provide officer safety as the larger departments have. Although the final phase, which provides "complete" coverage for the State's approximate 48,000 square miles, has been completed, the project will continue to explore new technologies that will enhance the operation of the mobile data network and help us to continue providing the level of service our users expect. As of February 2004, there were 310 criminal agencies using CJIN-MDN and a total of 9,236 users.

- The **Statewide Magistrate System** is operational in ninety-eight counties. AOC is working with two counties who had developed their own local, county-based magistrate systems prior to the development of the statewide magistrate system. The Magistrate System automates the work of magistrates by managing warrants and other arrest information.

- The **Statewide Automated Warrant Repository System (NCAWARE)** builds on the Magistrate System environment and will result in the creation of a statewide warrant repository system to maintain and track criminal processes and offender information. NCAWARE provides public safety personnel across the state with full access to all outstanding summons and warrants created in North Carolina and with the ability to print and serve from any county in the state. Currently, the construction of the system is 33% complete and statewide implementation is targeted for late 2005.

- **End User Technology** has allowed the Administrative Office of the Courts (AOC) to implement and upgrade the Local Architecture Network (LAN) infrastructure, replace equipment, and provide an infrastructure that readies courthouses for web based applications. End User Technology has supplemented the Department of Justice's (DOJ) migration to a distributed environment that is compliant with Statewide Technical Architecture and Senate Bill 222.

- **CJIN Network Security** developed 'best of industry' strategies for firewalls, data encryption, and authentication / authorization and then deployed equipment to fulfill some of the outstanding network security needs in the State agencies.

- In May, 2003, **CJIN – Voice Trunking Network (CJIN-VTN)** was renamed to **Voice Interoperability Plan for Emergency Responders (VIPER)** to more accurately reflect the State's short-term tactical communications interoperability needs and solutions as well as the long-term strategic ones. The short-term, emergency communications solution is targeted for completion in December, 2004. The detailed project plan for the strategic 800 MHz solution is targeted for completion in August, 2004.

- **eCitation** is a computerized citation process that allows officers to create citations and schedule court dates electronically in the patrol car. It is currently in the statewide implementation phase and is scheduled for completion in late 2007.

- The **North Carolina Juvenile On-Line Network (NC-JOIN)** will establish an automated statewide system to manage the business of tracking the flow of juveniles through the juvenile justice system. Phases 1 and 2 automated the work of the juvenile court counselors and Phase 3, which is planned to be in use by May, 2004, will address the most critical needs of youth development centers (YDC), assessment centers, and juvenile detention centers. The final two phases, Phase 4 and 5, are pending further funding and will include all aspects of YDC, assessment centers, and juvenile detention centers.

- **CJIN Data Sharing Standards** is piloting Extended Markup Language (XML). XML is a multi-agency data transport tool that allows disparate systems to more easily "talk" to one another. XML appears to be emerging as a universal standard for sharing data across criminal justice information systems.

- The **CJIN Planning Project Study** allowed the state to update selected components of the 1995 blueprint as significant advancements in technology have presented new technological solutions. The Study is complete and has been posted on the CJIN web site.

CJIN Funding Priorities

The CJIN Governing Board has identified its <u>critical funding priorities</u> as follows:

- $125,058 in recurring funds and a $10,000 one-time appropriation for two Full Time Equivalent positions: an **Administrative Assistant III**, level 67, and a **Business and Technology Applications Analyst**, Computer Consultant V - level 79. The CJIN Study Final Report, dated April 1995, recommended the CJIN staff of an Executive Director and four to five technical experts as full-time staff. The Gartner Group Recurring Costs Final Report, dated June 2003, outlines the addition of five CJIN staff by 2005. Gartner recommends that these new positions be fully budgeted with training, travel, and office expenses at the mid-point salary range. Gartner also notes that the CJIN Executive Director position was created with no recurring funding for training, travel, or office expenses. Both studies have stated that staffing is essential to the long term viability of CJIN. The CJIN Governing Board recognizes these are tight financial times to be expanding its staff but has deemed the Administrative Assistant and Business and Technology Applications Analyst as critical staff additions.

- $2,250,000 for the **Statewide Warrant Repository System (NCAWARE).** To date, NCAWARE has been funded with one-time federal grant monies and subsidized with internal Administrative Office of the Courts monies. NCAWARE is a cornerstone for both CJIN and the courts. Once NCAWARE is implemented, public safety personnel throughout the state will have full access to all outstanding summons and warrants created in North Carolina as well as the ability to print and serve them from any county in the state.

- $32,000,000 for refresh of the **Statewide Automated Fingerprint Identification System (SAFIS)** infrastructure and the Live Scan devices. The currently deployed equipment is nearing its obsolescence and must be refreshed in 2007. SAFIS provides positive identification for the individual at the state level and/or at the FBI in less than four hours. SAFIS is also a critical step towards a comprehensive integrated criminal history record because arrest data, along with descriptive data, is automatically added to the Computerized Criminal History files (CCH) minutes after the record is processed through the SBI's Criminal Information and Identification Section.

- **Recurring funds** for operations (i.e., on-going support and maintenance). For example, eCitation has been funded with one-time federal grant monies and subsidized with internal Administrative Office of the Courts monies. eCitation is operational in several counties and continuing its statewide rollout without a recurring funding stream. CJIN Mobile Data Network (CJIN-MDN) has 9,000+ users representing 310 criminal justice agencies and it has no recurring funding stream. Each project template has respectively noted its development funding as well as operational funding. The CJIN Governing Board also lacks recurring funds and this is documented in the template titled "CJIN Governing Board Recurring Costs".

CJIN Funding Priorities

It should be noted that CJIN <u>endorses</u> the following projects for funding even though they do not appear on the critical funding project list.

- The inability of public safety agencies to communicate while participating in joint responses is a risk to both the public safety officials and the general public. **Voice Interoperability Plan for Emergency Responders (VIPER)** is a cornerstone of the State's interoperability Homeland Security strategy and will provide statewide interagency voice communications. The short-term tactical solution for emergency communications is already funded and targeted for implementation in December 2004. The long-term strategic 800 MHz solution is having a detailed project plan developed and is targeted for completion in August 2004. Once the detailed project plan is complete, VIPER will have the vehicle required to justify funding and press for a deployment timeline of 60 months or less (this is the norm to allow for the entire voice network to be deployed before a technology refresh is required).

- Per the Juvenile Justice Reform Act, Senate Bill 1260, Section 21 requires the creation of a juvenile justice information system to provide timely and accurate juvenile information to the courts, law enforcement officers, and those providing treatment and other services for youth in the juvenile justice system; and to relate effectively to the criminal justice (adult) system. When Phase 3 is fully rolled out to the field in April 2004, **NC-JOIN** will be a fully integrated information system for DJJDP. Phase 4, to be completed in 2004-2005 if funding is available, will add the remaining functionality for Youth Development Centers (YDCs) and Detention Centers.

- The CJIN - Mobile Data Network (CJIN-MDN) and Voice Interoperability Plan for Emergency Responders (VIPER) use the shared State Highway Patrol (SHP) / University of North Carolina Center for Public Television (UNC-TV) microwave system. Due to a federal mandate to be HDTV compliant by December 31, 2004, UNC-TV must update its portion of the analog microwave system to a digital standard. In addition, the existing SHP analog microwave locations need to be updated to the digital standard as well. The **digital microwave system** will provide a necessary backbone communications infrastructure link for both VIPER and CJIN-MDN. The digital microwave system should eliminate the monthly recurring costs for telco data circuits being paid by the Department of Justice to support mobile data transmitters today.

Requests for Special Provisions to Support CJIN

There are no requests for special provisions to support CJIN.

Appendix A

An Introduction to NC Criminal Justice Information Network (CJIN)

An Introduction to the North Carolina Criminal Justice Information Network (CJIN)

CJIN Vision

To develop a statewide criminal justice information network in North Carolina that will enable a properly authorized user to readily and effectively use information, regardless of its location in national, state, or local databases.

CJIN Study Final Report Findings

The North Carolina Legislature, during their 1994 Special Crime Session, created a 'blue ribbon' Study Committee to identify alternative strategies for developing and implementing a statewide criminal justice information network in North Carolina that would permit the sharing of information between state and local agencies. An examination of the state's current criminal justice information systems revealed the following deficiencies:

- It takes too long to positively identify persons. From fingerprints to photographs, information is scattered across different databases and filing systems.
- A single, comprehensive source for a person's criminal history is not available in North Carolina. Bits and pieces must be assembled on each individual, causing valuable time to be wasted on information collection.
- There is no single source of outstanding warrants. A person wanted in one county could be stopped in another while the officer has no knowledge of an outstanding warrant. This situation compromises public and officer safety.
- Data is entered excessively and redundantly. There is no single, centralized location for all information and records so data is entered and reentered over and over again into separate databases using different coding systems.
- There is no statewide, interagency mobile voice and data communications system. Officers cannot talk to their counterparts across their own county, much less to those across the state.

CJIN Study Final Report Recommendations

The CJIN Study Committee outlined the following major recommendations for removing these barriers that currently hinder the establishment and implementation of a comprehensive criminal justice information network. These recommendations also took into account the major building blocks for a statewide CJIN that were already in place in 1995.

- Establish a CJIN Governing Board to create, promote, and enforce policies and standards.
- Adopt system architecture standards, end-user upgrades, and system security standards to facilitate movement of data between systems.
- Establish data standards for sharing information, including common definitions, code structures, and formats.
- Implement Live Scan digitized fingerprint systems and Statewide Automated Fingerprint Identification System (SAFIS) technology to accomplish positive fingerprint identification within two hours of arrest.
- Implement a statewide magistrate system to streamline the process of warrant and case creation.

An Introduction to the North Carolina Criminal Justice Information Network (CJIN)

CJIN Study Final Report Recommendations (continued)
- Build a statewide warrant repository that contains all new and served warrant information.
- Implement a statewide fingerprint-based criminal history that includes all arrests and dispositions.
- Build a statewide identification index that includes information from all state and local agencies, as well as necessary linkages to federal justice agencies.
- Establish standards for, and implement a mobile voice and data communication network that allows state and local law enforcement and public safety agencies to communicate with each other, regardless of location in the state.

CJIN Initiatives
The following CJIN initiatives evolved from the CJIN Study Final Report Recommendations:

- CJIN Data Sharing Standards
- Statewide Automated Fingerprint Identification System (SAFIS)
- CJIN-Mobile Data Network (CJIN-MDN)
- Voice Interoperability Plan for Emergency Responders - VIPER (formerly known as CJIN Voice Trunking Network - CJIN-VTN)
- Courtroom Automation - CourtFlow
- Statewide Magistrate System
- North Caroline Juvenile Online Information Network (NC-JOIN)
- CJIN Network Security
- End-User Technology
- Statewide Computerized Criminal History (CCH) Repository
- Statewide Identification Index

CJIN Participants
CJIN comprises both state and local and public and private representatives. The Department of Justice, the Department of Correction, the Department of Crime Control and Public Safety, the Administrative Office of the Courts, the Department of Juvenile Justice and Delinquency Prevention, and the Division of Motor Vehicles are participating CJIN state agencies. Local representation includes Police Chiefs, Sheriffs, County Commissioners, County Information System Directors, North Carolina Chapter of Public Communications Officials International, Court Clerks of Superior Court, Judges, District Attorneys, general public appointments by the Speaker of the House of Representatives and President Pro Tempore of the Senate, the North Carolina Local Government Information System Association (NCLGISA), and the Information Management Resource Commission (IRMC).

Appendix B

CJIN Governing Board

CJIN Governing Board

Section 23.3 of Chapter 18 of the Session Laws of the 1996 Second Extra Session established the Criminal Justice Information Network Governing Board within the Department of Justice (DOJ) for administrative and budgetary purposes. Section 17.1. (a) of the Session Law 2003-284 House Bill 397 transferred CJIN to the Department of Crime Control and Public Safety (DCC&PS). The CJIN Governing Board is established within the DCC&PS for organizational and budgetary purposes only and the Board exercises all of its statutory power independent of control by the DCC&PS.

CJIN Governing Board Membership
There are twenty-one legislatively defined members on the Board. The CJIN Executive Director serves as an advisory member to the Board. There is also an ex-officio advisory member that represents the local city and county Information System (IS) directors.

At the November 20, 2003 Board meeting, Mr. Robert Brinson, Department of Correction Chief Information Officer, was re-elected as the CJIN Chair and Lieutenant Kenneth Wiseman, Jr., Fayetteville Police Department, was re-elected as Vice-Chair. Per legislation, the CJIN Chair and Vice-Chair serve a one-year term. Ms. Carol Morin, CJIN Executive Director, remains the sole CJIN dedicated employee. A CJIN planning study federal grant funded a CJIN Administrative Assistant for approximately eight months, ending on June 30, 2003. All other agencies contribute their resources in an in-kind, ad-hoc fashion.

The Board typically meets every other month but meeting dates are adjusted according to the business needs of CJIN. The CJIN Chair, CJIN Vice-Chair, and CJIN Executive Director address any issues/concerns and then execute an appropriate action plan for those items that need attention between meetings.

There is a CJIN Web site (http://cjin.jus.state.nc.us) that has the basics - meeting minutes, reports to the General Assembly, Board membership, and other relevant CJIN project materials. A CJIN userid is available for questions ('cjin@nccrimecontrol.org'). The CJIN web site is hosted by the Department of Justice.

CJIN Governing Board Financials
When CJIN transferred to DCC&PS, the balance of funds from the original $100,000 State Fiscal Year (SFY) 96-97 non-recurring, non-reverting appropriation was $5,877. CJIN also received a second $100,000 non-recurring, non-reverting appropriation in SFY03-04. CJIN has currently budgeted its money as follows: $5,000 is being used as Governor's Crime Commission (GCC) 25% grant match monies for Board operations and $4,086 is being used as GCC 10% grant match money for the National Criminal History Improvement Program grant.

North Carolina CJIN Governing Board Membership

Appointed By	Description	Current Member
Governor	Employee of Department of Crime Control & Public Safety	Bryan Beatty, Secretary
Governor	Director or employee of State Correction Agency	Robert Brinson, Chief Information Officer, Dept. of Correction
Governor	Representative recommended by the Association of Chiefs of Police	Glen Allen, Chief, Henderson P.D.
Governor	Employee of Department of Juvenile Justice and Delinquency Prevention	Dwayne Patterson, Deputy Secretary
Governor	Employee of Division of Motor Vehicles	George Tatum, Commissioner
General Assembly	Representative of general public, recommended by the President Pro Tempore of the Senate	Kenneth Wiseman, Lieutenant, Fayetteville P.D.
General Assembly	Representative of general public, recommended by the President Pro Tempore of the Senate	Martin Chriscoe, Director, Wake County Emergency Management
General Assembly	Individual who is member of or working directly for the governing board of a NC municipality and recommended by President Pro Tempore of the Senate	J. B. Evans, Mayor, Fair Bluff
General Assembly	Representative of the general public, recommended by the Speaker of the House of Representatives	Joseph Buckner, Chief Judge, District 15B
General Assembly	Representative of the general public, recommended by the Speaker of the House of Representatives	Lewis Blanton, Retired, State Highway Patrol
General Assembly	Individual who is a working member of or working directly for the governing board of a NC county, recommended by the Speaker of the House of Representatives	Vacant
Attorney General	Employee of the Attorney General	Larry Smith, Assistant Director, State Bureau of Investigation
Attorney General	Representative recommended by the Sheriffs' Association	Tommy W. Allen, Sheriff, Anson County
Chief Justice, Supreme Court	Director or employee of the Administrative Office of the Courts	Richard Little, Assistant Deputy Director, Information Technology Division
Chief Justice, Supreme Court	Clerk of the Superior Court	Thomas Payne, Beaufort County
Chief Justice, Supreme Court	Judge, trial court of the General Court of Justice	Henry "Chip" Hight, Jr., District 9
Chief Justice, Supreme Court	Judge, trial court of the General Court of Justice	Robert B. Rader, District 10
Chief Justice, Supreme Court	District Attorney	Rex Gore, District 13
Chief Justice, Supreme Court	Magistrate	Larry Ware, Cleveland County
Information Resource Management Commission	Chair or member of the Information Resource Management Commission	Norris Tolson, Secretary, Department of Revenue
NC Chapter of Public Communications Officials International, President	Active member of the NC Chapter of Public Communications Officials International	Richard NiFong, City of High Point, Director of Communication and Information Services

CJIN Executive Director
March 11, 2004

Appendix C

CJIN Funding Summary

CJIN Funding Summary

This section is intended to provide a summary of CJIN funding by initiative. Active CJIN initiatives provide a detailed breakdown of financial information in the Appendix Section of this report.

CJIN FUNDING SOURCES - DEVELOPMENT	STATE	FEDERAL	UNFUNDED FOR SFY 04-05 (PROJECTED)	ESTIMATE TO COMPLETE
CJIN Feasibility Study (1995). Please note that this figure does not include the overhead costs and salaries for project staff.	$ 769,000	$ 0	N/A	N/A
CJIN Governing Board	$ 200,000	$ 15,000	N/A	N/A
CJIN – Mobile Data Network (CJIN-MDN)	$ 7,932,800	$ 6,257,805	N/A	N/A
Voice Interoperability Plan for Emergency Responders – VIPER (formerly known as CJIN Voice Trunking Network - CJIN-VTN)	$ 0	$ 8,392,460	TBD (1)	TBD (1)
Courtroom Automation – CourtFlow	$ 531,340	$ 0	N/A	N/A
Statewide Magistrate System	$ 6,201,227	$ 6,896,702	N/A	N/A
Automated Warrant Repository System (NCAWARE)	$ 462,087	$ 2,715,337	$ 1,236,908	$ 2,473,816
NC Juvenile Online Information Network (NC-JOIN)	$ 2,103,368	$ 1,599,421	$ 625,408 (2)	$ 1,333,512 (2)
J-NET	$ 2,515,626	$ 10,003,233	N/A	N/A
CJIN Data Sharing Standards	$ 300,000	$ 591,480	TBD (3)	TBD (3)
CJIN Network Security	$ 0	$ 3,500,000	TBD (4)	TBD (4)
eCitation	$ 0	$ 1,375,000	$ 250,000	$ 250,000
CJIN Planning Study (2002)	$ 80,100	$ 1,043,802	N/A	N/A
Statewide Computerized History (CCH) Repository	$ 295,523	$ 886,569	$ 3,000,000	$ 3,000,000
Statewide Automated Fingerprint Identification System (SAFIS)	$ 1,450,000	$ 8,690,636	N/A	N/A
SAFIS Technology Refresh	$ 0	$ 0	$ 1,308,710	$ 31,729,880
End User Technology	$ 0	$ 5,000,000	(5)	(5)
TOTAL	**$ 22,841,071**	**$ 56,967,445**	**$ 6,421,026**	**$ 38,787,208**

NOTES:

These projects funding figures reflect infrastructure, not end user costs.

(1) Based on completion of detailed project plan for the VIPER 800 MHz strategic solution
(2) Based on first generation for NC JOIN (Phases 1-5)
(3) Based on Gartner Group's recommendations
(4) Based on Gartner Group's refreshed network security vision
(5) Varies by individual project

CJIN Funding Summary

CJIN FUNDING SOURCES – OPERATIONS (RECURRING COSTS)	IN SFY 03-04 BUDGET	IN SFY 04-05 BUDGET	UNFUNDED FOR SFY 04-05 (PROJECTED)
CJIN Governing Board	$ 20,000	$ 20,000	$ 135,058
CJIN – Mobile Data Network (CJIN-MDN)	$ 0	$ 0	$ 1,144,000 (1)
Voice Interoperability Plan for Emergency Responders – VIPER (formerly known as CJIN Voice Trunking Network - CJIN-VTN)	$ 0	$ 0	$ 2,126,000 (2)
NC Juvenile Online Information Network (NC-JOIN)	$ 176,061	$ 297,702	$ 84,421
CJIN Data Sharing Standards	$ 0	$ 0	TBD (3)
CJIN Network Security	$ 0	$ 0	$ 5,612,000
eCitation	$ 0	$ 0	$ 298,213
Statewide Automated Fingerprint Identification System (SAFIS)	$ 0	$ 0	$ 462,261
TOTAL	**$ 196,061**	**$ 317,702**	**$ 9,861,953**

NOTES:

These projects funding figures reflect infrastructure, not end user costs.

(1) Based on CJIN-MDN 24x7 support operations

(2) Based on the former CJIN-VTN Phase 1 and the VIPER tactical solution

(3) Based on Gartner Group's recommendations

CJIN Funding Summary

Additional CJIN Funding Sources

Since 1996, the Governor's Crime Commission (GCC) has awarded approximately $27,000,000 in federal grant funds to local law enforcement agencies for CJIN related projects. This includes such items as Live Scan devices, mobile data computers, incident based crime reporting systems, geographical information systems, 800 MHz radios, and cybercrime projects. In addition to the federal funds awarded by the GCC, the U.S. Department of Justice has provided approximately $27,000,000 in grants directly to local units of government for law enforcement purposes via the Local Law Enforcement Block Grant Program and the Edward Byrne Memorial Fund (DCSI).

The Governor's Highway Safety Program (GHSP) provides funding for the administration of a highway safety program designed to reduce traffic crashes and the resulting deaths, injuries and property damage. The GHSP has awarded $875,000 to the eCitation pilot program in Cumberland County and $400,000 to the eCrash project. The GHSP has funded approximately $700,000 for mobile data terminals in law enforcement vehicles.

Other Criminal Justice Systems in North Carolina

There are other state information technology systems that are critical players in the North Carolina criminal justice effort, but they are not identified as "CJIN" because they existed prior to the 1995 study. Examples of such systems include the Department of Correction's Offender Population Unified System (OPUS), the Administrative Office of the Court's Automated Criminal Information System (ACIS), and the Division of Criminal Information's Computerized Criminal History file. The respective agency's operational budget contains funding to support these CJIN activities and they are not included in the figures cited above.

Mecklenburg County has embarked on a multi-year project to integrate their local criminal justice and public safety information systems with state of the art methodologies and technologies in information management and telecommunications. The Administrative Office of the Courts is a major partner in this project to develop a state of the art court system. This project will serve as a model for the State in building a local integrated CJIN effort.

Appendix D

CJIN Mobile Data Network (CJIN-MDN)

Criminal Justice Information Network Mobile Data Network (CJIN-MDN)

Description

Public safety agencies across North Carolina depend on their communication systems as a "life line" for support and individual officer safety. Incompatible radio and data communications equipment inhibits interagency communications in routine and emergency situations. The CJIN - Mobile Data Network (CJIN-MDN) project is focused on expanding the "backbone" of a statewide, shared, public safety mobile data network consistent with the goals and objectives of the North Carolina Criminal Justice Information Network.

Benefits

The CJIN-MDN makes available mobile data service to all public safety agencies in North Carolina including federal, state and local agencies. This service allows smaller departments with limited financial resources to have the same high tech assets to fight crime and provide officer safety as the larger departments have.

Project Status

CJIN-MDN was a five-phase project that began in 1996 and concluded in 2002. Phase V, for all practical purposes, completed coverage for the State's approximate 48,000 square miles. Over the next few years, the focus of CJIN-MDN will be on optimizing coverage, replacing aging base stations, exploring and evaluating new applications, and supporting and maintaining CJIN-MDN deployed infrastructure.

Description of Data

Vehicle registration (car and boat), driver's license, state & national wanted persons, securities (could be stolen traveler checks), stolen articles (TV, VCR, etc.), stolen guns, concealed carry permits, missing persons, domestic violence orders, sexual offender registration violations, and messaging. Agencies with Computer Aided Dispatch (CAD) and Records Management Systems (RMS) have the ability to send reports and dispatch cars via the network. Users performing general inquiries on drivers and registration enjoy a twelve second response time.

Lead State Agency Responsible for Project

Department of Crime Control and Public Safety (DCC&PS), State Highway Patrol (SHP)

FUNDING SOURCES – DEVELOPMENT *							
	SFY 96-97	SFY 97-98	SFY 98-99	SFY 99-00	SFY 00-01	SFY 01-02	SFY 02-03
State appropriations	$ 2,000,000	$ 2,406,000	$ 2,406,000	$ 0	$ 0	$ 0	$ 0
Federal grants	$ 500,000	$ 500,000	$ 3,000,000	$ 240,000	$ 106,370	$ 1,911,435	$ 0
DCC&PS / SHP budget	$ 0	$ 0	$ 0	$ 0	$ 0	$ 547,800	$ 573,000
Subtotal	$ 2,500,000	$ 2,906,000	$ 5,406,000	$ 240,000	$ 106,370	$ 2,459,235	$ 573,000
Total							**$14,190,605**

*Cost is for CJIN infrastructure only and is not representative of Mobile Data Computers
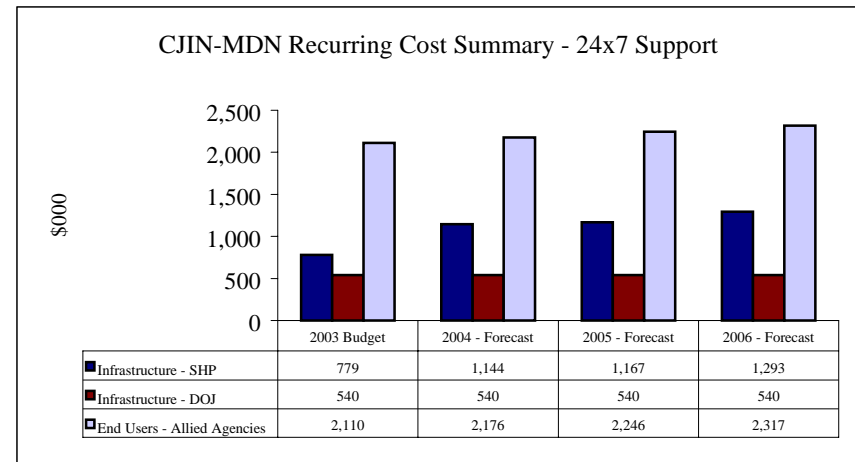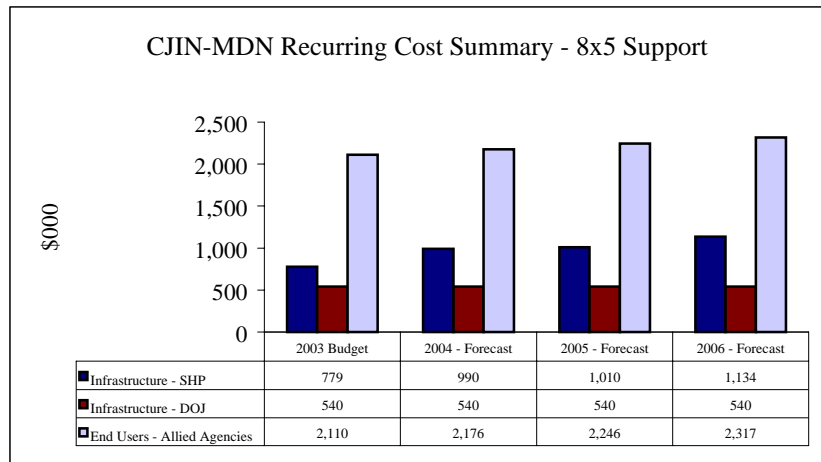
CJIN-MDN

Recurring Costs

CJIN-MDN has been built in five phases over seven years with one time money from both state appropriations and federal grants. CJIN-MDN needs recurring money for operational and support costs. The CJIN recurring cost project selected Gartner Group as an independent and professional firm to assess the current state and to develop recommendations that could be used to guide future decisions.

Figure 12 provides a summary of CJIN-MDN recurring costs for infrastructure and end-user devices.

- The cost of supporting CJIN-MDN infrastructure in 2003 is estimated at $1.32 million.
  - The SHP cost component is $779,000.
  - The DOJ cost component is $540,000.
- In order to provide 24x7 support, the SHP will need three additional positions. The cost impact is illustrated in Figure 12.
- CJIN-MDN end-user costs in 2003 are estimated at $2.1 million. This figure is an estimate only since costs will vary from agency to agency and figures presented provide an average representation of the end-user environment.

Figure 12. Recurring Cost Summary

CJIN-MDN Recurring Cost Summary - 8x5 Support

	2003 Budget	2004 - Forecast	2005 - Forecast	2006 - Forecast
Infrastructure - SHP	779	990	1,010	1,134
Infrastructure - DOJ	540	540	540	540
End Users - Allied Agencies	2,110	2,176	2,246	2,317

CJIN-MDN Recurring Cost Summary - 24x7 Support

	2003 Budget	2004 - Forecast	2005 - Forecast	2006 - Forecast
Infrastructure - SHP	779	1,144	1,167	1,293
Infrastructure - DOJ	540	540	540	540
End Users - Allied Agencies	2,110	2,176	2,246	2,317

Source: Gartner, 2003

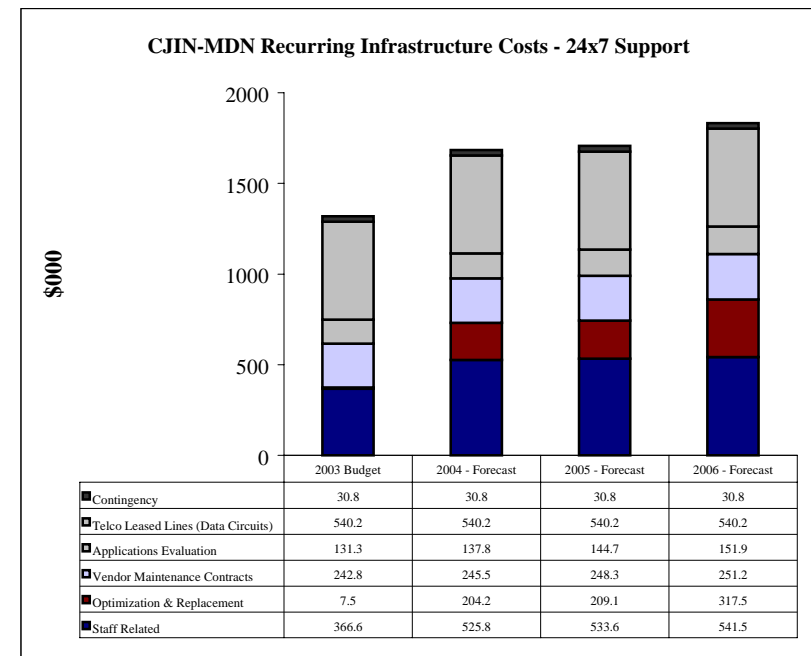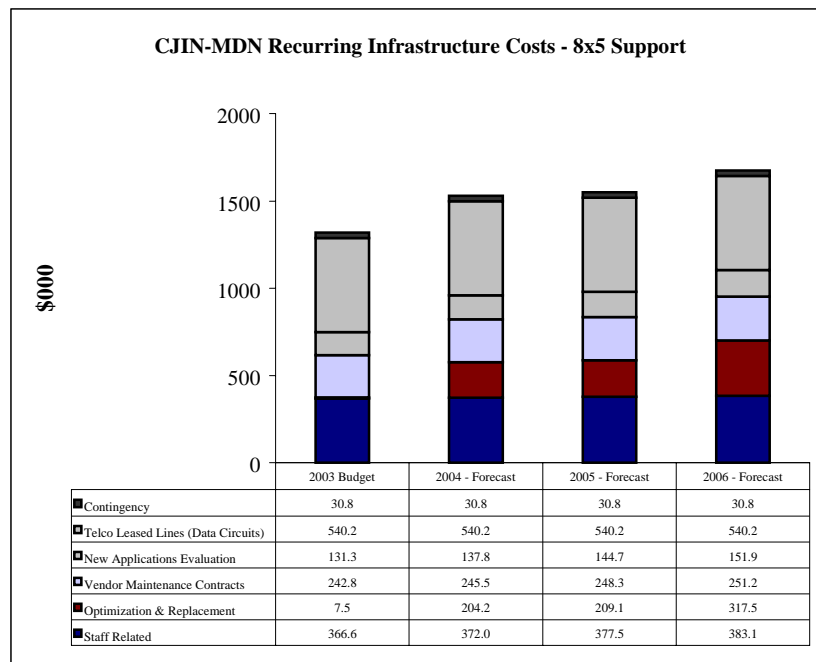Source: State of North Carolina CJIN Recurring Costs – Final Report, Gartner, June, 2003, page 31

3.4.2 Infrastructure Recurring Costs

Figure 13 provides a breakdown of CJIN-MDN infrastructure recurring costs.

- The SHP is responsible for all recurring infrastructure costs except for Data Circuits.

- The cost of providing Data Circuits is borne by the DOJ.

- The additional cost impact of providing 24X7 support in 2004 is estimated at $153,800.

Figure 13. CJIN-MDN Infrastructure Recurring Costs

CJIN-MDN Recurring Infrastructure Costs - 8x5 Support

	2003 Budget	2004 - Forecast	2005 - Forecast	2006 - Forecast
Contingency	30.8	30.8	30.8	30.8
Telco Leased Lines (Data Circuits)	540.2	540.2	540.2	540.2
New Applications Evaluation	131.3	137.8	144.7	151.9
Vendor Maintenance Contracts	242.8	245.5	248.3	251.2
Optimization & Replacement	7.5	204.2	209.1	317.5
Staff Related	366.6	372.0	377.5	383.1

CJIN-MDN Recurring Infrastructure Costs - 24x7 Support

	2003 Budget	2004 - Forecast	2005 - Forecast	2006 - Forecast
Contingency	30.8	30.8	30.8	30.8
Telco Leased Lines (Data Circuits)	540.2	540.2	540.2	540.2
Applications Evaluation	131.3	137.8	144.7	151.9
Vendor Maintenance Contracts	242.8	245.5	248.3	251.2
Optimization & Replacement	7.5	204.2	209.1	317.5
Staff Related	366.6	525.8	533.6	541.5

Source: Gartner, 2003

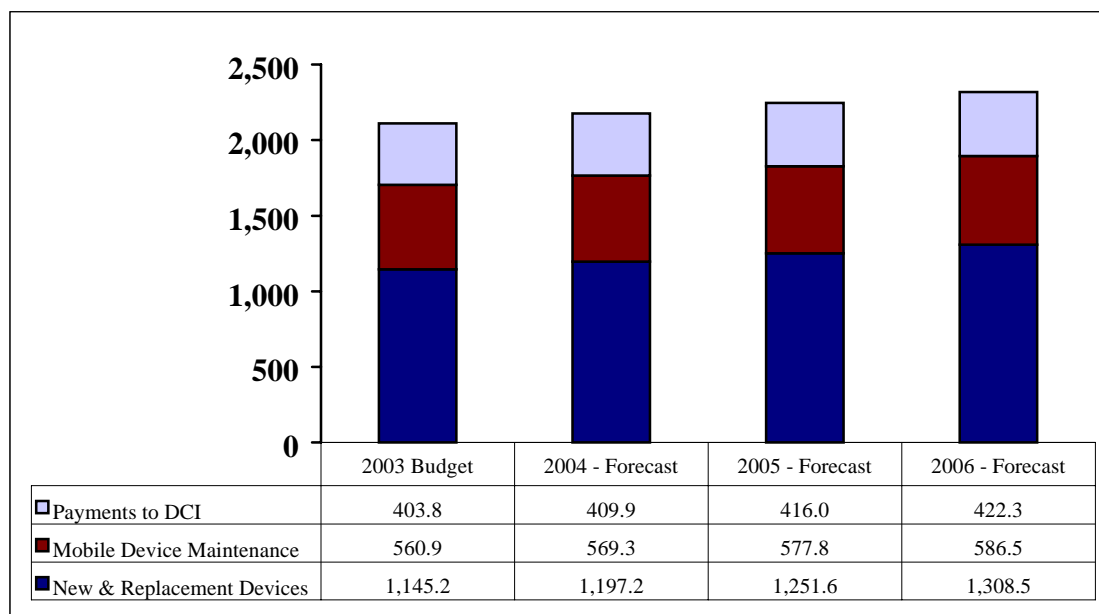Source: State of North Carolina CJIN Recurring Costs – Final Report, Gartner, June, 2003, page 32

3.4.3 End User (Allied Agencies) Recurring Costs

Figure 14 provides a breakdown of CJIN-MDN end user recurring costs.

- Payment to DCI relates to monthly payments of $6 per mobile device made to DCI. This monthly payment mechanism is utilized to offset monthly telco charges made by the DOJ.

Figure 14. CJIN-MDN End User (Allied Agencies) Recurring Costs

	2003 Budget	2004 - Forecast	2005 - Forecast	2006 - Forecast
☐ Payments to DCI	403.8	409.9	416.0	422.3
■ Mobile Device Maintenance	560.9	569.3	577.8	586.5
■ New & Replacement Devices	1,145.2	1,197.2	1,251.6	1,308.5

Note:
1. Payments to DCI based on $6 per month per device
2. Excludes payments from non CJIN devices

Source: Gartner, 2003

Source: State of North Carolina CJIN Recurring Costs – Final Report, Gartner, June, 2003, page 33

CJIN-MDN

Note: EC = Emergency Communications, EMC = Electric Membership Corporation, EMS = Emergency Medical Services, FD = Fire Department, NCFS = NC Forestry Services, PD = Police Department, SO = Sheriff's Office

State Agency Partners:
NC Department of Justice
University of North Carolina Public TV

Local/Federal Partners:

Alexander County SO	City of Tarboro	Oak Island PD
Alleghany County	City of Thomasville	Pamlico County
Alltel Communications Hyde County	City of Yanceyville	Pasquotank County
Ashe County SO	Clay County	Randolph County-NCFS
Aulander Tank Bertie County	Clinton PD	Robbins PD
Avery County-NCFS	Columbus County NCFS	Rutherford County
Balsam, Willets, Ochre Hill FD	County of Guilford	Scotland County
Beaufort County	County of Mecklenburg	Stanly County
Beaufort County Water Department Phase V	Currituck County	Stovall & Granville Co. EC
Bertie County	Dare County	Surry County
Brunswick County Emergency Services	Franklin County SO	Surry Telephone Membership
Burke County	Gaston County	Swain County
Caldwell County SO	Gates County	Town of Beech Mountain
Cherokee County	Davidson County SO	Town of Blowing Rock
Cherokee Indian Agencies	Durham City County EMS	Town of Tabor City
Chowan County SO	Graham County SO	Town of Fair Bluff
City of Asheville	Haywood County	Town of Hamlet
City of Burlington PD	Henderson County	Town of Lilesville
City of Concord	Hertford County SO	Town of Raeford
City of Eden	Hoke County	Town of Southern Shores
City of Goldsboro & Goldsboro PD	Johnston County	Town of Topsail Beach
City of Greensboro	Jones County	Transylvania County
City of High Point	Jones Onslow EMC	Union County
City of Kernersville	Kerr Lake Regional Water Treatment Plant	Wake County
City of Mount Holly	Lenoir County	Wake Forest Univ
City of New Bern	Macon County	Warren County SO
City of Oxford	Madison County Site One and Two	Watauga County
City of Reidsville PD	McDowell County	Wilkes County - Wilkesboro
City of Roxboro	Mitchell County	Yadkin County
City of Sanford PD	Moore County	Yancey County
City of Shelby PD	NC Forest Resources	
City of Statesville	Northampton County SO	

CJIN-MDN

Description of Users

Note: ABC = Alcohol Beverage Commission, ALE = Alcohol Law Enforcement, DMV = Department of Motor Vehicles, PD = Police Department, SO = Sheriff's Office

Aberdeen PD
Ahoskie PD
Albemarle PD
ALE
Alexander SO
Angier PD
Apex PD
Archdale PD
Asheboro PD
Asheville Metro PD
Asheville PD
Atlantic Beach PD
Aulander PD
Bailey PD
Beaufort PD
Beaufort SO
Benson SO
Bethel PD
Beulaville PD
Biltmore Forest PD
Biscoe PD
Black Mountain PD
Bladen SO
Bladenboro PD
Brevard PD
Boone PD
Boonville PD
Buncombe County
Burgaw PD
Burke SO
Burlington PD
Burnsville PD
Butner Public Safety
Cabarrus SO
Caldwell SO
Cameron PD
Camp LeJeune

Campus-Dix Hospital
Campus-ECU
Campus-Guilford Tech
Campus-UNCC
Campus-UNCG
Campus-UNCW
Candor PD
Carolina Beach PD
Carthage PD
Cary PD
Caswell SO
Catawba Hospital
Catawba SO
Chadbourn PD
Chapel Hill PD
Cherryville PD
China Grove PD
Chowan SO
Claremont PD
Cleveland PD
Cleveland SO
Clinton PD
Columbus PD
Columbus SO
Concord PD
Conover PD
Cooleemee PD
Cornelius PD
Craven SO
Creedmoor PD
Cumberland ABC
Cumberland SO
Currituck SO
Dare SO
Davidson PD
Davidson SO
Davie SO

Denton PD
DOT - Fuel Tax
Duke Univ PD
Dunn PD
Duplin
Durham Co ABC
Durham PD
Durham SO
Edenton PD
Edgecombe PD
Elizabeth City PD
Elizabethtown PD
Elon PD
Eureka PD
Fairmont PD
Faison PD
Falls Lake
Fayetteville FD
Fayetteville PD
FBI Charlotte
Fletcher PD
Forest City PD
Forestry
Forsyth ABC
Forsyth SO
Fort Bragg Prov Marshal's Office
Foxfire PD
Fuquay Varina PD
Garner PD
Gaston PD
Goldsboro PD
Graham PD
Graham SO
Granite Falls PD
Granite Quarry
Granville
Greene SO

Description of Users (continued)

Greensboro PD	Lenoir SO	Nash SO
Greenville PD	Lexington PD	NC Marine Patrol
Grifton PD	Liberty PD	NC DMV Enforcement
Guilford EMS	Lincoln SO	NCSHP
Guilford SO	Lincolnton PD	NCSHP Motor Carrier's Enforcement
Hamlet PD	Locust PD	New Bern PD
Harnett	Louisburg PD	New Hanover SO
Havelock PD	Lumberton PD	Newton PD
Haw River PD	Macon SO	North Topsail PD
Henderson	Madison PD	Northampton SO
Henderson PD	Maiden PD	Northwest PD
Hendersonville PD	Manteo PD	Oakboro PD
Hertsford SO	Marion PD	Oak Island PD
Hickory PD	Mars Hill PD	Ocean Isle PD
High Point PD	Marshal's Service, US	Old Fort PD
Highlands PD	Marshville PD	Onslow SO
Hoke SO	Mathews PD	Oxford PD
Hudson PD	Maxton PD	Parkton PD
Huntersville PD	McDowell SO	Pasquotank SO
Hyde County	Mecklenburg ABC	Pembroke PD
Indian Beach	Mecklenburg SO	Pender SO
Iredell County	Middlesex PD	Person Co SO
Jackson SO	Mitchell SO	Pine Knoll Shores PD
Jacksonville PD	Mocksville PD	Pine Level PD
Johnston SO	Monroe PD	Pinebluff PD
Kannapolis PD	Montgomery SO	Pinehurst PD
Kenansville PD	Montreat PD	Pinetops PD
Kernersville PD	Moore SO	Pitt Comm College
Kill Devil Hills PD	Mooresville PD	Pitt SO
King PD	Morehead PD	Pittsboro PD
Kinston PD	Morganton PD	Plymouth PD
Kitty Hawk PD	Morrisville PD	Princeville PD
Kure Beach PD	Mt. Holly PD	Raeford PD
Landis PD	Murfreesboro PD	Randleman PD
Laurinburg PD	N/Campus-Sch-Arts	Randolph SO
Lee SO	Nags Head PD	Reidsville PD
Leland PD	Nash ABC	Rich Square PD

Description of Users (continued)

Richland PD
Richmond SO
Roanoke Rapid PD
Robbins PD
Robeson SO
Rockingham PD
Rockingham SO
Rockwell PD
Rocky Mount PD
Rosehill PD
Rowan ABC
Rowan Comm College
Rowan SO
Rowland PD
Roxboro PD
Rutherford SO
Rutherfordton PD
Salisbury PD
Saluda PD
Sampson SO
Sanford PD
SBI
Scotland
Seagrove PD
Selma PD
Seymour Johnson
Shelby PD
Siler City PD
Smithfield PD
Southern Pines PD
Southern Shores PD
Spencer PD
Smithfield PD
Southern Pines PD
Southern Shores PD
Spencer PD
Spindale

Spring Lake PD
Stanfield PD
Stanly SO
State Capitol PD
Statesville PD
Stem PD
Stovall PD
Surf City PD
Surry SO
Tabor City PD
Tarboro PD
Taylortown PD
Thomasville PD
Topsail Beach PD
Transylvania SO
Trent Woods PD
Troy PD
Tyrell SO
UNC-CH Public Safety
Union SO
US Forest
VA Hospital
Valdese PD
Vance SO
Vanceboro PD
Vass PD
Wagram PD
Wake Forest
Warsaw PD
Washington PD
Watauga SO
Waxhaw PD
Wayne
Waynesville PD
Weaverville PD
West Tek PD
Western Carolina PD

Whispering Pines PD
Williamston PD
Wilmington PD
Wilson PD
Wilson SO
Winfall PD
Wingate PD
Winterville PD
Woodfin PD
Woodland PD
Wrightsville Beach PD
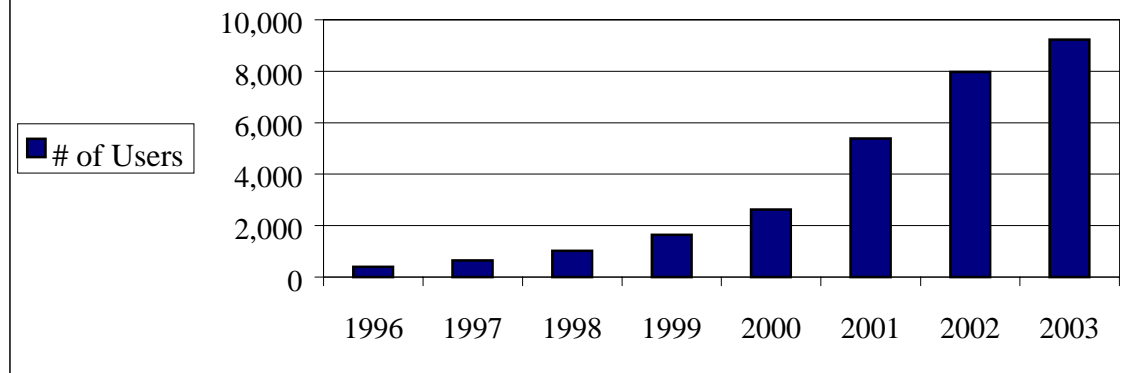Yadkin SO
Yadkinville PD
Yancey SO

CJIN-MDN

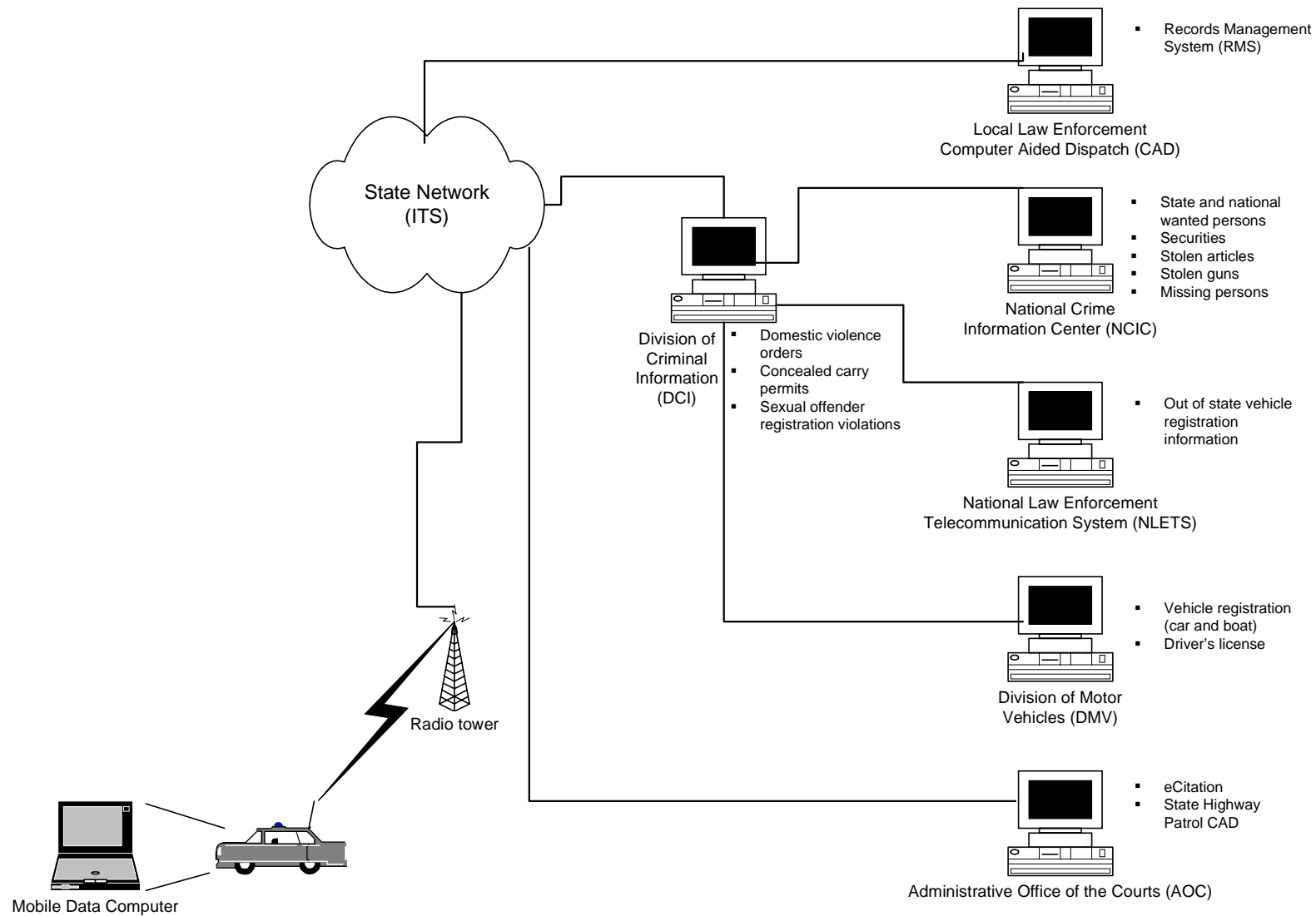## Number of Agencies Using CJIN-MDN
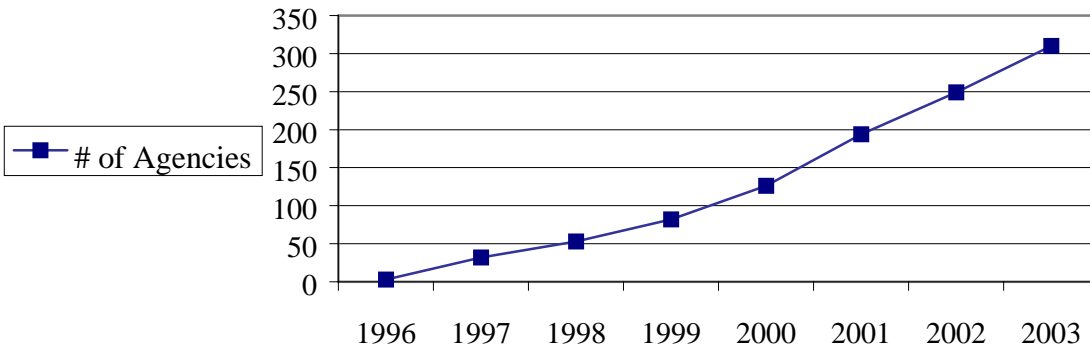
CJIN-MDN offers data communications coverage throughout the 48,000 square miles of North Carolina, utilizing 162 tower sites.

Number of CJIN-MDN Users

CJIN-MDN

State Network (ITS)

Local Law Enforcement
Computer Aided Dispatch (CAD)

- Records Management System (RMS)

Division of Criminal Information (DCI)
- Domestic violence orders
- Concealed carry permits
- Sexual offender registration violations

National Crime Information Center (NCIC)
- State and national wanted persons
- Securities
- Stolen articles
- Stolen guns
- Missing persons

National Law Enforcement Telecommunication System (NLETS)
- Out of state vehicle registration information

Division of Motor Vehicles (DMV)
- Vehicle registration (car and boat)
- Driver's license

Administrative Office of the Courts (AOC)
- eCitation
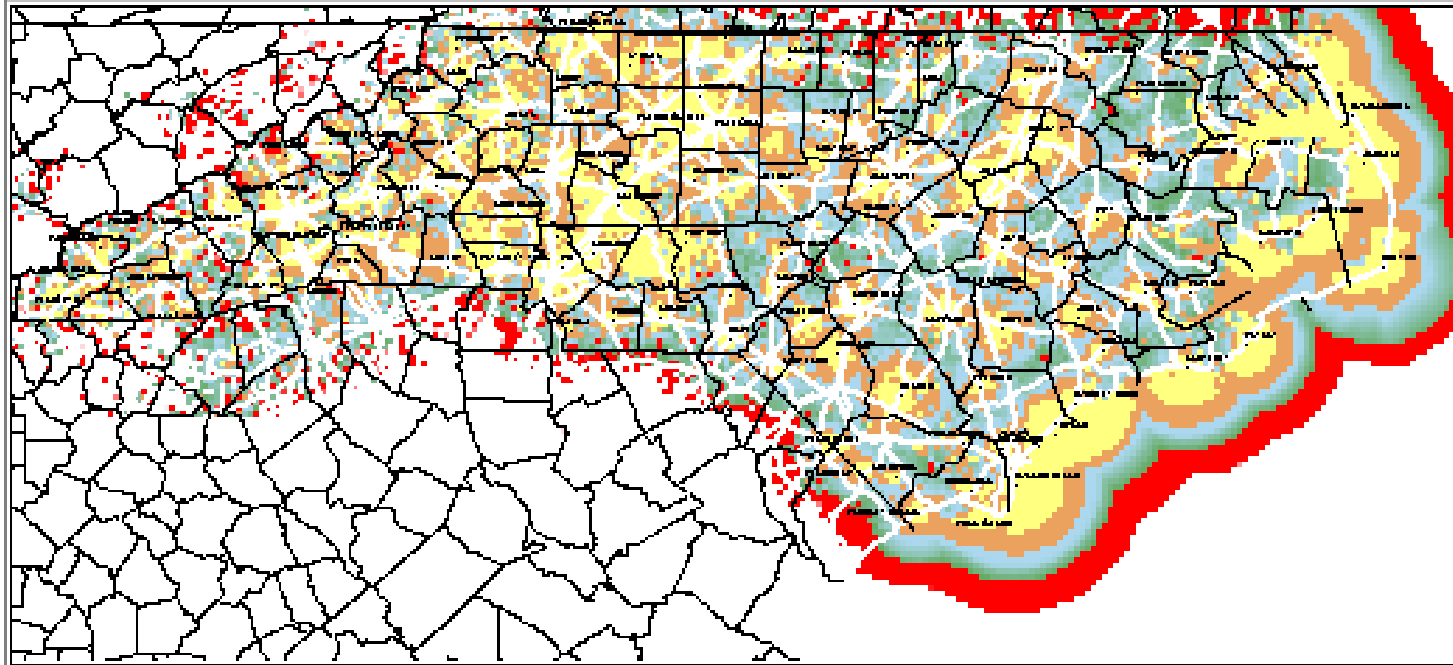- State Highway Patrol CAD

Radio tower

Mobile Data Computer

CJIN-MDN

CJIN - MDN COVERAGE THROUGH PHASE V

WHT=NO SIGNAL, RED=WEAK SIGNAL,   GRN / BLU=GOOD SIGNAL, BRN / YEL=STRONG / VERY STRONG SIGNAL

Weak Signal Strength   Strong Signal Strength

Appendix E

Voice Interoperability Plan for Emergency Responders - VIPER (formerly known as CJIN Voice Trunked Network - CJIN-VTN)

Voice Interoperability Plan for Emergency Responders (VIPER)

Description

In the Criminal Justice Information Network (CJIN) Study Final Report, dated April 7, 1995, Price Waterhouse LLP recommended that CJIN establish standards for and implement a mobile voice and data communications network that would allow all North Carolina law enforcement and public safety agencies to communicate with each other, regardless of location. While our CJIN Mobile Data Network (CJIN-MDN) solution is fully deployed across the State, the CJIN Voice Trunked Network (CJIN-VTN) initiative has struggled over the years. Although it is a high priority for CJIN and we believe that it's a "horse that will win the race once it gets out of the stables", it has the greatest projected cost and is the biggest project left to be tackled.

A revalidation study completed by Gartner Group in November, 2002 reconfirmed our strategy to deploy an 800 MHz solution. This strategy supports the existing local 800 MHz investments. In May 2003, CJIN-VTN was renamed to Voice Interoperability Plan for Emergency Responders (VIPER) thus making our public safety resources more effective and efficient when serving the citizens of North Carolina.

Benefits

Prior to the organization of CJIN, there was no unified comprehensive communications plan that afforded users access to interagency communications. VIPER will provide the ability to communicate interagency, thus enhancing officer safety and allowing our public safety community to better serve the citizens of North Carolina.

Project Status

The VIPER project plan includes a two-pronged approach: a short-term tactical phase and a strategic long-term statewide 800 MHz solution. The tactical approach, a short-term solution for emergency communications with portable/mobile assets, is targeted for completion in December 2004. A detailed project plan for the strategic phase, a statewide 800 MHz trunked radio systems for all emergency responders and setting up mutual aid talk groups, is presently under development and is targeted for completion in August 2004.

Lead State Agency Responsible for Project

Department of Crime Control and Public Safety / State Highway Patrol (DCC&PS/SHP)

Other State Agencies and Local/Federal Partners

University of North Carolina Public Television, Division of Motor Vehicle Enforcement, Alcohol Law Enforcement, Butner Public Safety, State Capitol Police, Department of Correction's Division of Adult Probation and Parole, Wake County Sheriff's Office Judicial Division, Wake County Department of Public Safety, Regional Transit system (operated by the Triangle Transit Authority), United States Marshal's Service, United States Drug Enforcement Administration

FUNDING SOURCES – DEVELOPMENT					
	SFY 99-00	SFY 00-01	SFY 01-02	SFY 02-03	SFY 03-04
State appropriations to CJIN	$ 0	$ 0	$ 0	$ 0	$ 0
Federal grants to CJIN	$ 0	$ 0	$ 0	$ 1,000,000	$ 0
Federal Grants to DCC&PS / SHP	$ 164,000	$ 0	$ 698,460	$ 0	$ 1,500,000
DCC&PS / SHP Federal Asset Forfeiture Funds	$ 1,140,000	$ 0	$ 0	$ 0	$ 0
DCC&PS / SHP Federal Hazard Mitigation Funds	$ 0	$ 0	$ 0	$ 690,000	$ 0
NC Homeland Security Appropriations	$ 0	$ 0	$ 0	$ 0	$ 3,200,000
Subtotal	$ 1,304,000	$ 0	$ 698,460	$ 1,690,000	$ 4,700,000
Total					**$ 8,392,460**

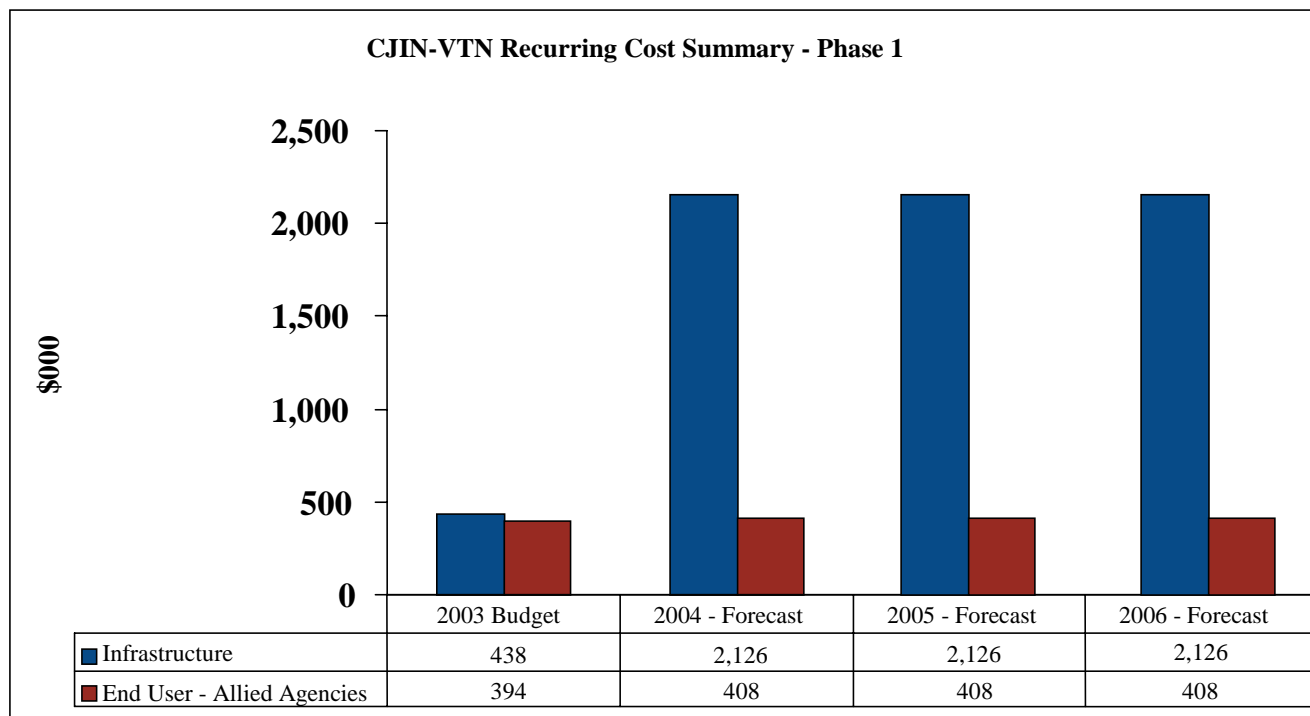# Voice Interoperability Plan for Emergency Responders (VIPER)

Since the detailed project plan for the VIPER 800 MHz strategic solution is still being developed, the 2003 recurring cost model is based on supporting the former CJIN-VTN Phase 1 and the 2004, 2005 and 2006 recurring cost models are based on the former CJIN-VTN Phase 1 and the VIPER tactical solution.

4.4.1 Recurring Costs Summary

Figure 18 provides a summary of CJIN-VTN recurring costs for infrastructure and end-user devices for Phase One:

- The cost of supporting CJIN-VTN infrastructure in 2003 is estimated at $438,171

- The cost of supporting CJIN-VTN end user mobile/portable radios in 2003 is estimated at $393,982

Figure 18. Phase One Recurring Cost Summary

CJIN-VTN Recurring Cost Summary - Phase 1

	2003 Budget	2004 - Forecast	2005 - Forecast	2006 - Forecast
Infrastructure	438	2,126	2,126	2,126
End User - Allied Agencies	394	408	408	408

Note: Year 2003 reflects former CJIN-VTN Phase 1. Year 2004, 2005 and 2006 reflect VIPER tactical solution and former CJIN-VTN Phase 1.

Source: State of North Carolina CJIN Recurring Costs – Final Report, Gartner, June, 2003, page 41 (for 2003 data only).
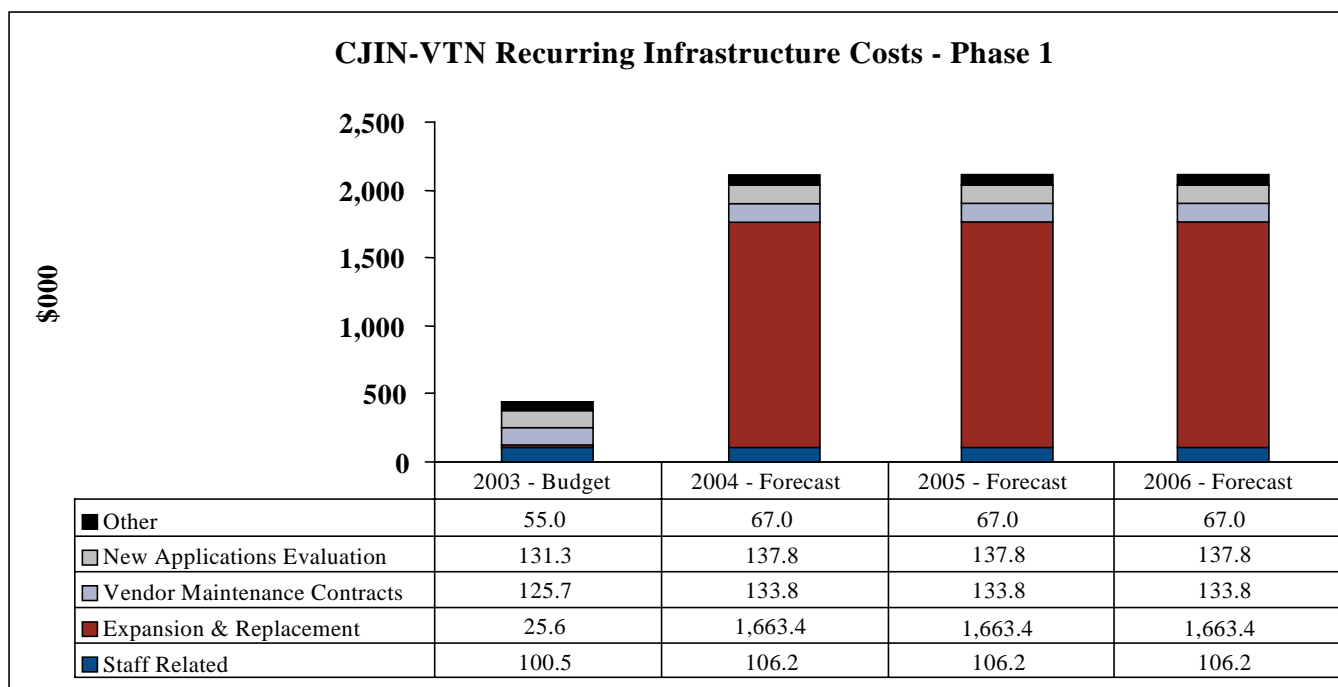
Voice Interoperability Plan for Emergency Responders (VIPER)

Since the detailed project plan for the VIPER 800 MHz strategic solution is still being developed, the 2003 recurring cost model is based on supporting the former CJIN-VTN Phase 1 and the 2004, 2005 and 2006 recurring cost models are based on the former CJIN-VTN Phase 1 and the VIPER tactical solution.

4.4.2 Infrastructure Recurring Costs

Figure 19 provides a breakdown of CJIN-VTN infrastructure recurring costs for VIPER tactical solution Phase 1.

Figure 19. CJIN-VTN Infrastructure Recurring Costs—Phase One

CJIN-VTN Recurring Infrastructure Costs - Phase 1

$000

	2003 - Budget	2004 - Forecast	2005 - Forecast	2006 - Forecast
■ Other	55.0	67.0	67.0	67.0
▨ New Applications Evaluation	131.3	137.8	137.8	137.8
▨ Vendor Maintenance Contracts	125.7	133.8	133.8	133.8
■ Expansion & Replacement	25.6	1,663.4	1,663.4	1,663.4
■ Staff Related	100.5	106.2	106.2	106.2

Note: Other includes Telco leased lines, site maintenance and utilities and contingency

Note: Year 2003 reflects former CJIN-VTN Phase 1. Year 2004, 2005 and 2006 reflect VIPER tactical solution and former CJIN-VTN Phase 1.

Source: State of North Carolina CJIN Recurring Costs – Final Report, Gartner, June, 2003, page 42 (for 2003 data only).

Voice Interoperability Plan for Emergency Responders (VIPER)

1.0 Executive Summary

This report is the final phase in Gartner's engagement to provide a revalidation of the original Price-Waterhouse study, which recommended the development of a Statewide voice trunking network (VTN) to allow State and local agencies to communicate with each other. After extensive review of available documentation, interviews with key personnel, review of comparable projects in other states, review of internal Gartner data and an analysis of a major end-user survey of North Carolina public-safety agencies, our findings include the following:

- **Demand for Statewide VTN is strong**—The user surveys show that the vast majority of local agencies support the need for a Statewide network and feel that it will speed the flow of information between agencies.

- **Local support is strong**—A majority of the local agencies are willing to partner with CJIN in the development of a Statewide network.

- **There is a willingness to share cost**—Local agencies are open to the idea of paying a monthly usage fee of around US$20 as a way to defray some of the cost of network construction and operation.

- **Project costing needs further refinement**—Our estimates for the total project cost are markedly higher than those provided by the State Highway Patrol (SHP). The SHP has estimated the cost of deploying CJIN-VTN infrastructure excluding subscriber radio units and annual recurring costs, at about $150 million. Based on high-level assumptions, Gartner estimates the cost of deploying CJIN-VTN at about $240 million. We have identified three major areas of cost divergence.

  - *SmartZone Controllers and Transmitters*—The SHP estimate for this category is about $76.8 million. Based on our analysis and input provided by Motorola, our estimate for this category is about $42.4 million, based on list pricing.

  - *Program Management*—The SHP has elected to internally manage the CJIN-VTN deployment. The SHP has successfully demonstrated with the deployment of the Mobile Data Network (MDN) that it can realize significant cost savings by managing the project with in-house resources. Our research and analysis indicates that program management costs can account for as much as 25 percent to 40 percent of the project cost. The SHP has assumed program management cost at 5 percent of the total cost, or $8 million. For planning purposes, Gartner has assumed program management costs at 25 percent of total costs, resulting in a total cost of $60 million. Since detailed assumptions were not available, we cannot comment on the validity of the assumptions made by the SHP. While we recognize that there are opportunities for cost savings by managing such a program internally, we believe that the 5 percent figure assumed by the SHP may be on the low side.

Source: State of North Carolina CJIN-VTN Task 7—Final Report, Gartner, November, 2002, pages 1-2

Voice Interoperability Plan for Emergency Responders (VIPER)

1.0 Executive Summary (continued)

□ *Tower Sites/Buildings/Generators*—The SHP has assumed an average cost of about $122,000 per site, resulting in a total estimate of $24.4 million. This average cost is based on the assumption that existing sites will require no refurbishing and new sites can be deployed at a cost ranging from $180,000 to $250,000. Tower construction is a highly variable cost because there are many unknown factors that have to be considered. As a result, the cost of a new tower site can be as high as $1 million. For planning purposes, Gartner has assumed $200,000 to upgrade existing sites and $535,000 to deploy new sites, resulting in a blended cost of $350,000 per site, or $70 million.

■ **Lack of funding is a major hindrance**—To date, only a limited network deployment has taken place because funding has been scarce. Gartner estimates that the total cost of building the network at about $240 million. The cost of maintaining and operating the network is estimated at $18 million per year. The total life-cycle cost of CJIN-VTN over a 10-year period could exceed $400 million. Unless funding sources are identified and a deployment timeline agreed-to, the local agencies will likely lose interest before the project ever reaches critical mass.

■ **Detailed project plan is required**—At the current time, the network design, project plans and cost estimates exist only at a planning level. Detailed implementation plans and budgets have not been prepared. This has limited our validation effort to a "planning-level" set of estimates. In order to secure funding and to propose a reasonable implementation timeline, a formal project, budget and implementation plan needs to be put in place. This will allow the State to assess the full costs associated with the project and make a determination as to how it wishes to proceed.

■ *Ad hoc* **funding is not the answer**—When we look at other states that have deployed networks of this type, we find that deployment timelines of 60 months or less are the norm. This allows the entire network to be deployed before a technology refresh is required. In addition, it establishes concrete dates by which local agencies can expect to receive the benefits of the network. Without committed funding and a specific implementation schedule, the local agencies are likely to lose their enthusiasm for the project and will seek alternate solutions to meet their needs. Overall, we have found that the planning work that has been done on the CJIN-VTN network to be pragmatic and well thought out. However, it is only planning work. In order to take the CJIN-VTN to the full deployment level, a detailed project plan must be put in place that lays out the network design, project costing, implementation timeline, cooperative agreements, personnel requirements and funding plan.

Overall, we have found that the planning work that has been done on the CJIN-VTN network to be pragmatic and well thought out. However, it is only planning work. In order to take the CJIN-VTN to the full deployment level, a detailed project plan must be put in place that lays out the network design, project costing, implementation timeline, cooperative agreements, personnel requirements and funding plan.

Source: State of North Carolina CJIN-VTN Task 7—Final Report, Gartner, November, 2002, pages 1-2

Voice Interoperability Plan for Emergency Responders (VIPER)

3.3 Conclusions

Based on the survey results, a number of conclusions become evident:

- There is limited deployment of 800 MHz technology to date

- The majority of the in-place 800 MHz infrastructure is supplied by Motorola

- The majority of users are dissatisfied with their ability to inter-operate with other agencies

- Most respondents agree that a CJIN-VTN will provide a number of key benefits
  - Seamless Statewide communications
  - Seamless interagency voice communications
  - Unobstructed flow of criminal justice information across agencies
  - Improved officer safety

- The vast majority of respondents are interested in a partnership with CJIN-VTN

- The majority of respondents lack the capital budget required to purchase new equipment

- A monthly subscription fee of $20 will result in the highest participation rate.

While there are funding obstacles to overcome, the user survey clearly shows that there is a perceived need for the CJIN-VTN, an understanding of the benefits to be derived, and a willingness to assist in defraying the costs by paying a monthly user fee.

Source: State of North Carolina CJIN-VTN Task 7—Final Report, Gartner, November, 2002, page 15

Voice Interoperability Plan for Emergency Responders (VIPER)
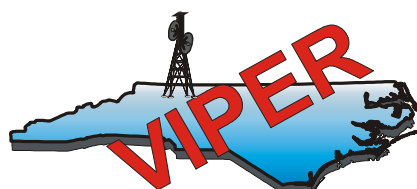
VIPER

Voice Interoperability Plan for Emergency Responders

A CJIN Module

Voice Interoperability Plan for Emergency Responders (VIPER)

CURRENT VIPER 800MHz SITES
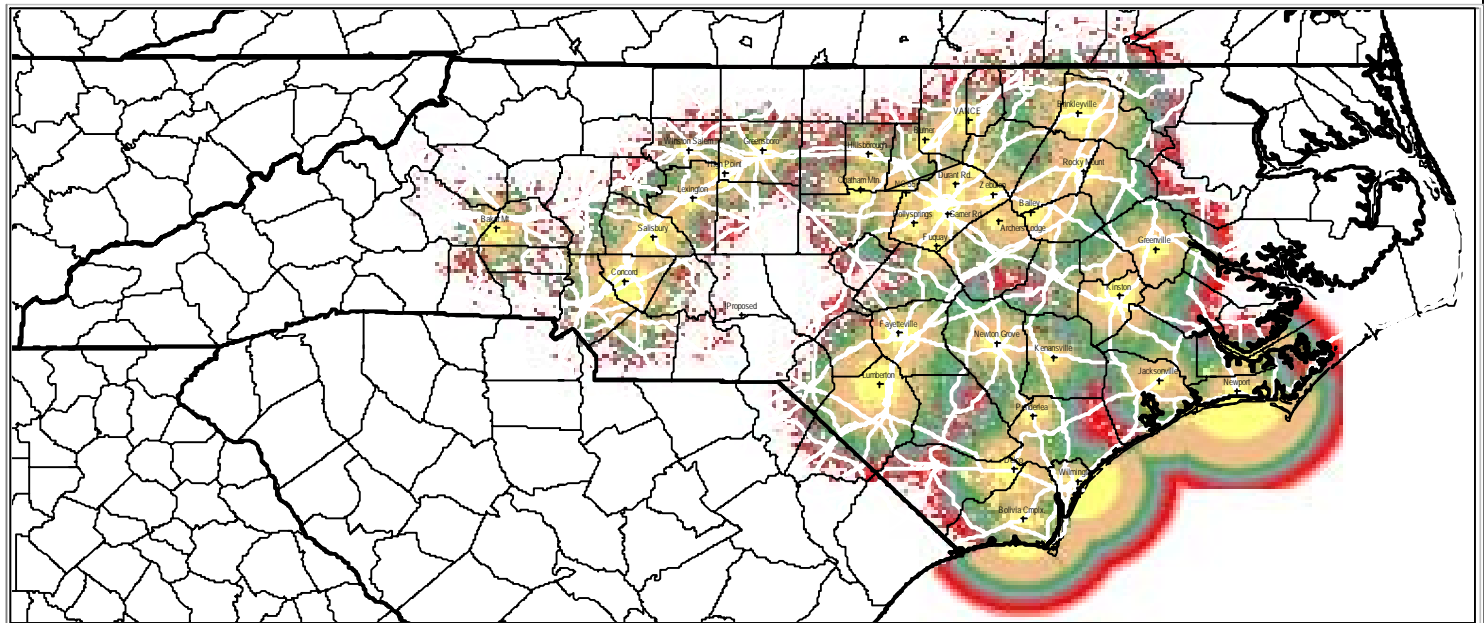
5-WATT T/B LEVELS:WHT-NO SIGNAL RED-VERY WEAK   BLU/GRN-GOOD   BRN/YEL-STRONG

| 0.00 | 0.02 | 0.04 | 0.14 | 0.25 | 0.69 | 1.96 | 2.77 | 4.38 | 1101.18 |
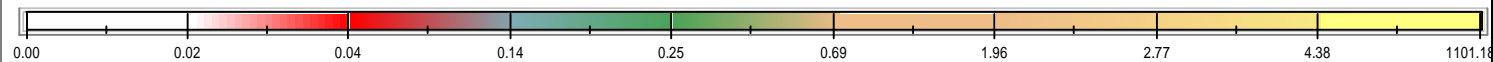
Weak Signal Strength   Strong Signal Strength

Appendix F

North Carolina Automated Warrant Repository (NCAWARE)

NC Automated Warrant Repository (NCAWARE)

Description

NCAWARE will provide an automated statewide warrant repository to maintain and track criminal processes and offender information. All NC court officials and law enforcement agencies will have access to NCAWARE. NCAWARE will be initially populated by data from both the existing Magistrate system and the Automated Criminal Information System (ACIS).

Part of this project will move the Magistrate System from a client-server platform to a browser-based environment. This will result in compliance with the new Administrative Office of the Courts (AOC) technical architecture as well as providing a common presentation to magistrates and law enforcement users. NCAWARE will be one of many modules that together make up the AOC's modernized Court Information System (CIS).

Benefits

NCAWARE will provide real time access to a statewide warrant repository that will be widely accessible to all North Carolina court officials and law enforcement officers. In addition, there is the ability to print and serve them from any county in the State. NCAWARE also reduces risks to personal safety for court officials, public safety officers, and law enforcement personnel.

Project Status

The following phases are complete: Planning, Analysis, Conceptual Design, External Design, and Detailed Design phases. Interface Designs is 25% complete, Construction is 33% complete, and the testing environment has been established. Planned statewide implementation is targeted for late 2005.

Description of Data

Case level, warrants for arrest, magistrate orders, criminal summons, order for arrest, fugitive orders / warrants, release orders, appearance bonds, involuntary commitment, direct criminal contempt.

Description of Users

Magistrates, county clerks, law enforcement officers (local, state and federal), Department of Justice, State Bureau of Investigation, Division of Criminal Information and Identification Section, and Department of Correction.

Lead Agency Responsible for Project

Administrative Office of the Courts

FUNDING SOURCES - DEVELOPMENT	SFY 00-01	SFY 01-02	SFY 02-03	SFY 03-04	Requested for SFY 04-05	Planned to Request for SFY 05-06
State appropriations	$ 54,180	$ 26,667	$ 133,308	$ 247,932		
Federal grants	$ 487,620	$ 240,000	$ 801,924	$ 1,185,793		
Subtotal	$ 541,800	$ 266,667	$ 935,232	$ 1,433,725		
Total				**$3,177,424**		

Unfunded					$1,236,908*	$1,236,908

*Note: Governor's Crime Commission pre-grant application submitted on January 30, 2004

NORTH CAROLINA WARRANT REPOSITORY (NCAWARE)

Sharing NCAWARE Information

- NC Magistrates

- NC Law Enforcement Officers (LEOs)

- Investigators

Any Web -enabled PC

NC Mobile LEOs

Other DCI inquiries

-DAs, DOC, LEOs, FBI, Wildlife, DEA

Any Web -enabled PC

National Mobile LEOs

NCAWARE (all NC warrants, summons, & Magistrate Orders)

Extraditable Warrants

Mobile inquiries to NC criminal processes

SBI DCI

Extraditable Warrants

FBI

National Magistrates & LEOs

CJIN General Assembly Report April 2004
North Carolina Automated Warrant Repository (NCAWARE)
Appendix F Page 2

Appendix G

**North Carolina Juvenile Online Information Network
(NC-JOIN)**

North Carolina Juvenile Online Information Network (NC-JOIN)

Description

A major initiative of North Carolina's Department of Juvenile Justice and Delinquency Prevention (DJJDP) is establishing an automated statewide system to manage the business processes of the DJJDP staff charged with monitoring and managing the flow of juveniles through the State's juvenile justice system. The North Carolina Juvenile Online Information Network (NC-JOIN) will ultimately replace local databases and the manual processing and tracking of juveniles in the juvenile justice system statewide.

Benefits

The benefits of NC-JOIN to DJJDP include replacing the current manual processing and tracking of juveniles, providing a user interface that meets the usability needs of the end users, providing necessary data to field staff for case management and reporting, enabling business process efficiency across all DJJDP functional departments, providing a centralized database of current and historical juvenile information, and providing the capability for doing statistical analysis for research and planning.

The benefits of NC-JOIN to the State include sharing of juvenile information between agencies, improving and expediting decisions made about juveniles, reporting on statistical analysis and trends to measure juvenile crime and the success of prevention programs, providing valuable data to the legislature for statistical analysis and reporting, and providing data for planning to determine bed space and program capacity needs for the full continuum of community-based programs.

Lead State Agency Responsible for Project

Department of Juvenile Justice and Delinquency Prevention (DJJDP)

Description of Users

Current users are juvenile court counselors and administrative staff statewide. Youth Development Centers (YDC), assessment center, and detention center staff will begin using NC-JOIN in April-May 2004. Community programs are expected to begin using NC-JOIN in 2006. Next generation users will be agencies outside of DJJDP, such as courts, law enforcement, mental health, etc.

Project Status

NC-JOIN functionality is being developed and implemented in multiple phases. Phase 1 automated a portion of the juvenile intake process for juvenile court counselors with statewide use beginning on May 1, 2003. Phase 2 automated the remaining juvenile court counselor functions with statewide use beginning on January 2, 2004. Phase 3, which will be in use by May 28, 2004, will address the most critical needs of YDC, assessment centers, and juvenile detention centers and represents the completion of a system that integrates staff, processes, and juvenile data from DJJDP's two main divisions. Pending the acquisition of necessary funding, functionality envisioned for Phases 4 and 5 of NC-JOIN includes management of education, transportation, and treatment services in YDC, assessment centers, and detention centers and extending NC-JOIN to community programs for tracking referrals, participation, and outcomes for these programs. The next generation of NC-JOIN is expected to automate business processes and data communication between DJJDP and other agencies associated with juvenile justice, but this will require funding and executive sponsorship from those agencies, which is not currently in place.

Description of Data

NC-JOIN data currently available:
- Juvenile Demographics and Social History
- Complaints, Decisions, Petitions, and Placement
- Case Notes
- Program Assignments
- Risk and Needs Assessments
- Court Process / History
- Diversion and Supervision

NC-JOIN data to be included in the May 2004 implementation:
- Detention Admissions and Exits, Incidents and Hearings, Confinement and Isolation
- YDC Commitment and Extension, Admission and Release, Juvenile Status, Location, and Assigned Staff, Behavior Alerts, Infractions, and Hearings
- Educational and Mental Health Assessments
- Eckerd Camp Referral, Acceptance/Admission, and Outcome
- Juvenile Alerts

NC-JOIN

FUNDING SOURCES – FIRST GENERATION DEVELOPMENT

	SFY 01-02	SFY 02-03	SFY 03-04	SFY 04-05	SFY 05-06
State appropriations	$ 172,293*	$ 356,776*	$ 763,021*	$ 419,824*	$ 391,454*
Federal grants	$ 398,048	$ 982,986	$ 218,387	$ 0	$ 0
Subtotal	$ 570,341	$ 1,339,762	$ 981,408	$ 419,824	$ 391,454
Total					**$3,702,789**

Unfunded	$ 0	$ 0	$ 0	$ 625,408**	$ 708,104

* Note: Represents funding for DJJDP FTE's on project team
** Note: Governor's Crime Commission pre-grant application for $391,160 submitted to fund through completion of Phase 4

RECURRING COSTS – FIRST GENERATION OPERATIONS, MAINTENANCE, AND SUPPORT

	SFY 02-03	SFY 03-04	SFY 04-05	SFY 05-06	SFY 06-07	SFY 07-08
State appropriations	$ 99,768	$ 176,061*	$ 213,281*	$ 241,651*	$ 241,651*	$ 294,202*
Federal	$ 21,998	$ 0	$ 0	$ 0	$ 0	$ 0
Subtotal	$ 121,766	$ 176,061	$ 213,281	$ 241,651	$ 241,651	$ 294,202
Total						**$1,288,612**

Unfunded	$ 0	$ 0	$ 84,421	$ 94,421	$ 126,421	$ 161,088

* Note: Represents funding for DJJDP FTE's operating, supporting, and maintaining NC-JOIN

Relevant Statistics

Juvenile Intakes in NC-JOIN
- 20,088 Delinquent Juvenile Intakes
- 3,731 Undisciplined Juvenile Intakes

Juvenile Complaints in NC-JOIN
- 38,893 Delinquent Complaints
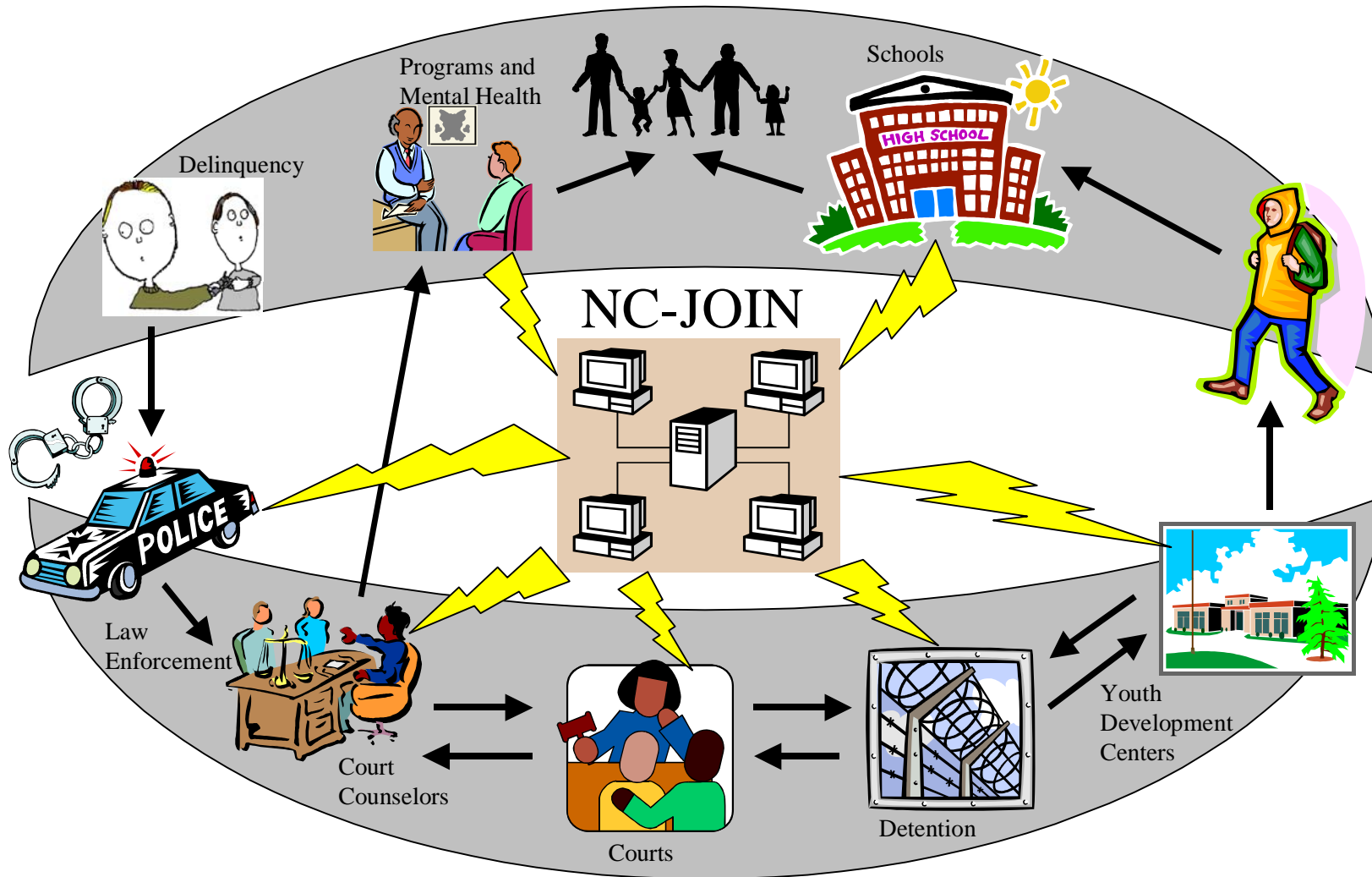- 4,101 Undisciplined Complaints
- 42,994 Total Complaints

Juvenile Case Data in NC-JOIN
- 309,647 Case Notes
- 21,204 Court Records
- 9,765 Supervision Records
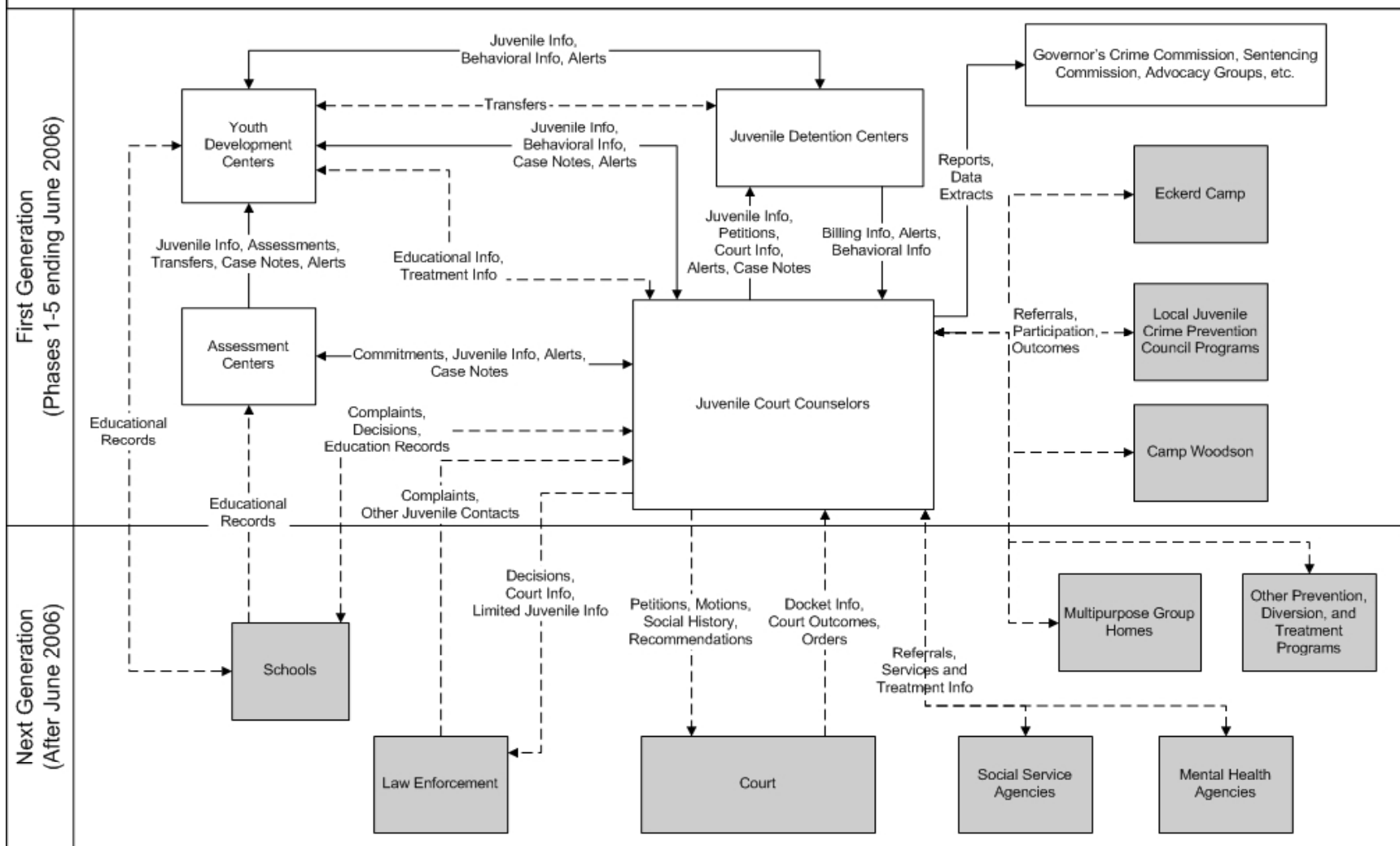- 4,476 Diversion Records

User Data
- 600 active NC-JOIN users

Community

Programs and Mental Health

Schools

Delinquency

NC-JOIN

Law Enforcement

Court Counselors

Courts

Detention

Youth Development Centers

Juvenile Justice System

NC-JOIN

First Generation (Phases 1-5 ending June 2006)

Juvenile Info, Behavioral Info, Alerts

Youth Development Centers

Transfers

Juvenile Info, Behavioral Info, Case Notes, Alerts

Juvenile Detention Centers

Governor's Crime Commission, Sentencing Commission, Advocacy Groups, etc.

Reports, Data Extracts

Eckerd Camp

Juvenile Info, Assessments, Transfers, Case Notes, Alerts

Educational Info, Treatment Info

Juvenile Info, Petitions, Court Info, Alerts, Case Notes

Billing Info, Alerts, Behavioral Info

Assessment Centers

Commitments, Juvenile Info, Alerts, Case Notes

Juvenile Court Counselors

Referrals, Participation, Outcomes

Local Juvenile Crime Prevention Council Programs

Complaints, Decisions, Education Records

Camp Woodson

Educational Records

Complaints, Other Juvenile Contacts

Educational Records

Next Generation (After June 2006)

Decisions, Court Info, Limited Juvenile Info

Petitions, Motions, Social History, Recommendations

Docket Info, Court Outcomes, Orders

Referrals, Services and Treatment Info

Multipurpose Group Homes

Other Prevention, Diversion, and Treatment Programs

Schools

Law Enforcement

Court

Social Service Agencies

Mental Health Agencies

Legend

Current Users

Planned Data

Current Data

Planned Users

Appendix H

CJIN Data Sharing Standards

CJIN Data Sharing Standards

Description

One of the most critical factors driving the efforts of CJIN is improving information sharing among criminal justice and public safety agencies. The goal is to provide the right information to the right people at the right time, in order that correct decisions are made. Decisions requiring information about persons before them are made by law enforcement, jailers, prosecutors, judges, juries, corrections, and probation.

The CJIN Data Sharing Standards initiative is an infrastructure project whose goal is to establish standards to facilitate the sharing of information to authorized users, regardless of the data's location. North Carolina, like many other states, has redundant entry of data by each criminal justice agency as the offender moves through each step of the criminal justice system. This is because the criminal justice information is distributed over a wide range of state and local agencies, on different platforms, and in different physical locations. Although this design recognizes that the best data is typically captured close to its source, it tends to cause redundant data entry.

Benefits

The ability to share data is critical to the success of any organization. More effective and efficient data sharing will:
- reduce wasted staff resources that are already stretched thin,
- provide more timely information available to the criminal justice decision makers,
- improve data accuracy because it is re-entered less often, and
- reduce the perceived bureaucracy for the amount of time it takes an offender to move through the criminal justice system.

Project Status

Within the past two to three years, Extensible Markup Language (XML) has emerged as an appealing data transfer tool. XML allows disparate systems to more easily "talk" to one another rather than building custom interfaces between applications. Both the United States Department of Justice / Office of Justice Programs and the Global Justice Information Sharing Initiative have XML initiatives underway. Our research has found extensive amounts of readily available 'free and open' standards, along with excellent and inexpensive tools to use. CJIN had three successful XML pilots with the most recent grant funding. We continue to monitor federal initiatives and do our best to incorporate them into the existing environments. The following page cites the Gartner Group conclusions for CJIN data sharing standards as they appear in the Recurring Cost Final Report, dated June 2003.

Description of Data

Criminal justice related

Lead Agency Responsible for Project

Department of Justice

Other State Agencies and local/federal partners

The criminal justice community and the Information Resource Management Commission (IRMC)

Description of Users

All State, federal, and local government agencies that use, produce, or disseminate criminal justice information within the State.

FUNDING SOURCES – DEVELOPMENT								
	SFY 96-97	SFY 97-98	SFY 98-99	SFY 99-00	SFY 00-01	SFY 01-02	SFY 02-03	SFY 03-04
State appropriations	$ 300,000	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Federal grants	$ 391,480	$ 0	$ 0	$ 0	$ 0	$ 200,000	$ 0	$ 0
Subtotal	$ 691,480	$ 0	$ 0	$ 0	$ 0	$ 200,000	$ 0	$ 0
Total								**$891,480**

Note: This project has no recurring funding as of yet.

6.3 Conclusions

6.3.1 Analysis

■ Gartner believes that emerging standards will no doubt help to facilitate a more cohesive exchange of information between local, state and federal criminal justice agencies; however, there is no 'magic bullet' in sight that will alleviate the need for CJIN to provide leadership and promote data sharing within the State of North Carolina. CJIN should view itself as playing a key role in leveraging the efforts of leading North Carolina's criminal justice data sharing efforts and on providing comment to national standards in order that the standards address specific North Carolina needs to the greatest degree possible. This will allow North Carolina to increase the level of automated justice information exchange with the least amount of need for customization or associated additional expense.

■ While the State and many of its leading counties and cities recognize the value of justice information sharing, there will be a large variance between local agencies that can fund this activity and those who can't afford to. It should not be assumed that Homeland Security initiatives will provide significant funding for this effort. Therefore CJIN should be active in identifying funding requirements and potential funding solutions CJIN should play an active role in helping to identify not only funding sources for CJIN, but ones that could help the local agencies as well.

■ Limited connectivity between systems will continue to be an obstacle as most systems that contain the data run on secure private local networks. Broad based standards efforts similar to those described for data sharing are underway to develop information security standards and technologies that will provide adequate security across the Internet, but they are not complete.

6.3.2 Recommendations

■ CJIN should continue to take an active role in the development of criminal justice information sharing standards.

■ CJIN should continue to monitor the relationship between emerging standards and the State's standards to determine if there any differences that could require changes to State standards and systems.

■ CJIN should encourage user agencies to adopt a standardized data model when developing new systems.

■ CJIN should assess legacy systems that can be updated and improved by retrofitting XML data sharing capabilities.

■ CJIN should establish a data interoperability committee to evaluate emerging standards from multiple sources (for example, national, state, regional and industry) against North Carolina specific needs.

■ To properly administer any data sharing initiatives, CJIN will require additional staff and an ongoing source of funding to support this position. This position should be responsible for analyzing, developing and coordinating database designs, logical data models and relational data definitions. This position should also be responsible for monitoring national criminal justice data sharing initiatives and participating in national data sharing forums. Estimated costs associated with this Data Base Analyst position are provided under Section 7—CJIN Governing Board Recurring Costs.

Source: State of North Carolina CJIN Recurring Costs – Final Report, Gartner, June, 2003, pages 60-61

Appendix I

CJIN Network Security

CJIN Network Security

Description

The integration of CJIN requires that disparate systems be linked together so data can be passed and shared throughout the systems as various agencies perform their individual functions. In order to safeguard the integrity of the disparate systems and the criminal justice data, a suite of network security tools must be deployed.

As a result of September 11, 2001 events, the need to share critical data between various local, state and federal agencies in a secure manner has become critical. The key elements identified in homeland security measures overlap CJIN's basic elements of data sharing, interoperability, communications, and partnerships.

Benefits

It is the passing and sharing of data that will enable the creation of information that is then made available to the criminal justice practitioner in a timely manner. When armed with this information, those involved in the administration of criminal justice will be able to make better decisions thus improving operations. The improved operations will lead to reduced crime and increased safety of the citizens of North Carolina.

Project Status

CJIN's earlier grant work on network security included developing strategies for firewall technology to provide perimeter defense (restricting unauthorized users access to information), desktop data encryption (securing data transmissions over unsecured communications) and authentication and authorization (providing the capability for identification and verification of all users of North Carolina criminal justice information paths). These strategies were deployed as far as the grant funding would permit and based on the agency's business needs. Towards the end of the grant, CJIN realized that each State criminal justice agency has unique as well as common security requirements thus making it difficult to develop an enterprise wide security framework. Each agency has since customized its network security requirements to best meet its business/functional needs. The Gartner Group refreshed CJIN's network security vision as part of the Recurring Costs Final Report, dated June 2003.

Lead Agency Responsible for Project

Department of Justice

Other State Agencies and Local/Federal Partners

Department of Crime Control & Public Safety, Administrative Office of the Courts, Department of Corrections, Department of Juvenile Justice and Delinquency Prevention, Office of Information Technology Services, and Information Resource Management Commission

Description of Users

All State, federal, and local government agencies that use, produce, or disseminate criminal justice information within the State.

FUNDING SOURCES - DEVELOPMENT					
	SFY 98-99	SFY 99-00	SFY 00-01	SFY 01-02	SFY 02-03
State appropriations	$ 0	$ 0	$ 0	$ 0	$ 0
Federal grants	$ 3,500,000	$ 0	$ 0	$ 0	$ 0
Subtotal	$ 3,500,000	$ 0	$ 0	$ 0	$ 0
Total					**$3,500,000**

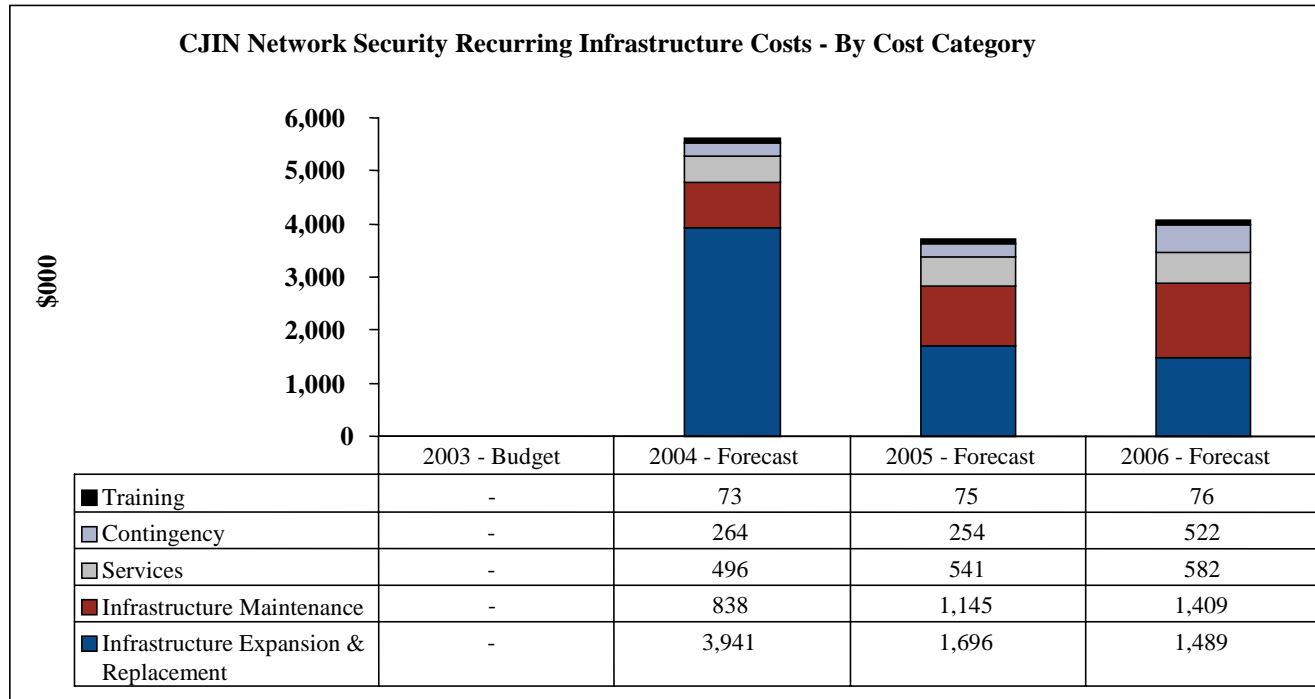Note: This project has no recurring funding as of yet.

5.7 Network Security Recurring Costs

Figure 23 provides a breakdown of CJIN-Network Security recurring costs

Figure 23. CJIN-Network Security Recurring Costs

CJIN Network Security Recurring Infrastructure Costs - By Cost Category

$000

	2003 - Budget	2004 - Forecast	2005 - Forecast	2006 - Forecast
■ Training	-	73	75	76
□ Contingency	-	264	254	522
□ Services	-	496	541	582
■ Infrastructure Maintenance	-	838	1,145	1,409
■ Infrastructure Expansion & Replacement	-	3,941	1,696	1,489

Source: State of North Carolina CJIN Recurring Costs – Final Report, Gartner, June, 2003, page 53

CJIN Network Security

5.3 Overview of Current Security Environment and Key Security Issues

Through interviews with various CJIN staff, agencies and workshop conducted by Gartner, the following is a summary of the current security environment:

- Each agency has unique as well as common security requirements thus making it difficult to develop a enterprise wide security framework. CJIN's basic belief of 'one size fits all' solution is no longer the case and each agency has customized its network security requirements to best meet its business/functional needs.
- The level of security maturity varies from agency to agency.
- Each agency has deployed firewall technology to provide perimeter defense.
- Each agency has started to deploy desktop data encryption based on business needs.

Table 1 provides a summary of key issues and potential impacts that were identified during workshop sessions conducted by Gartner with CJIN SOC.

Table 1. Network Security—Key Issues and Potential Impact

Key Security Issue	Impact
Current CJIN-ITS Service Levels Agreements no longer meet CJIN needs.	The current CJIN-ITS SLAs no longer meet the level of service that the individual agencies require.
CJIN SOC (Security Oversight Committee) is effective.	The CJIN SOC has been very effective in creating a forum where CJIN agencies can plan and implement security solutions.
Individual CJIN State agency network security personnel try to collectively perform CJIN network security needs.	CJIN does not have a dedicated network security resource to manage CJIN network security needs and services effectively.
Network Perimeter spans multiple branches of government.	Coordination across multiple the security perimeters provides a complex operating environment for CJIN.
CJIN does not presently have a master user Identity Management plan	External users of individual CJIN agency services have multiple authentication and authorization mechanisms and multiple login IDs managed at each agency.
No common access mechanism	Many of the CJIN agencies provide remote access from both remote sites and external users.
Varying degrees of CJIN Agency Disaster Recovery (DR)/Business Continuity Plan) BCP Plans	Most CJIN agencies have a DR/BCP plan.; some are more complete than others.
Agencies are vulnerable to security attacks.	CJIN agencies are no different than any other agency in having to protect themselves from security attacks.
Intrusion Detection is in place in some agencies.	CJIN agencies need tools for better detecting abnormal network traffic that originates within the agency.
Training is highly valued but underfunded.	The training for security technology has occurred on an irregular schedule. Personnel highly trained in security technologies have left for better paying jobs outside of State government
ITS service offerings are for current firewall technology while CJIN has an older technology solution	The firewalls acquired via the CJIN grant are older technology and should have a technology refresh as they have reached their life cycle.
Agencies have implemented various strategies for network zoning.	Individual CJIN State agencies have deployed network zoning strategies that best meet their individual business needs.
Agencies are unique.	Each CJIN agency has unique security requirements. Some agencies are strongly influenced to maintain the integrity of the public data of which they are custodians. Other agencies are strongly driven by the need to maintain the privacy and/or access to data.

Source: State of North Carolina CJIN Recurring Costs CJIN Recurring Costs – Final Report, Gartner, June, 2003, pages 47-48

CJIN Network Security

5.4 Network Security Services Requirements

Table 2 provides a summary of eleven network security services that are needed to meet agency needs. The table also provides deployment guideline and agency priority for each network security service.

Table 2. Network Security Services Requirements

	Security Service	Description	Impact	Year Deployed	Priority Ranking
1.	**Existing Firewall Support-Perimeter**	CJIN would provide funding to continue the basic services of the individual agency electronic perimeter. Each agency would be free to select and configure the appropriate firewall(s) that meet individual agency needs while maintaining compliance with CJIN and State standards.	Prevention of network intrusions	In Place (2001-2002)	1
2.	**Firewall—New Internal Agency**	Internal firewall(s) would be deployed to provide appropriate security zones within the agency. CJIN would provide funding for the acquisition of these firewalls and for funding the support personnel needed to configure, maintain and operate these firewalls	Prevention of network intrusions	2004-2006	3
3.	**Intrusion Detection/Prevention Service (IDS)**	CJIN would provide funding to deploy IDS for individual agency networks and critical hosts located within the agency network. This would provide detection of attempted penetrations of the agency's cyber infrastructure.	Detection	2004	2
4.	**Network Redundancy**	CJIN would fund an alternative connectivity to the NC State network in case the normal State network was not available. This would ensure that CJIN agencies could maintain connectivity to remote CJIN agency sites and external agencies.	Recovery	Not Planned; some CJIN agencies are pursuing limited agency solutions	10
5.	**Disaster Recovery / Business Continuity Plans (DR/BCP Plan)**	CJIN would fund the development of a DR/BCP plan for each CJIN agency to ensure that it could recover in the event of an agency event. As envisioned, the CJIN agencies would provide mutual aid and BCP and IT DR space in the event of an agency disaster such as a fire or plan development and testing plans.	Recovery	Not Planned	9

Source: State of North Carolina CJIN Recurring Costs – Final Report, Gartner, June, 2003, page 49

CJIN Network Security

Table 2. Network Security Services Requirements (continued)

Security Service	Description	Impact	Year Deployed	Priority Ranking
6. **Virtual Private Network (VPN)**	CJIN would fund the development of a common strategic approach to VPN portals and identity management system for users to access applications hosted at CJIN agencies. This would allow CJIN agencies to manage user access in a common manner.	Prevention	2005-2006	8
7. **Security Tools**	CJIN would fund the acquisition of a set of security tools that agencies could use to conduct forensic analysis of security events and test security of various infrastructure components.	Recovery, Prevention and Detection	2004-2006	6
8. **CJIN Security Staff**	CJIN would secure one Full Time Equivalent (1.0 FTE) dedicated security staff member that would work with the SOC to follow current security requirements from CJIS and the State. The staff member would be responsible for administering the priority of funded CJIN security initiatives at the individual CJIN agency level and work with CJIN agencies to insure that they are in compliance with CJIN security requirements. This FTE would also provide oversight of the DR/BCP plans and tests, as well as oversight for the coordination of CJIN agency security operations. Finally he/she would be responsible for maintaining security policies and budgets.	Prevention, Detection, Recovery	2004 - 2006	5
9. **Vulnerability Testing**	CJIN would fund periodic vulnerability testing of all CJIN agencies to uncover security weaknesses and vulnerabilities. This would be limited to the perimeter and internal networks of each agency.	Prevention	2004 – 2006	7
10. **Wireless Security**	In coordination with the State's Chief Technology Officer, CJIN would develop a Wireless application gateway to support access to internal CJIN agency applications through a security wireless gateway. A common approach for each CJIN agency would reduce the costs for users and improve interoperability.	Prevention	Not Planned	11
11. **Security Training**	CJIN would provide funding for security training; A minimum percentage of funding would have to be dedicated to training as part of the project. Individual CJIN agencies would be responsible for determining training needs and submitting these recommendations to the CJIN SOC. CJIN would investigate the feasibility of creating common security training programs where appropriate. .	Prevention, Detection	2004 -2006	4

Source: State of North Carolina CJIN Recurring Costs – Final Report, Gartner, June, 2003, pages 50-51

CJIN Network Security

5.5 CJIN Network Security Vision

■ The CJIN SOC, under the auspices of the CJIN Governing Board, should act as an oversight body and assist in developing an enterprise-wide network security strategy across all CJIN agencies. As part of this enterprise vision, CJIN Network Security should provide the following services over the next three to four years:

  ❑ **Perimeter Firewall Services**—CJIN should continue to provide the funding for the operation and support of perimeter firewalls that were purchased as part of the grant's initial security infrastructure deployment.

  ❑ **Intrusion Detection/Prevention**—CJIN should provide and fund the acquisition and maintenance of devices that monitor network traffic.

  ❑ **New Internal Firewall Services**—CJIN should provide and fund the acquisition and maintenance of firewalls for internal networks of the agencies.

  ❑ **Training**—CJIN should provide and fund training requirements. This approach will provide a unified and common funding source to all CJIN agencies.

  ❑ **CJIN Security Staff Resource**—CJIN should add a dedicated security staff resource to support, coordinate and manage security requirements with agencies. This position is included as part of the CJIN Governing Board recommendation.

  ❑ **Security Tools**—CJIN should provide and fund the acquisition and maintenance of security tools.

  ❑ **Vulnerability Testing**—CJIN should provide and fund the testing of each agencies network biannually. Tests should be conducted by an independent entity.

  ❑ **VPNs**—CJIN should provide and fund the acquisition a common VPN solution across all agencies.

Source: State of North Carolina CJIN Recurring Costs – Final Report, Gartner, June, 2003, pages 51-52

Appendix J

eCitation

eCitation

Description

eCitation is a computerized citation process, producing the NC Uniform Citation (N.C.U.C.) in an electronic format that moves almost instantaneously from the patrol car to the courts. eCitation was designed to replace the manual, paper process of issuing traffic citations, by reducing citation data entry to a single iteration (in an officer's patrol car), and transmitting that data directly to the Administrative Office of the Courts (AOC). Using existing wireless connections, eCitation allows officers to create citations and schedule court dates electronically, using a laptop computer in the patrol car. A portable printer produces a copy of the citation for the defendant. After entry, the citation data is transmitted to the AOC.

Benefits

The paperless flow of citation data into the Clerk of Superior Court's office creates a significant reduction in: (1) the amount of paper generated by officers; (2) data entry workload in the clerk's office; and (3) errors and inconsistencies of citation records attributable to redundant data entry.

Project Status

eCitation is presently in its statewide implementation phase, with a targeted completion date in late 2007.

Description of Users

Clerks of Superior Court, North Carolina State Highway Patrol, local law enforcement (Sheriffs and municipal police), District Attorneys, Judges.

Description of Data

Data customarily collected to populate/complete the N.C.U.C.

Lead State Agency Responsible for Project

Administrative Office of the Courts (supporting Clerks of Superior Court, District Attorneys, Magistrates and other judicial personnel)

Other State Agencies and Local/Federal Partners

Department of Crime Control & Public Safety, State Highway Patrol

FUNDING SOURCES – DEVELOPMENT	SFY 99-00	SFY 00-01	SFY 01-02	SFY 02-03	SFY 03-04	SFY 04-05
State appropriations	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Federal grants	$ 500,000	$ 375,000	$ 200,000	$ 0	$ 300,000	$ 0
Total					**$1,375,000**	

	SFY 99-00	SFY 00-01	SFY 01-02	SFY 02-03	SFY 03-04	SFY 04-05
Unfunded	$ 0	$ 0	$ 0	$ 0	$ 0	$ 250,000

FUNDING SOURCES – OPERATIONS	SFY 99-00	SFY 00-01	SFY 01-02	SFY 02-03	SFY 03-04	Requested for SFY 04-05
State appropriations	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Federal grants	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Total						**$0**

	SFY 99-00	SFY 00-01	SFY 01-02	SFY 02-03	SFY 03-04	Requested for SFY 04-05
Unfunded future needs	$ 0	$ 0	$ 0	$ 0	$ 0	$ 298,213*

*Governor's Crime Commission pre-application dated Jan. 30, 2004.

eCitation

eCitation Monthly Volume
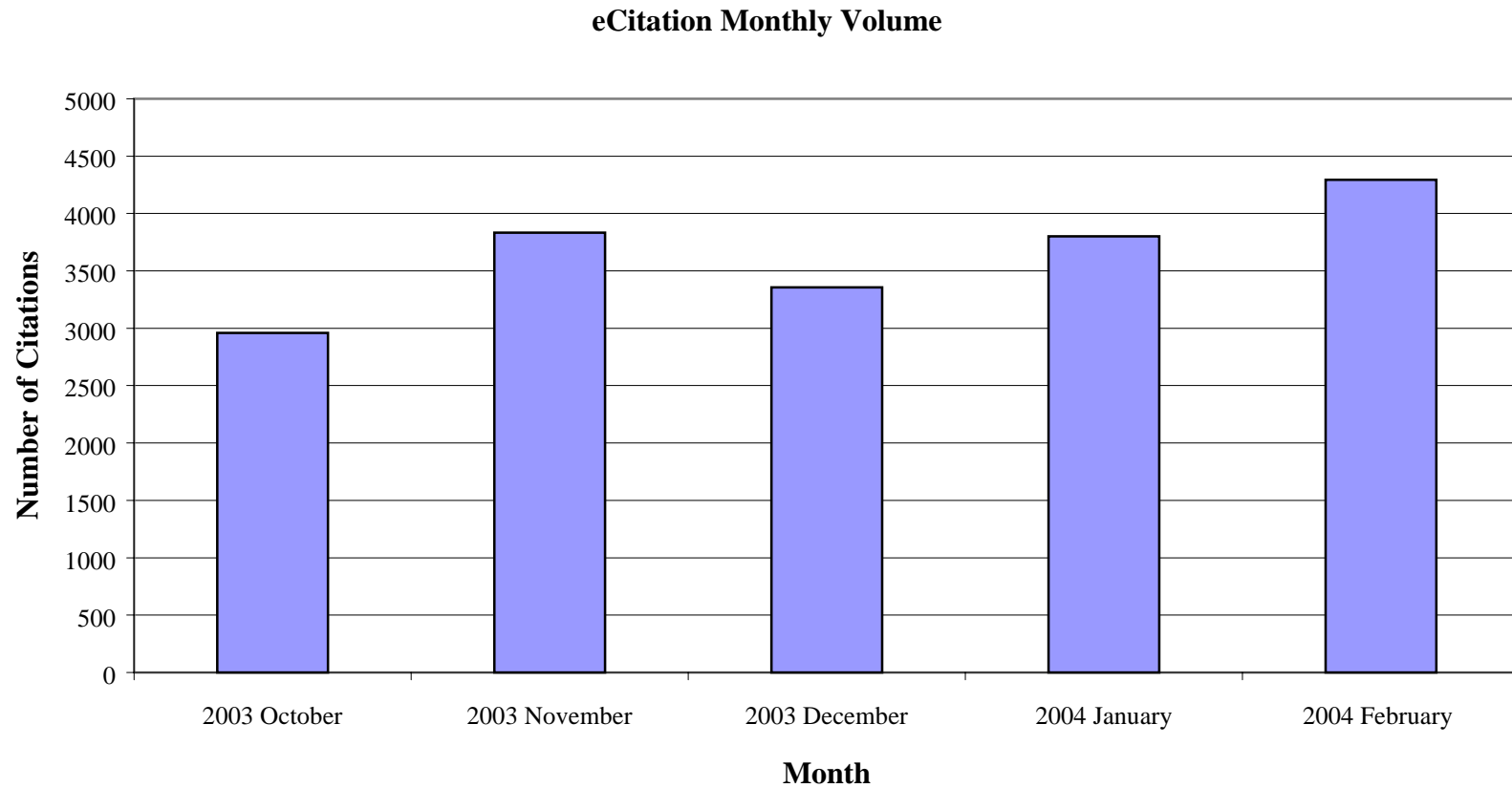
Note: This data reflects partial implementation in three counties. Statewide implementation is targeted for completion in late 2007.

eCitation

Patrol Car

eCit App

Mobile Data Computer

Modem

In-Car Printer

Defendant Copies

Officer Copies

Internet

Other Wireless Users

CJIN MDN

CJIN Users

Radio tower

AOC

SSL Server

AOC Mainframe

AOC Databases

Courthouse

Court App

Clerk Workstations

Judgment Copies

DMV Services

DMV

DMV License/ Registration Databases

LLE Agencies

Record Management Systems
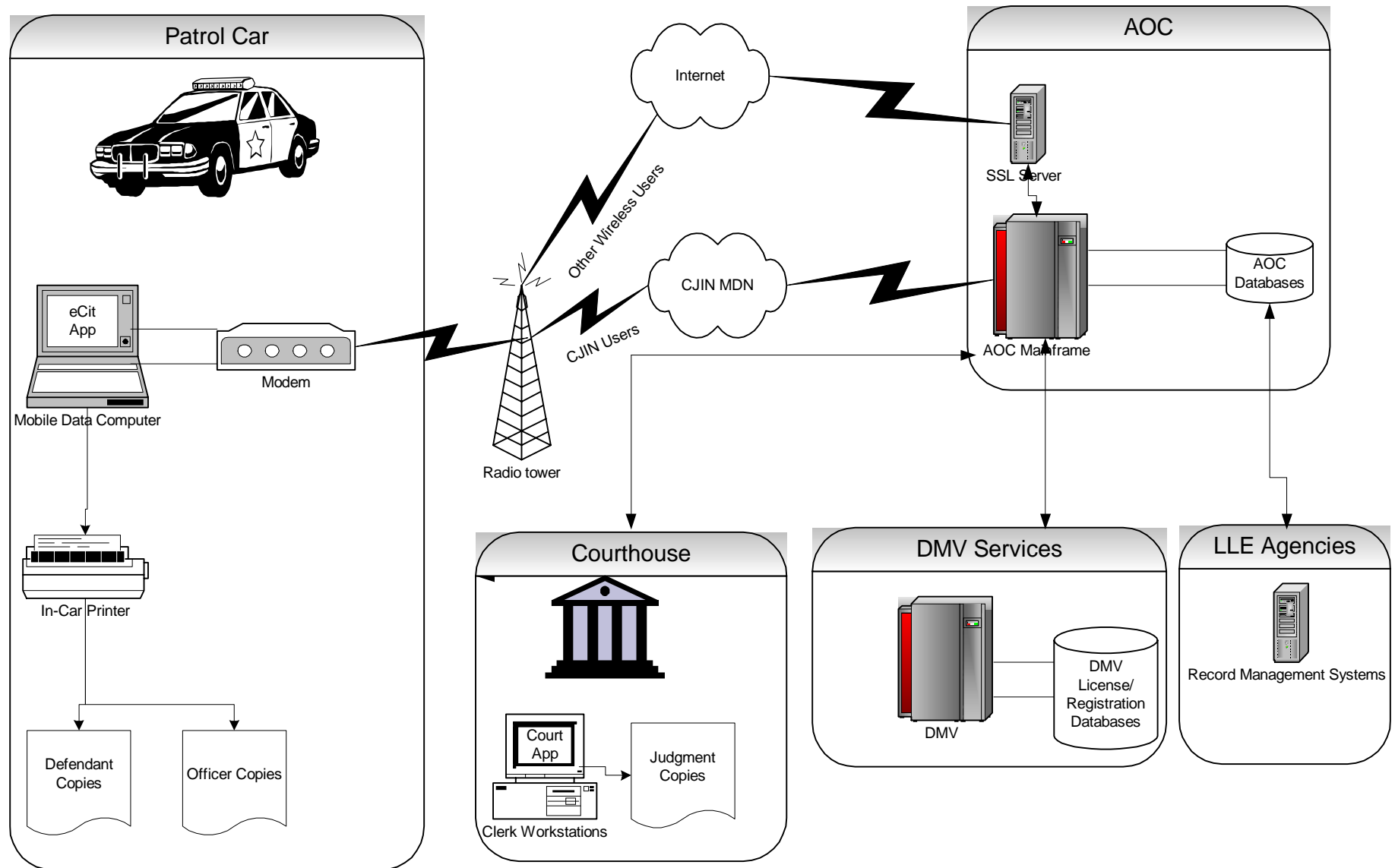
Appendix K

CJIN Planning Study

CJIN Planning Study

Description

The CJIN Planning Study allowed the State to update selected sections of its 1995 blueprint for developing a statewide criminal justice information network.

The five goals of the CJIN planning study were:

- To revalidate the CJIN Voice Trunked Network (CJIN-VTN) 800 MHz strategy.
- To determine the impact of fingerprinting serious misdemeanants on state and local criminal justice agencies.
- To build and validate a data model for constructing comprehensive criminal histories from the juvenile justice system through the adult criminal justice system.
- To better define the on-going, recurring funding needed for maintenance, support, and the replacement of presently deployed technologies for CJIN related initiatives.
- To increase the public awareness of CJIN by documenting the business case, which will serve as a communication vehicle with stakeholders and will verify/validate high-level business functional requirements.

Benefits

The State needed to update its 1995 blueprint for developing a statewide CJIN to assess the progress made during the past six years and consider the significant advancements in technology, which have reduced some costs and presented new technological possibilities for solving problems. An updated blueprint will serve the State in a strategic manner and will also assist CJIN in soliciting legislative support by providing an independent assessment of the progress made to date and tasks to be completed.

Project Status

The CJIN Planning Study is complete. Final deliverables have been posted on the CJIN web site.

The two time-limited grant-funded positions, a CJIN Administrative Assistant and CJIN Chief Fiscal Officer, ended on June 30, 2003.

Lead State Agency Responsible for Project

Department of Justice

Other State Agencies and Local/Federal Partners

The criminal justice community

Project Funding

The CJIN Planning Study was funded in SFY 01-02 as follows:

State appropriations	$ 80,100
Federal Grants	$ 1,043,802
Total	$ 1,123,902

Appendix L

Statewide Computerized Criminal History (CCH) Repository

Statewide Computerized Criminal History (CCH) Repository

Description

There is no single, comprehensive statewide criminal history repository in the State. Currently, criminal justice information users must independently search multiple databases in separate systems in order to obtain comprehensive criminal histories. Even though an abundance of criminal history information exists in these different systems, key pieces of information must be 'married' together to compile a comprehensive picture of an offender's criminal history.

Benefits

A timely and comprehensive criminal history record will allow the criminal justice community to make better informed decisions when:

- Law enforcement is approaching or apprehending suspects and offenders
- Magistrates and District Attorneys are making charging, bail, and release decisions
- Judges are making sentencing decisions.
- The Parole Commission is deciding appropriate conditions of probation and parole

There are also non-criminal justice users that require timely and comprehensive criminal history information for things like employment screening, firearms purchase, and security clearance screening.

Project Status

The Department of Justice (DOJ) is continuing their part of the effort within the scope of the overall DOJ migration plan as presented to the Legislative Justice Subcommittee in July 1999. Other agencies lack funding to work on their component of the criminal history record.

Description of Data

Criminal history

Lead State Agency Responsible for Project

Department of Justice

Other State Agencies and Local/Federal Partners

Administrative Office of the Courts, Department of Correction

Description of Users

State agencies, law enforcement officers, judges, district attorneys, correction personnel, and magistrates, and some non-criminal justice users.

FUNDING SOURCES - DEVELOPMENT						
	SFY 99-00	SFY 00-01	SFY 01-02	SFY 02-03	SFY 03-04	SFY 04-05
State appropriations	$ 109,166	$ 0	$ 0	$ 56,263	$ 128,245	$ 1,849
Federal grants	$ 327,500	$ 0	$ 0	$ 168,787	$ 384,735	$ 5,547
Subtotal	$ 436,666	$ 0	$ 0	$ 225,050	$ 512,980	$ 7,396
Total						**$ 1,182,092**

Unfunded						$ 3, 000,000*

*Cited as a CJIN priority in the 2003 General Assembly report

Appendix M

Statewide Automated Fingerprinting Identification System (SAFIS)

Statewide Automated Fingerprinting Identification System (SAFIS)

Description

The CJIN Study Final Report, dated April 1995, stated that is that it takes too long to positively identify a person and recommended that the State implement a Live Scan digitized fingerprint system and Statewide Automated Fingerprint Identification System (SAFIS) technology to positively identify a person within two hours of arrest. SAFIS is now operational in 80 counties, representing 85% of the State's population.

Benefits

SAFIS allows data to be transferred and examined within acceptable time frames. In most instances, an agency submitting an electronic Live Scan fingerprint card through the SAFIS network will know in less than four hours if an individual has a previous criminal record on file at the state level and/or at the FBI.

SAFIS is a critical step towards a comprehensive integrated criminal history record because arrest data, along with descriptive data, is automatically added to the Computerized Criminal History files (CCH) minutes after the record is processed through the SBI's Criminal Information and Identification Section. SAFIS provides positive identification that will allow for better decisions about the individuals being processed and could result in saving lives.

Project Status

The currently deployed SAFIS infrastructure and existing Live Scan devices will be obsolete in 2007 and must be refreshed. The primary SAFIS and Live Scan vendor has stated that repair and replacement parts are no longer available from the manufacturer. CJIN proposes to refresh both SAFIS and Live Scan in an all-inclusive, fixed price, turn-key contract for the life of the project. Estimated cost is $33,038,590. Details are available in the Fingerprinting Serious Misdemeanants Feasibility Study.

Description of Data

The primary data within the SAFIS is fingerprint image data along with the descriptive and arrest data associated with an individual.

Lead State Agency Responsible for Project

Department of Justice, State Bureau of Investigation

Other State Agencies and Local/Federal Partners

North Carolina local law enforcement, the North Department of Correction and the Federal Bureau of Investigation.

Description of Users

State, local, and federal law enforcement agencies.

FUNDING SOURCES – DEVELOPMENT							
	SFY 95-96	SFY 96-97	SFY 97-98	SFY 98-99	SFY 99-00	SFY 00-01	SFY 01-02
State appropriations	$ 0	$ 0	$ 1,000,000	$ 450,000	$ 0	$ 0	$ 0
Federal grants	$ 2,445,255	$ 0	$ 3,745,381	$ 0	$ 2,500,000	$ 0	$ 0
Subtotal	$ 2,445,255	$ 0	$ 4,745,381	$ 450,000	$ 2,500,000	$ 0	$ 0
Total							**$ 10,140,636**

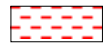| FUNDING SOURCES – OPERATIONS					
	SFY 00-01	SFY 01-02	SFY 02-03	SFY 03-04	SFY 04-05
State appropriations	$ 0	$ 0	$ 0	$ 0	$ 0
Federal grants	$ 0	$ 0	$ 0	$ 0	$ 0
DOJ / SBI budget	$ 474,577	$ 493,835	$ 493,835	$ 462,261	$ 462,261
Subtotal	$ 474,577	$ 493,835	$ 493,835	$ 462,261	$ 462,261
Total					**$ 2,386,769**

North Carolina SAFIS

Electronic Interfaces

Total Electronic Devices - 129
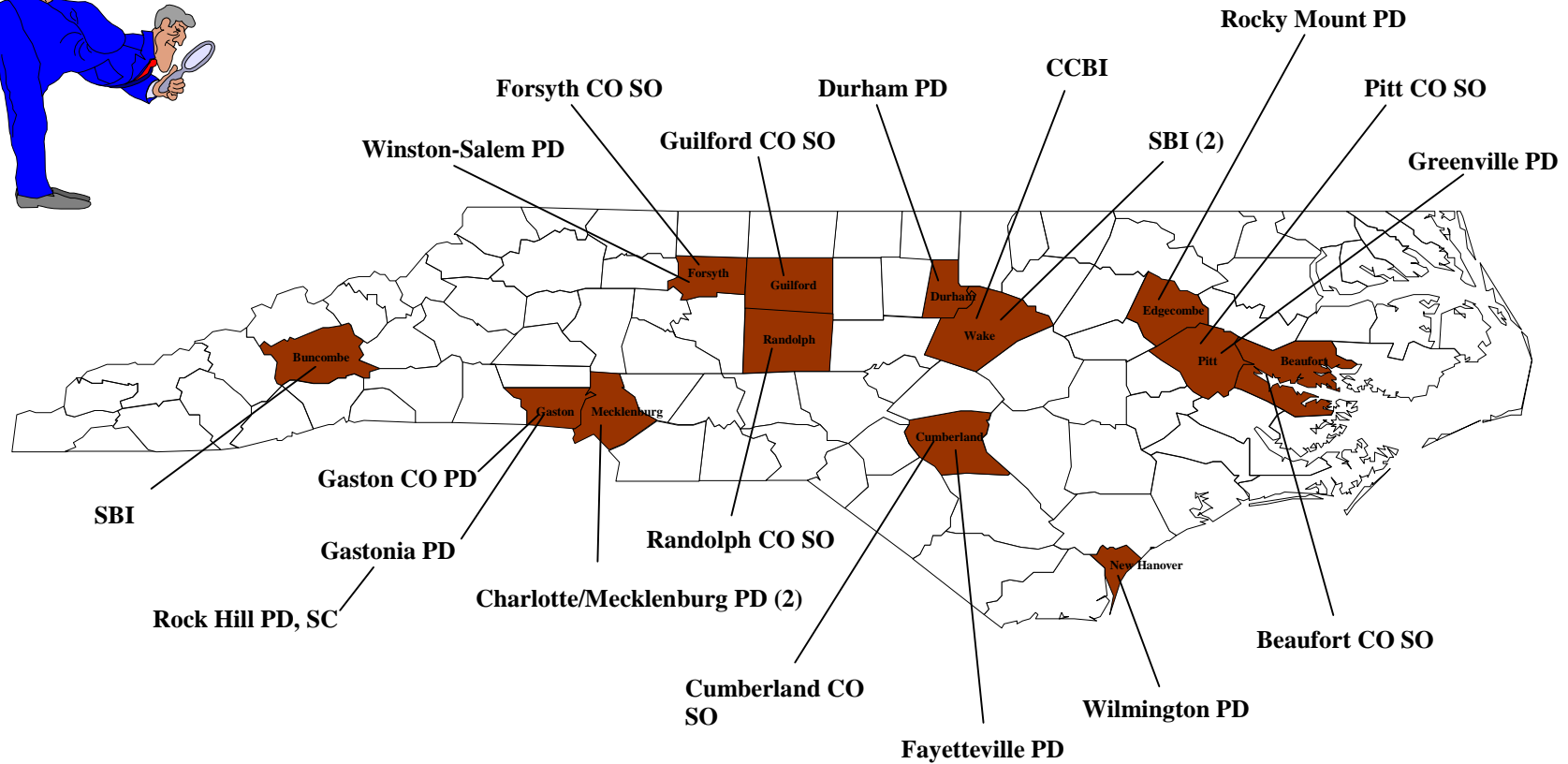
Crossmatch

Exegetics
Card Scan

Identix

Printrak

No Interface
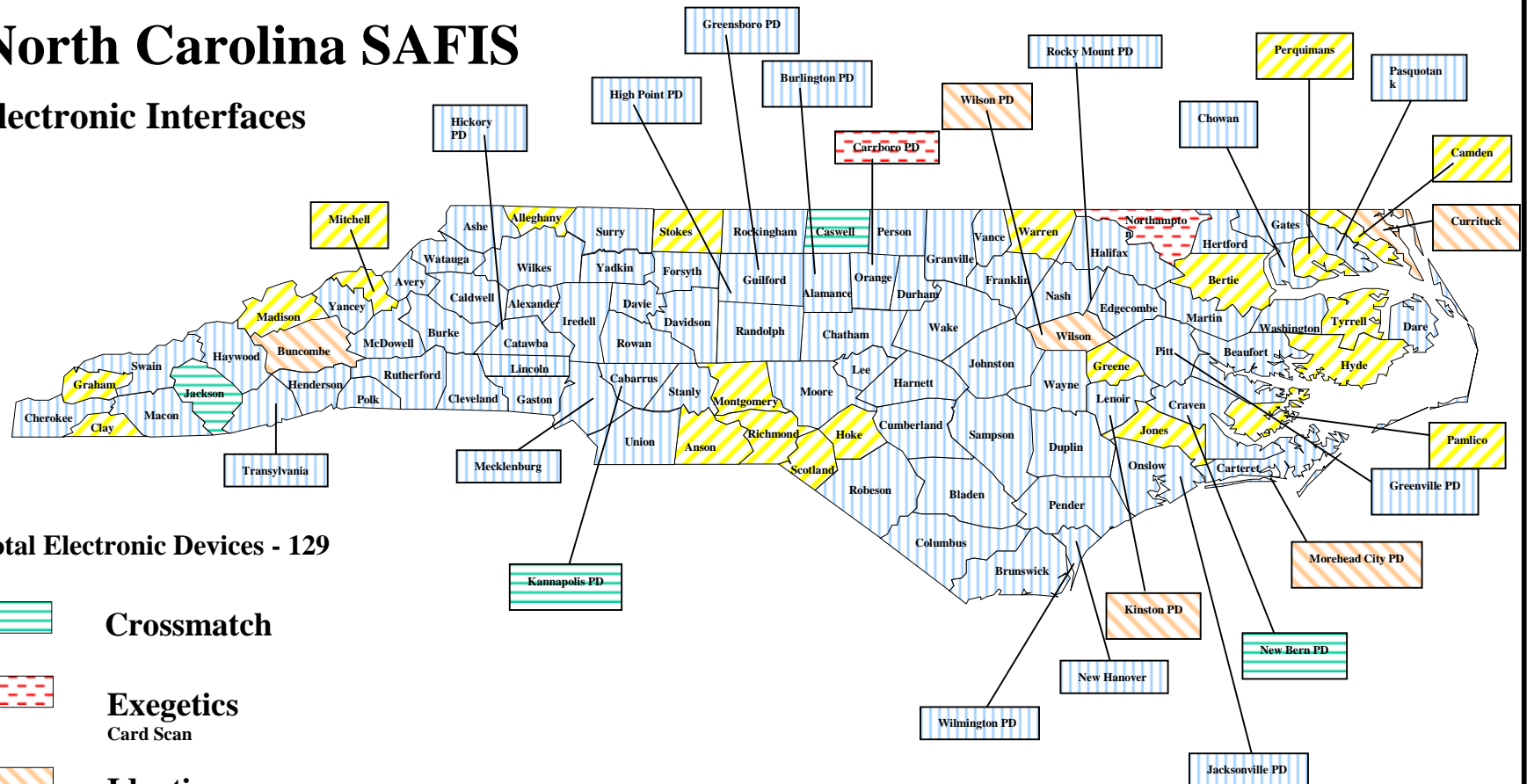
State Bureau of Investigation
December 12, 2003

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

Wake

Randolph

Pitt

Beaufort

Buncombe

Gaston

Mecklenburg

Cumberland

New Hanover

Gaston CO PD

SBI

Gastonia PD

Randolph CO SO

Rock Hill PD, SC

Charlotte/Mecklenburg PD (2)

Beaufort CO SO

Wilmington PD

Cumberland CO
SO

Fayetteville PD

North Carolina SAFIS
Remote Latent Terminals

State Bureau of Investigation
May 2, 2002

Appendix N

CJIN Governing Board Recurring Costs

CJIN Governing Board Recurring Costs

The purpose of this task was to assess CJIN's governance structure against the governance structures of similar state criminal justice information networks, and provide recommendations. For this task, governance includes the CJIN Governing Board and CJIN staffing.

7.1 Overview of Current CJIN Governance Structure

Issues

- CJIN is currently staffed with only one employee, the CJIN Executive Director. This level of staffing is not adequate to meet the expectations of the CJIN stakeholders. There is currently no on-going funding mechanism in place to fund the needed additional positions.

- 'Without additional staff it is not likely that CJIN will be able to provide the expected long-term benefits' as described in the Blue Ribbon report prepared by Price Waterhouse dated April 7, 1995. The Blue Ribbon Final Report states that CJIN's staff should be comprised of:

  - An Executive Director.

  - Four to five technical experts in the areas of law enforcement, courts, corrections, telecommunications and an Administrative Assistant.

  - Along with the Executive Director, the group of technical experts was expected to form a team of consultants who would support research and development efforts.

  - The Report further states that all staff should be full time and compensated appropriately for their skills and contribution, and that the funds for these resources should be allocated to an existing state agency such as the Office of State Budget and Management for purposes of disbursement and accounting. The report stressed that the successful creation and funding of this group is essential to provide the leadership and continuity required to assure the long-term viability of the criminal justice information network independent of political transitions in state and local leadership.

- CJIN Board has no recurring funds.

Source: State of North Carolina CJIN Recurring Costs – Final Report, Gartner, June, 2003, pages 63-64

## 7.3 Conclusions

7.3.1 Analysis

- Best practice states have a statewide governing body to oversee the State's criminal justice information network. These bodies have broad representation from criminal justice-related agencies in the State. These structures may include a single oversight board, or some combination of an oversight board, advisory council, task force and/or other bodies. This representative governing board approach is very similar to CJIN's Governing Board. The CJIN Board has responsibilities that are very similar to those of Boards in other states, which typically are focused on overseeing development, management and administration of the State's criminal justice information network.

- The State governance structures discussed in this report range in size from a low of 12 to a high of 37. Those states with a single oversight body tend to have fewer total individuals involved in governance. For example, Florida and Connecticut have a single oversight body with 14 and 12 members respectively. In contrast, because Pennsylvania and Minnesota have multiple oversight bodies, these states have a much higher number of individuals involved in governance. Each of these states has 37 individuals participating on a combined set of governance bodies.

- While the CJIN Board meets the State's needs by allowing for comprehensive representation, CJIN should review its current Board membership to ensure that it has adequate representation within the current 21 seats. In order to be effective, the CJIN Board should not become so large that it becomes difficult for the Board to resolve issues and make timely decisions. At the same time, CJIN must ensure that the Board has good representation of those agencies and entities impacted by CJIN.

- Other states typically have staff to support the management and administration of the criminal justice information network. The CriMNet Office in Minnesota has duties that are similar to those of North Carolina CJIN staff, including overall executive management, communications, handling security issues, working with Departments, securing grant funding, supporting the Board, etc. The CriMNet Office has a total of 10 staff members, including the Executive Director. Pennsylvania JNET Office staff is a minimum of three staff members, including the Executive Director, and the actual number of staff may be higher. North Carolina CJIN, with only a single staff member, seems to be understaffed by comparison to other states. When CJIN was initiated, there were plans to add a small number of technical staff members, but these staff members were not hired due to budget constraints. If CJIN is to accomplish its mission, the CJIN Office must be properly staffed.

Source: State of North Carolina CJIN Recurring Costs – Final Report, Gartner, June, 2003, pages 66-67

CJIN Governing Board Recurring Costs

7.4.1 Staffing Requirements

Figure 24. CJIN Governing Board Staffing Recommendations
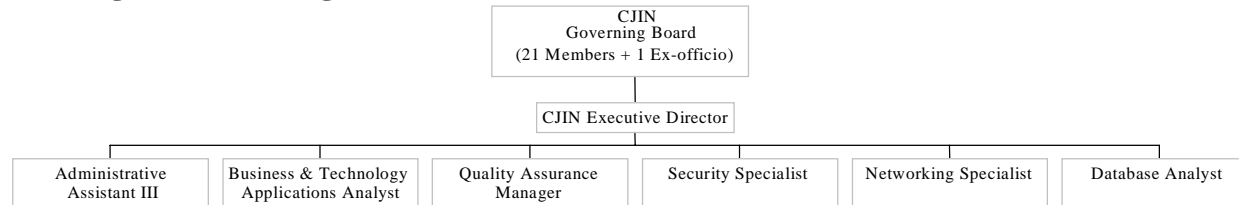
Source: Gartner, 2003

- Based on a comparison with other states with central criminal justice information offices that perform work similar to NC CJIN, CJIN should add the following staff over the next three years:

  - 2003:
    - *Administrative Secretary III:* This position would be responsible for performing advanced administrative duties to support the Board and the Executive Director.

  - 2004:
    - *Quality Assurance Manager:* This position would be responsible for overall CJIN project management, overall assurance of compliance to SDLC, IEEE standards, and IRMC requirements. Additional responsibilities would include developing and maintaining a CJIN Systems Development Life Cycle (SDLC) methodology, performing quality assurance reviews and audits on CJIN projects, assisting the agencies in developing their own individual policies and providing independent verification of project related information.
    - *Networking Specialist:* This position would be a technical staff member responsible for assisting with planning and management of the technical aspects of CJIN and CJIN-related projects. This position requires knowledge in law enforcement, corrections, courts, telecommunications and specific technical criminal justice system knowledge and experience to assist with CJIN projects at a detailed technical level.
    - *Security Specialist:* This position would be a technical staff member responsible for assisting with planning and management of CJIN-Network Security.
    - *Business and Technology Applications Analyst:* This position would perform business analyst functions, including being responsible for writing grant applications, working with criminal justice agencies to provide support to their grant writing staff, identifying new funding sources, and managing/monitoring the financial expenditures of grant funds. This position would serve as an overall CJIN project coordinator by tracking projects monthly and reporting their progress to the CJIN Governing Board via Information Technology Services/Enterprise Technologies Strategies staff.

  - 2005:
    - *Database Analyst:* This position would perform data modeling duties and would be responsible for analyzing developing and coordinating database designs, logical data models and relational data definitions. This position would also be responsible for monitoring national criminal justice data sharing initiatives and participating in national data sharing forums. This position requires the skills and expertise to support future project such as XML projects with SAFIS interfaces to CCH, juvenile to adult CCH modeling, etc.

Source: State of North Carolina CJIN Recurring Costs – Final Report, Gartner, June, 2003, pages 67-68

CJIN Governing Board Recurring Costs

7.4.2 CJIN-Governing Board Recurring Costs Assumptions and Categories

Table 3. Estimated CJIN Governing Board Recommended Staffing and Costs

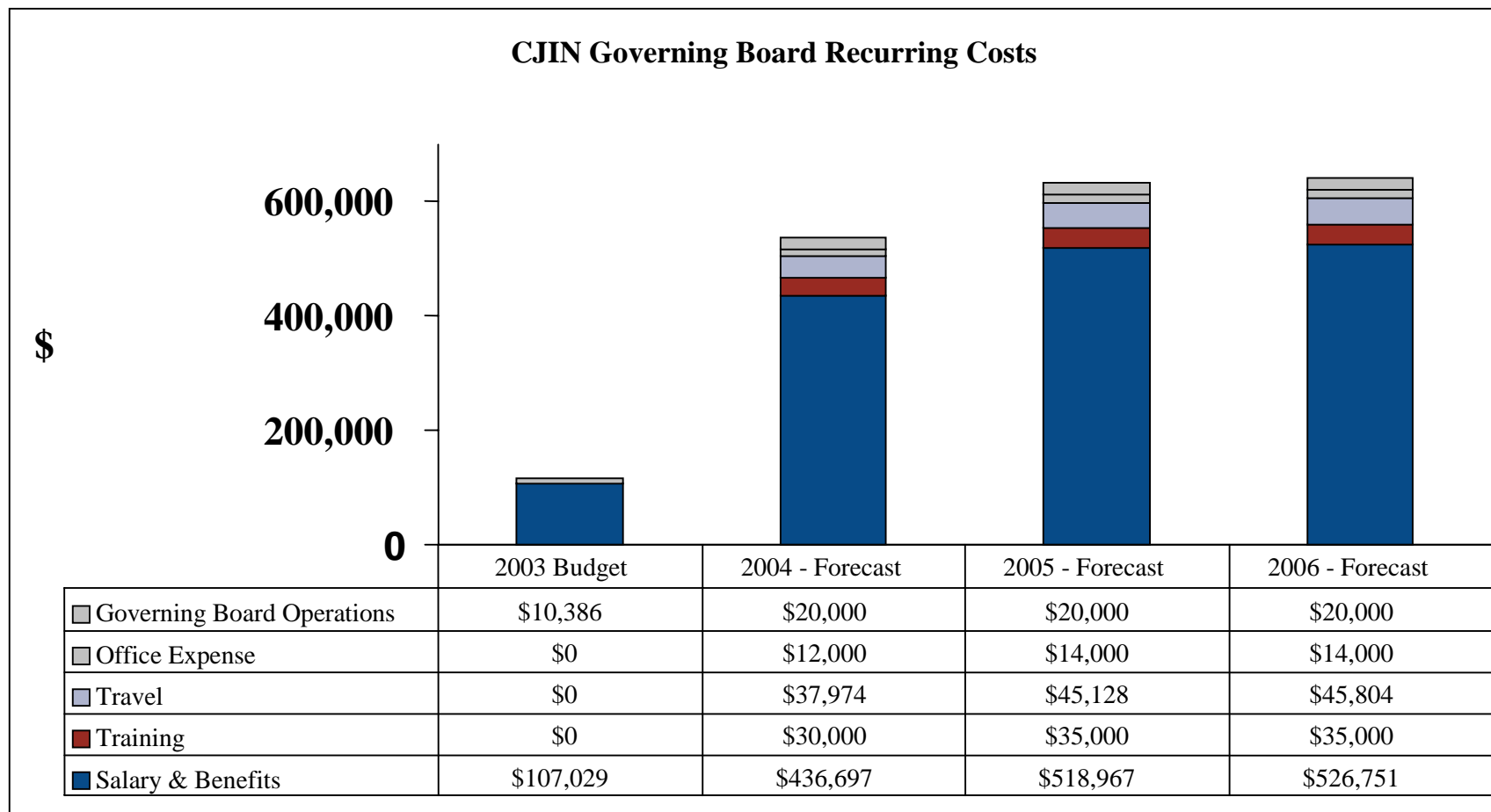| Position[1]	Annual Salary[2]	Benefits[3]	Training[4]	Travel[5]	Office Expense[6]	Governing Board Operations
CJIN Executive Director[7]	$75,569	$11,335	$5,000	$7,557	$2,000	$20,000 per year
Administrative Assistant III	$29,035	$4,355	$5,000	$2,904	$2,000	
Business and Technology Applications Analyst	$61,128	$9,169	$5,000	$6,113	$2,000	
Quality Assurance Manager	$65,800	$9,870	$5,000	$6,580	$2,000	
Security Specialist	$71,365	$10,705	$5,000	$7,137	$2,000	
Networking Specialist	$71,365	$10,705	$5,000	$7,137	$2,000	
Database Analyst	$62,857	$9,429	$5,000	$6,286	$2,000	

Notes:
1. These position titles were taken from the NC Office of State Personnel's Job Classifications by Schematic Code, Electronic Data Processing section. Specific job duties of these staff members may differ somewhat from the duties of staff with the same title in other NC State Departments, as CJIN's operational and technical environment is unique in the State.
2. Annual salary information is based on the mid-point of the salary range for each position as reported in the NC Office of State Personnel's Job Classifications by Schematic Code, Electronic Data Processing section. These figures are current as of March 31, 2003.
3. Benefits are based on 15 percent of total compensation.
4. Training is estimated at $5,000 per year for all positions.
5. Travel is estimated at 10 percent of the annual salary for all positions.
6. This is the estimated annual cost of office expense for the CJIN office. This includes paper, PC software licenses and upgrades, monthly bills for telephone/pager, copy machine, etc. This is estimated at $2,000 per person per year.
7. CJIN Executive Director is not a new position, but is provided here to show the total cost of CJIN Office staff once those staff members are hired. Recurring costs for this position have been added for training, travel and office expense to ensure that these items are budgeted in the future.
8. Annual salary increases of 1.5 percent assumed.

Source: State of North Carolina CJIN Recurring Costs – Final Report, Gartner, June, 2003, page 69

CJIN Governing Board Recurring Costs

7.4.3 Recurring Cost Summary

Figure 25. CJIN-Governing Board Recurring Costs

CJIN Governing Board Recurring Costs

	2003 Budget	2004 - Forecast	2005 - Forecast	2006 - Forecast
Governing Board Operations	$10,386	$20,000	$20,000	$20,000
Office Expense	$0	$12,000	$14,000	$14,000
Travel	$0	$37,974	$45,128	$45,804
Training	$0	$30,000	$35,000	$35,000
Salary & Benefits	$107,029	$436,697	$518,967	$526,751

Source: Gartner, 2003

Source: State of North Carolina CJIN Recurring Costs – Final Report, Gartner, June, 2003, page 70

Appendix O

CJIN Funding Sources

CJIN Funding Sources

CJIN has been challenged by obtaining on-going, recurring funding for maintenance, support, and the replacement of presently deployed technologies for CJIN related initiatives. Although one-time federal or state funding has initiated many key CJIN initiatives, in many cases, individual state agencies have assumed ownership and responsibility for obtaining on-going recurring funding into their recurring budgets. Given recent budget shortfalls in North Carolina, many state agencies have reached the point where they are fiscally incapable and can no longer continue this mode of operation. As part of the CJIN recurring cost study, the Gartner Group was asked to identify recurring funding sources and explore the feasibility of alternative funding streams of revenue. The following pages are from their final report.

8.1 Introduction

The purpose of Task 6 was to identify and research alternative funding sources that may be used to pay for CJIN recurring costs.

8.2 Methodology

To understand CJIN's current environment, we reviewed key documentation provided by the State, including the April 2002 and 2003 North Carolina CJIN Governing Board Report to the North Carolina General Assembly. We also conducted interviews with CJIN's Executive Director and key staff members.

To understand best practices in the area of funding, we first identified a group of states that were considered to have 'best practice' approaches in criminal justice information networks. To compile a list of best practice states, we contacted SEARCH, the National Consortium for Justice Information and Statistics (http://www.search.org). Using the information provided by SEARCH, we identified 10 states that have demonstrated evidence of production criminal justice applications and/or substantial funding mechanisms. These states are as follows:

- Connecticut
- Florida
- Kansas
- Minnesota
- Missouri
- Oklahoma
- Pennsylvania
- Rhode Island
- Washington
- Wisconsin.

We then conducted interviews with representatives from each of these states to gather information about funding sources.

Using the information gathered through these interviews, Gartner research, and research and information available in the public domain, we assessed CJIN against other states' best practices and developed recommendations for improvement. In the area of funding, we compared CJIN's current funding sources with the funding sources used in other states. This analysis led to the identification of additional potential funding opportunities.

Source: State of North Carolina CJIN Recurring Costs – Final Report, Gartner, June, 2003, page 71

8.3 Overview of CJIN Current Environment and Key Issues

CJIN has three separate and distinct funding requirements:

- The first component of CJIN funding is for Governing Board operations.

- The second component of funding relates to the development and operational aspects of the individual infrastructure and application initiatives.

- The third and final component of CJIN funding is for the end-user community. This aspect of funding is to ensure that end users have the appropriate equipment and software to fully participate in CJIN initiatives.

In North Carolina, CJIN operates as a 'virtual agency' rather than a traditional State agency with an operating budget and staff. CJIN's workspace is the criminal justice areas and the 'no man's land' between them. When the General Assembly created CJIN, it was correctly cautious in ensuring that it was not going to become another bureaucratic agency. CJIN legislatively resides within the DOJ for administrative and budgetary purposes but the Board exercises all of its powers independent of DOJ.

CJIN operates within the State budget constraints that are agency-centric while the CJIN enterprise includes five State agencies within two branches of government and 280+ criminal justice agencies. CJIN enterprise also supports local and federal agencies that provide their own funding resources but participate in CJIN initiatives.

Source: State of North Carolina CJIN Recurring Costs – Final Report, Gartner, June, 2003, page 72

CJIN Funding Sources

8.3.1 Description of CJIN Funding Sources

■ The State of North Carolina has an annual fiscal year process which runs from July 1 to June 30 of the following year. CJIN prioritizes its funding needs in its annual report to the North Carolina General Assembly. Each State agency can also prioritize its CJIN initiatives within the agency's priorities and budget. Funds are appropriated to the individual agencies, and these agencies expend these funds from Departmental budgets as projects are undertaken.

■ CJIN also receives grant funding on behalf of the CJIN community of users from a variety of State and Federal sources. Some of these grant funds are awarded directly to CJIN and reside in DOJ State agencies for use on CJIN-related projects, while other grant funds are awarded directly to CJIN. Some of those grant funding sources include the following:

   ❑ National Governor's Association (NGA)

   ❑ Governor's Crime Commission (GCC)—includes Edward Byrne Memorial Fund (DCSI)

   ❑ Office of Juvenile Justice and Delinquency Prevention (OJJDP)

   ❑ Bureau of Justice Assistance

   ❑ Governor's Highway Safety Program (GHSP)

   ❑ Discretionary Congressional bill appropriations

   ❑ Others.

■ CJIN also receives in-kind contributions from a variety of private, local and state agencies. For example:

   ❑ CJIN—Mobile Data Network receives tower and shelter space at no cost from many Towns, Cities, Counties, Fire Departments, Sheriff's Departments, Police Departments, Emergency Services Offices, State Agencies and Departments, Native American organizations and private corporations.

■ Local law enforcement agencies receive a variety of grant funding for CJIN-related projects. These sources include the following:

   ❑ Governor's Crime Commission (GCC)

   ❑ Local Law Enforcement Block Grant (US Department of Justice)

   ❑ COPS MORE grants

   ❑ Bureau of Justice Assistance (BJA)

   ❑ Discretionary Congressional bill appropriations

   ❑ Others.

Source: State of North Carolina CJIN Recurring Costs – Final Report, Gartner, June, 2003, pages 72-73

8.3.2 CJIN Funding Source Issues

- Much of CJIN's funding to date has come from one-time federal grants. Although the grants have successfully funded several key infrastructure and application initiatives, the State lead agencies responsible for deploying these infrastructure and application initiatives are absorbing the costs of maintaining and supporting these initiatives for the 'common good' with no recurring CJIN funds. Grants as a means of funding projects are becoming unpredictable. Grants tend to be easily available during good economic times and difficult to get during economic downturns. The future of grants as a source of funding may be questionable since congressional earmarks may not be available as a source of funding in the future.

- CJIN has not established a predictable funding stream to support recurring costs. State agencies have reached a point where their ability to supplement CJIN operations for the 'common good' from their existing budgets is decreasing and can no longer continue.

- An enterprise approach requires that all participants share common objectives and also receive funding to support an enterprise wide approach across all agencies. While many agencies share common needs, each agency also has unique requirements. Implementing an enterprise approach can be challenging in this situation.

Source: State of North Carolina CJIN Recurring Costs – Final Report, Gartner, June, 2003, pages 73-74

CJIN Funding Sources

8.4 Review of Best Practice States Funding Sources

8.4.1 Funding Challenges in Best Practice States

- All states face significant challenges in funding their criminal justice information networks. Some of the most common challenges are summarized below:

  - Lack of grant fund availability during difficult economic times

  - Overall lack of ongoing funding; this may result in the inability to take advantage of available grant funds as there is no clear way to fund the project after the initial investment

  - Competing priorities among the criminal justice information network and other State functions

  - Expectations for funding from Homeland Security Department; this funding has not yet materialized

  - Fee for service proceeds related to the criminal justice information network are not always dedicated to the public safety agency; these resources may go into a general fund and become available for distribution to other state agencies

  - When fee for service proceeds are dedicated to the public safety agency, the agency's annual budget allocation may be reduced by an amount equal to the proceeds, leaving the agency with no additional revenue from the fee for service mechanism.

Source: State of North Carolina CJIN Recurring Costs – Final Report, Gartner, June, 2003, page 74

CJIN Funding Sources

8.5 Conclusions

This section provides Gartner's analysis of CJIN's current environment as compared to the best practice agencies and Gartner's research and experience with other similar agencies, and offers recommendations for CJIN.

- ■ CJIN has been successful in securing grant funding for individual projects. In order to support and maintain infrastructures and applications that have been deployed, CJIN needs a balanced portfolio of ongoing funding sources. In order for CJIN to fulfill its charter, CJIN must be sustained through adequate funding. Grant funding is not predictable. Relying on budget appropriations to individual state agencies is effective for certain projects, but not for all projects. This leaves critical efforts, such as new infrastructures, applications, upgrades and standardization initiatives unfunded. Locals secure their own funding to participate in the CJIN initiatives and they struggle with things like the cost of end-user gear.

  A more balanced set of funding sources will allow CJIN to secure grant funding when it is available, and provide more stable ongoing funding sources to rely on during lean economic times. A balanced funding portfolio could include the following:

  - ❑ Grant funding

  - ❑ Some level of state appropriation for non-agency-specific projects

  - ❑ Fee-for-service mechanisms that gather fees from both local law enforcement agencies and, more importantly, from the public

  - ❑ Surcharges

  - ❑ Public-Private Partnerships

  - ❑ Chargeback approaches to allow State agencies using CJIN to fund key CJIN staff members.

  The NC Department of Justice is currently using one fee for service funding approach through which CJIN-MDN users pay a monthly fee per device to access DCI. There is an opportunity for CJIN to expand the fee for service approach and consider other mechanisms as well. There is a variety of ongoing funding sources available and in use in other states, and CJIN should explore these sources to the fullest extent possible. The ongoing funding sources that have the best potential for CJIN are discussed in more detail below.

Source: State of North Carolina CJIN Recurring Costs – Final Report, Gartner, June, 2003, pages 79-80

8.5 Conclusions (continued)

- **Grant Funding**

  - CJIN has been very successful in competing for and winning grant funds. This is due to the efforts of the CJIN Executive Director and to staff members in the State's justice agencies. CJIN should continue to aggressively pursue grant funding for CJIN-related projects. Because grants are becoming more difficult to win, the Business and Technology Applications Analyst recommended for CJIN in the Governance Section should play a key role in grant writing and continue CJIN's aggressive competition for available grants.

- **State Appropriation for CJIN**

  - If the State of North Carolina considers CJIN a high priority and wants to continue its development 'common good' projects, the CJIN Board operations and the CJIN staff. While the departmental appropriation project works well for those projects that clearly benefit one agency or a small group of agencies, the CJIN appropriation would be dedicated to those projects of Board operation/staff that benefit all agencies and are not specific to a single agency. This is one of the few ways CJIN can be assured the consistent level of on-going funding required to meet user needs and expectations for continued growth and enhancement of the network and associated systems.

  - A budget appropriation brings up several questions and issues that may result in changes in how CJIN operations as an organization. Some of those questions and issues include the following:

    - Staffing: Appropriated funds could be used to hire contract employees to complete specific projects. CJIN staff would need to expand beyond just the Executive Director to provide oversight for the projects. As recommended in the Governance section, technical project oversight would be provided by the Applications Development Project Supervisor and the Networking Specialist. The CJIN Executive Director would be responsible for financial management of appropriated funds, and would be assisted by the recommended Business and Technology Applications Analyst.

    - Governance: The CJIN Governing Board would need to take on a new role in making decisions about how to prioritize projects funded by the CJIN appropriation. The Board would also become responsible for overseeing the successful use of those funds and monitoring the results of the projects implemented using those funds. The Executive Director and the recommended Business and Technology Applications Analyst would support the Board in its duties related to monitoring projects funded with a budget appropriation.

<div align="center">Source: State of North Carolina CJIN Recurring Costs – Final Report, Gartner, June, 2003, pages 80-81</div>

8.5 Conclusions (continued)

- **Fee for Service**

  - ❑ CJIN could undertake a program similar to that in Florida in which criminal background checks are provided to the public for a fee over the Internet. Florida and North Carolina are both public record states, and regulations require that state agencies provide public information and charge only the cost to provide it. Those regulations are typically relevant to traditional customer service methods, such as individuals walking into a state office building and requesting photocopies of information or using a terminal/reader to review electronic media on-site. The Internet has provided states with a new, non-traditional vehicle for delivery of this information, which should be seen by the State as an added value to the customer.

    The AOC currently provides criminal history record information over the Internet for a fee. CJIN may be able to provide other appropriate information in a similar manner to recover costs of providing the information, and to generate revenue related to the convenience of the media. As in Florida, individuals in North Carolina would likely be willing to pay a fee for the convenience of conducting a criminal background check from one's office or living room, at any time of the day or night, any day of the week. To satisfy State regulations, a portion of the fee would be used to pay for the information delivery medium, which should include the applications, servers and personnel needed to provide that information over the Web. The remainder of the fee would be considered a convenience fee that could be used to maintain and upgrade the criminal justice applications that provide that information. This fee would not be applicable to law enforcement agencies.

- **Surcharge**

  - ❑ CJIN could add a surcharge to a variety of things, including traffic tickets, non-criminal applicant fees for checking fingerprints, records checks for criminal history, etc. This would be similar to the program in the State of Washington. This program could provide consistent, on-going funding of the magistrate system or other CJIN-related systems. This would allow the magistrate system, or other appropriate systems, in North Carolina to be funded by a portion of those individuals who cause data to be entered into the system—criminal violators. This approach should not be considered a tax increase for the citizens of North Carolina, as it is only levied on those whose data goes through CJIN systems. Other opportunities for surcharges include adding a small amount to every vehicle title or driver's license, since CJIN MDN and Voice help to ensure driver safety. CJIN may also have opportunities to tap into State 911 funds, since CJIN supports public safety in the State.

Source: State of North Carolina CJIN Recurring Costs – Final Report, Gartner, June, 2003, pages 81-82

8.5 Conclusions (continued)

- **Public-Private Partnerships**

  - ❑ CJIN could develop a greater level of partnership with the private sector. CJIN should continue to leverage its existing relationship with the Information Resources Management Council (IRMC) and should expand into the new concept of the public-private partnerships. These corporate partners would provide pro bono staff resources for CJIN projects and assist in reviewing and implementing CJIN efforts. CJIN will benefit from the resources and insight provided by the corporate partner, while the corporate partner benefits by contributing to a safer community within the State. These partnerships require time to build, but once established, they will provide lasting benefits to CJIN, to the corporate partner and to the public.

- **Chargeback**

  - ❑ In addition to State appropriations, CJIN could also consider creating a CJIN General Use Charge. This Use Charge would be paid by State agencies using CJIN and the funds would be used to recover costs for CJIN staff. Funds could potentially also be used for other special, critical needs as determined by the CJIN Board.

Source: State of North Carolina CJIN Recurring Costs – Final Report, Gartner, June, 2003, page 82