

The author(s) shown below used Federal funds provided by the U.S. Department of Justice and prepared the following final report:

**Document Title: Northeast Gang Information System (NEGIS)
Participant Survey: Police Executive Research
Forum**

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Document No.: 183469

Date Received: July 12, 2000

Award Number: 96-LB-VX-K007

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NEGIS Participant Survey

***Police Executive
Research Forum***

January 11, 1998



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Guide to this report...

This report is the result of a consulting engagement done for the Police Executive Research Forum (PERF) by Xerox Connect. PERF coordinated a grant from the National Institute of Justice (NIJ) to implement the Northeast Gang Information System (NEGIS). As part of the grant process, PERF is compiling a report for the NIJ describing the results of the project. PERF has contracted with Xerox Connect to survey the five participating state police agencies regarding their satisfaction with the technical aspects of the project.

Consulting approach

Because NEGIS is based on the Lotus Notes platform Lenny Pitts from Xerox Connect, a Certified Lotus Professional (CLP), was the primary consultant for this project. After reviewing technical documentation for NEGIS and speaking with Lt. Thomas Kerle from the Massachusetts State Police who was the technical lead on the project, a survey was developed to evaluate the participant's satisfaction and issues with NEGIS. The survey concentrated on the following four subjects:

- Architecture and Platform Issues
- Hardware Configuration
- NEGIS (Notes Databases) Configuration
- Technical Implementation

Collectively, the information gathered in these surveys and Xerox Connect's technology research is the foundation for all findings in this report.

Intended audience

This report is directed to the NIJ, and other law enforcement agencies that may be engaged in activities pertaining to NEGIS.

The report presumes that the reader has a general background in information systems and data communications concepts. Xerox Connect has made every effort to provide thoughtful and in-depth descriptions of recommended technologies and methodologies.

Conventions used in this document

<i>Convention</i>	<i>What it means...</i>
NEGIS	Northeast Gang Information System - the Notes databases that make up the system
E-mail	Electronic mail
LAN	Local area network
PC	Desktop communications technology, including Macintosh and IBM compatible personal computers
Users	People who use applications, computers, networks, and applications
WAN	Wide area network

Desktop/PC	Hardware in offices
Employees, personnel, teachers, or students	General categories of people you might refer to; they aren't necessarily "users"
Gb, Kb, Mb	gigabit, kilobit, megabit
GB, KB, MB	gigabyte, kilobyte, megabyte
Mbps/MBps	Megabits/megabytes per second
MHz	megahertz
100MHz	100 megahertz

1 *Executive Summary*

The Police Executive Research Forum contracted Xerox Connect to survey NEGIS participants regarding their satisfaction with the technical aspects of the design and implementation of the system. Lotus Notes Consultant Lenny Pitts from Xerox Connect worked closely with Cliff Karchmer from PERF to generate the survey.

NEGIS is meant to act as a demonstration for a planned National Gang Information Network that will enable local, state, and federal law enforcement personnel across the country to share and exchange gang-related intelligence. The distributed, shared-system design solves two primary problems. First, by pooling information, the system provides a knowledge management solution for general gang information. The second, and more important, benefit of the system will be to enable investigators to quickly find personnel in other organizations with specialized knowledge or skills to aid them in a specific investigation. Once those connections are made, the system will provide additional benefits by replacing the traditional methods of information sharing (phone, fax, mail, and hand-delivery) with more efficient electronic delivery.

There were two primary deliverables to be demonstrated by the NEGIS project. This report will address how well the NEGIS project did in achieving those deliverables in the eyes of the participants.

1. **Demonstrate a functional Gang Information System that enables police gang investigators to share and exchange gang related information among U.S. law enforcement agencies at the federal, state, and local levels.**

At the writing of this report, NEGIS consists of the state police agencies of Massachusetts, Vermont, Connecticut, New York and Rhode Island. As will be demonstrated by the participating organizations' comments this step has been only partially successful. There were several reasons why this step has not been fully implemented, including funding, organizational operating differences and implementation problems. The funding and organizational decision making problems are outside the scope of this report. This report will deal with the technical aspects of how this implementation could have been more successful.

2. **The principal work product will be an architecture for an automated system for accessing interconnected but separate and stand alone state networks. The networks will be housed within law enforcement agencies within the participating states. Each of the systems will feature standard design features that use Lotus Notes as a common communications vehicle, and will also feature uniform access and security protocols.**

The surveys targeted four areas: architecture, hardware configuration, NEGIS configuration and technical implementation. Across these four areas questions were separated into two sections. The first section consisted of a list of project components where the participants were asked to rank their satisfaction with each on a scale of 1 to 5. The second section of the survey asked open-ended questions that gave participants the opportunity to comment on specific issues they had with NEGIS. The surveys were emailed to the participants on Thursday October 1, 1998, with follow up phone interviews conducted to rec-

ord the participant's responses. Survey results have been tabulated and organized into the following sections of this report:

- Section 2 – Architecture
- Section 3 – Hardware Configuration
- Section 4 – NEGIS Configuration
- Section 5 – Implementation

After presenting the quantitative results, each section contains a brief summary highlighting specific relevant comments made by the survey participants.

2 Architecture and Platform Issues

The "Architecture and Platform" section of the survey dealt with the technologies that NEGIS was built with. Participants were asked about their satisfaction with the software chosen, as well as the hardware it is being run upon. The software components covered in this section include the development platform and operating system. The hardware components covered in this section include the brands of servers, desktops and portables.

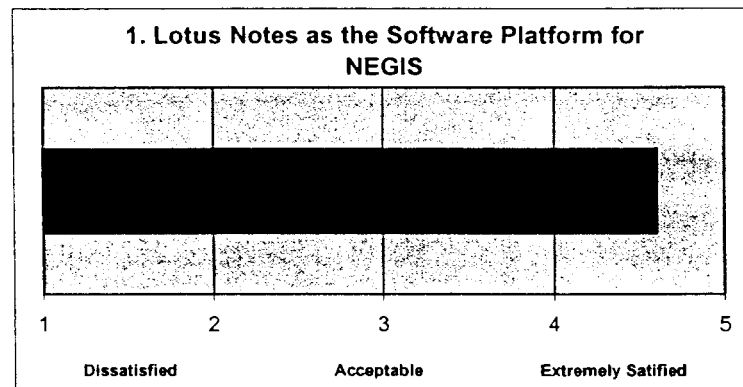
Architecture and Platform Satisfaction

1. Lotus Notes as the Software Platform for NEGIS

Lotus Notes was selected as the software platform that the NEGIS databases were developed in. There were several reasons for its selection. First, several of the states involved already used Lotus Notes, eliminating the need to learn a new technology. Additionally, the states felt that Lotus Notes integrated Email communication and secure ability to share databases made it an ideal platform for a multi-organizational information sharing system.

Responses

MA	NY	CT	VT	RI	AVERAGE
4	5	5	4	5	4.6



Every state except for Vermont already had implemented (or had plans to implement) Lotus Notes as a strategic platform. Due to the existing experience in Notes it is not surprising that overall the NEGIS participants were extremely satisfied with Notes as the choice of software platform. Several states cited potential benefits for Notes outside of NEGIS. John Shultis from the New York State Police stated, "NEGIS was the New York State Police's first Notes project, but we see lots of ways to use it. We are using it in many different spin-offs and are finding communications improved with other states using Notes."

Jim Colgan (VT) sited the platform as being adequate, but would have liked to the opportunity to evaluate other potential solutions before the platform decision was made.

Despite the high rating, there were several concerns about Notes that were related by various states. Andy Russell (CT) is concerned with the fact that Notes is not a relational database, and that the intelligence database may become hard to use when it gets larger than 100,000 records. John Shultis (NY)

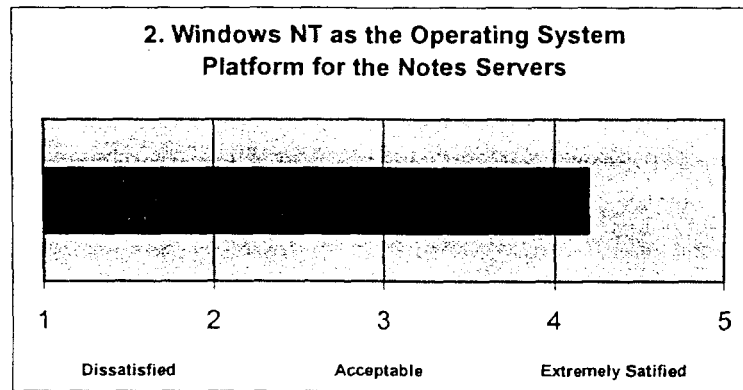
is concerned with the steep initial learning curve for administrators and application developers. He felt that end-user training was fine, but more effort could have been put into up-front administrator and developer training.

2. Windows NT as the Operating System Platform for the Notes Servers

Intel based servers running Windows NT were selected as the server platform because of the strong price/performance they offer. Additionally, Lotus supports Windows NT as one of the primary platforms for Notes, and new functionality is often available on that platform first.

Responses

MA	NY	CT	VT	RI	AVERAGE
4	4	4	4	5	4.2



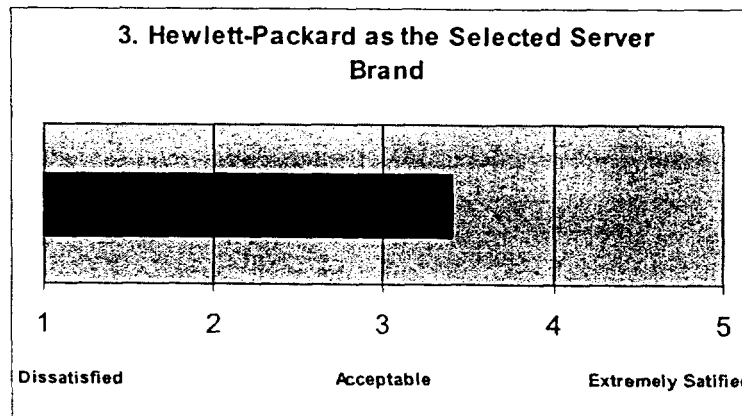
All of the respondents indicated that they were satisfied with the selection of Windows NT as the operating system platform for NEGIS. The only comment regarding operating systems selection was from James Shea (RI) who commented that there could have been "more input from technical personnel" when selecting software.

3. Hewlett-Packard as the selected server brand

As part of the bidding process, specifications for the Intel servers were specified with the bidding vendor choosing the brand. All the bids that met the specification were evaluated to determine the best value and the decision was made to go with CIC Systems/CompuCom, which made the bid with Hewlett-Packard Servers.

Responses

MA	NY	CT	VT	RI	AVERAGE
4*	5	3	2	3	3.4



*NOTE: Massachusetts received a Compaq server because they required a rack-mountable solution.

The range of responses to this question varied from somewhat dissatisfied to extremely satisfied, and was determined largely upon standards within the respective organizations. Jim Colgan (VT) was the only respondent to rate the selection of HP servers as less than acceptable, and had the following comment: "I would have preferred it if each state could have selected their own hardware within price limitations. Vermont has standardized on Gateway, and now we have several systems that don't conform to the standard. It is not a big deal, but we would have preferred to stick with one brand."

Because of the standardization of Intel-based hardware, several states did not have strong feelings regarding brands, leading to a ranking of only "acceptable". Andy Russell from the Connecticut State Police ranked the HP server brands as acceptable (3), and stated, "As far as desktops and servers go that they are all basically the same, brand does not matter." James Shea of the Rhode Island State Police also ranked HP as a server brand as "acceptable"(3), without specifying any preferred brand.

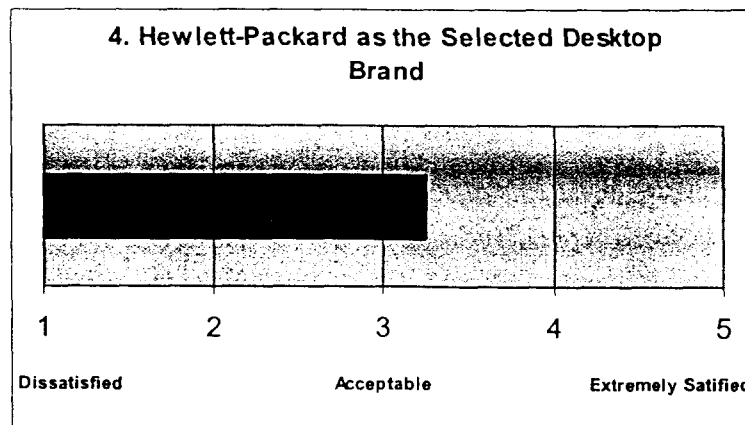
4. Hewlett-Packard as the selected desktop brand

As part of the bidding process, specifications for the Intel desktops were specified with the bidding vendor choosing the brand. All the bids that met the specification were evaluated to determine the best value and the decision was made to go with CIC Systems/CompuCom, which made the bid with Hewlett-Packard Desktops.

Responses

MA	NY	CT	VT	RI	AVERAGE
NA*	5	3	2	3	3.25

*NOTE – Massachusetts did not receive any desktops for the NEGIS project.



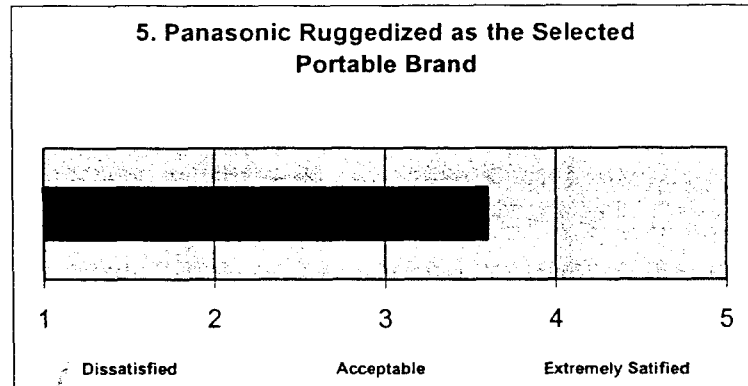
Similar to the HP server selection, the HP desktop selection responses ranged from somewhat dissatisfied to extremely satisfied. As with the servers, Vermont's issue with the selection of Hewlett-Packard as the desktop brand is that it introduces non-Gateway systems into their standardized environment.

5. Panasonic Ruggedized as the Selected Portable Brand

Because of the sometimes-harsh working conditions in the field, the Panasonic Ruggedized was selected as the portable brand.

Responses

MA	NY	CT	VT	RI	AVERAGE
3	5	1	5	4	3.6



The selection of portable brand drew the widest range of satisfaction ratings because of the trade-off between performance and reliability. At the dissatisfied end of the responses, Andy Russell (CT) rated his satisfaction with the Panasonic as "dissatisfied" (1), and commented, "We gave up a lot of performance for the rugged design, and the trade off was not worth it. Because of the poor performance, no-one is currently using the portable." While rating the Panasonic selection as "acceptable" (3), Tom Kerle (MA) also expressed concerns about the performance, "The higher cost and lower performance of the ruggedized portable make it a questionable choice. They are acceptable, but it would be a tossup to get three more powerful machines for the price of two ruggedized ones."

Architecture and Platform Conclusions

Despite the "commodity" nature of Intel-based systems, user responses indicate that system brands are important in standardized environments. Because of this, the selected hardware brands all ranked as just above "acceptable" when responses were averaged from participating states. When the project specification was drawn up there was a conscious trade-off made between giving everyone the specific brands they wanted, and going with a single source to keep procurement manageable. Even though some people were not happy with certain selections the use of the selected brands did not significantly hamper the final results of the NEGIS project.

One of the successes of NEGIS is the very high satisfaction ranking that Lotus Notes received as the selected application platform. The selection of Notes was the "architecture decision" the users were most satisfied with despite some implementation problems with the NEGIS Notes databases. The most frequently cited reasons for this satisfaction were improved communications, and the ability to use Notes to share information in new ways. Additionally, the fact that Notes is a platform-independent architecture will benefit state organizations down the road, as they can expand their Notes architectures on whatever platform best suit their needs.

3 Hardware Configuration Issues

The "Hardware Configuration" section of the survey deals with the ability of the hardware as configured to meet the current needs for NEGIS. Additionally, participants were asked about the scalability of the hardware, to determine if they are satisfied with their ability to expand and upgrade as NEGIS usage increases.

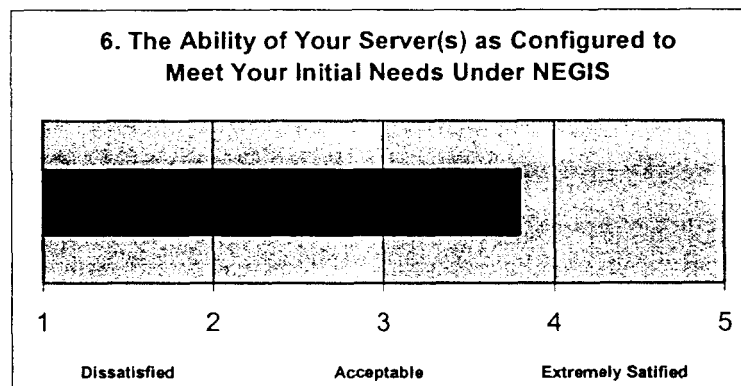
Hardware Configuration Satisfaction

6. The ability of your server(s) as configured to meet your initial needs under NEGIS (consider performance, number of users supported, reliability etc.)

All classes of servers were initially configured with more than the minimum recommended RAM and disk space for running Lotus Notes Servers. All servers were configured with tape drives for backup. Servers were configured with one, two or four processors depending on the number of users the state was going to support.

Responses

MA	NY	CT	VT	RI	AVERAGE
5	4	2	3	5	3.8



The initial server configurations received high satisfaction marks from MA, NY and RI, an acceptable grade from VT and a somewhat dissatisfied from CT. The only comments regarding the physical hardware configuration was from CT, which rated their initial server configuration satisfaction, the lowest. All other comments regarding initial server configurations were regarding software.

VT – No problems with the server configuration – only would have liked to pick own brand (see question 3.)

RI – No comments on the server configuration

NY – Problems with initial configuration of Cheyenne and InnocuLan protection suite enterprise editions. CIC CompuCom did not have time to configure this so it was shipped directly to the NY State Police. They cannot run the part that protects Notes. No one from CIC or Cheyenne has addressed the problem yet. NYSP spent their own money hiring outside consultants to get it working and it still is not fixed; they are waiting for Cheyenne to patch the software. Problem was that both CIC and Cheyenne did not stay on top of the problem.

CT – There was a problem migrating from their existing Notes Server to the new one. The primary complaint was that it didn't come with enough ports, and the CompuCom person who did the migration did not have enough NT experience. Now that the server is finally configured correctly it is functioning fine.

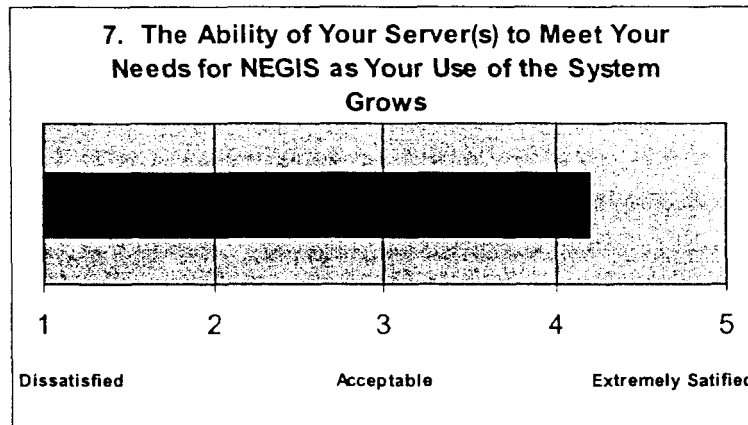
MA – The Cheyenne ArcServe Backup Software is still not working properly. The company is hard to deal with.

7. The ability of your server(s) to meet your needs for NEGIS as your use of the system grows (consider performance, scalability etc.)

The different classes of servers the different states received have different levels of scalability. All servers came with the maximum number of processors installed, but all can be upgraded with more memory and disk space in the future.

Responses

MA	NY	CT	VT	RI	AVERAGE
5	4	4	3	5	4.2



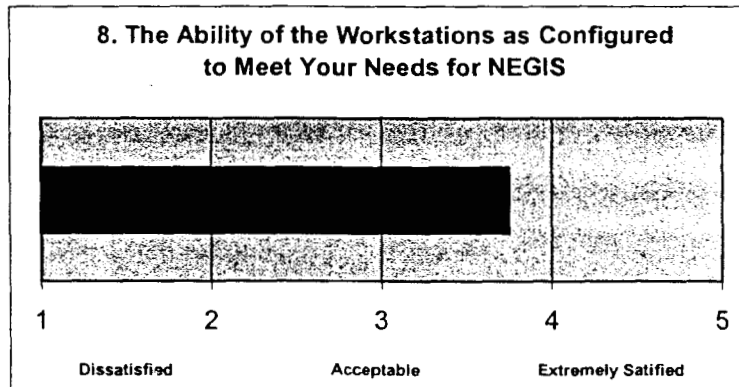
The fact that satisfaction with the servers' ability to meet the future needs scores almost a half a point higher than the satisfaction with the initial configuration shows that the NEGIS specification was well done. The lower scores from question 6 stem from frustration with getting the servers configured (mostly software issues). Once the servers were configured onsite it worked out that everyone was satisfied with the results. Perhaps, the most impressive fact was that across the five states, no participants indicated any specific changes they would make to the hardware configurations.

8. The ability of the workstations as configured to meet your needs for NEGIS

The workstations received by the states all were the same configuration. The key components were a Pentium MMX 200Mhz, 64MB EDO RAM, 2.5GB Hard Disk, 12XCD-ROM, and 33.6 modem. The workstation specifications easily exceed the Lotus Notes Client software requirements.

Responses

MA	NY	CT	VT	RI	AVERAGE
*NA	4	4	2	5	3.75



The only participant who ranked the desktop configuration less than a four was Jim Colgan from Vermont. His comments on the low score were, "The Hewlett-Packard desktops are constantly locking up and crashing. The hardware specifications are ok, but the crashes are a problem. Having to reboot constantly is the biggest user dissatisfaction."

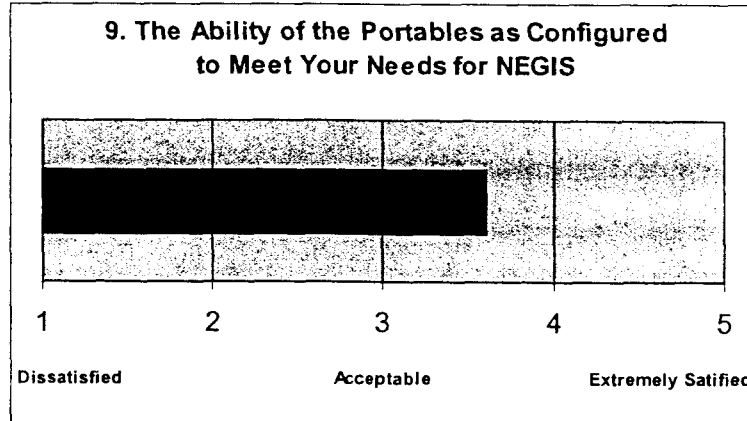
*NOTE: The state of Massachusetts did not receive any desktops as part of the NEGIS project.

9. The ability of the portables as configured to meet your needs for NEGIS

The specified configuration of the NEGIS portables is as follows: Pentium 166MHz CPU, 32MB EDO RAM, 1.2GB Disk, 12XCD-ROM, 10.4 TFT LCD, 33.6 Cellular Fax Modem, Ruggedized Casing

Responses

MA	NY	CT	VT	RI	AVERAGE
4	4	2	3	5	3.6



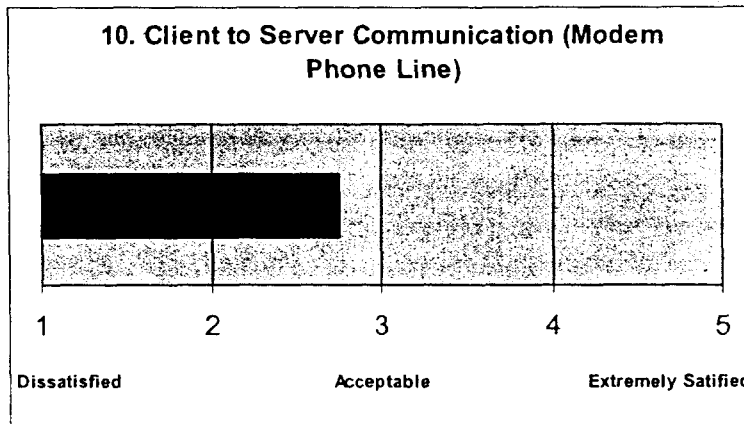
Massachusetts, New York and Rhode Island all ranked the portable configuration a 4 or a 5 which indicates that they are satisfied with the decreased performance of the ruggedized portables. Connecticut ranked the portable configuration as less than acceptable, which is backed up by the statement that the performance trade-off was not worth it.

10. Client to server communication (via modem and phone line)

The states that do not have statewide WANs have to rely on dial up access for the Notes Client machines (both workstation and portable) to access the Notes Servers. NOTE: NEGIS workstations located at the same physical location as the Notes Server would most likely be communicating via LAN, however the needs for NEGIS indicate that the workstations and portables are spread out across each state. Additionally, when portables are taken out into the field this is the only viable means of communications.

Responses

MA	NY	CT	VT	RI	AVERAGE
3	3	2	*NA	3	2.75



It is important to note that the purpose of NEGIS is not only to facilitate communication and the sharing of information across state lines, but across multiple locations within each individual state. At the time of deployment, Vermont is the only state with a WAN capable of linking all of their locations participating in NEGIS together. This means that in the other four states, officers utilizing NEGIS that are not stationed at the same location as the state's NEGIS server must dial into it to get access to the current information.

Client to server modem communication received an average score of slightly less than acceptable. This use of phone lines, however, is made essential by the limited capabilities of each states internal infrastructure. Even though dial-up is rated less than satisfactory, it is important to point out that Lotus Notes is one of the best technologies that allow a client/server solution like NEGIS to function with this limited infrastructure.

CT – Andy Russell had the following comment regarding client dial up to the server. “The communications infrastructure in the state is not adequate between the client and the server. Modems and phone lines are too slow for the type of data we are dealing with. We are storing and sending a lot of JPEG images which get quite large.

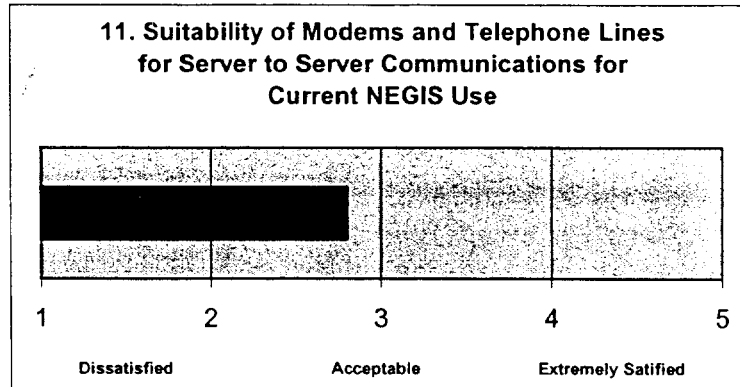
*NOTE: VT uses a statewide WAN to connect clients to its Notes Servers

11. Suitability of modems and telephone lines for server to server communications for current NEGIS use

The original NEGIS plan included a proposal for AT&T to provide the states with leased lines to facilitate interstate server-to-server communications. For various reasons that plan fell through, and the states were left with using modems and dial up phone lines for server to server connectivity.

Responses

MA	NY	CT	VT	RI	AVERAGE
3	3	3	3	2	2.8



The respondents realize that modems and phone lines are adequate for the initial NEGIS setup, but the slightly less than acceptable average score indicates that they realize there is a more efficient way to accomplish the interstate communication. The nature of the system should ensure that volume of data increases as time goes on

CT – Andy Russell stated that, “Modems and phone lines are adequate for replication between the Notes Servers in separate states.”

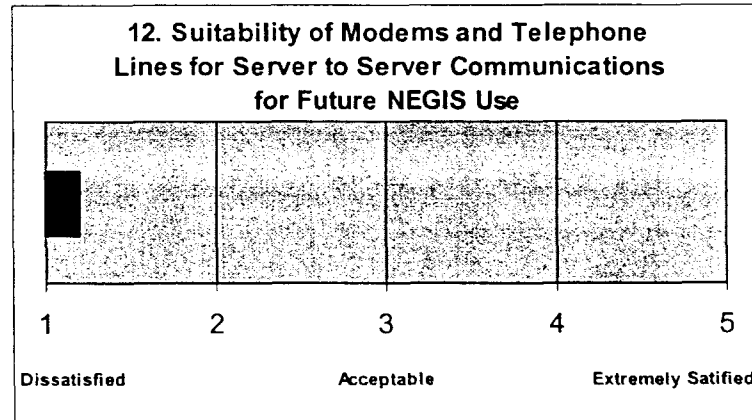
MA – Thomas Kerle mentioned that the states should consider using the Internet for replication in the future.

12. Suitability of modems and telephone lines for server to server communications for future NEGIS use

The original NEGIS plan was for AT&T to provide the states with leased lines to facilitate interstate server to server communications. For various reasons that plan fell through, and the states were left with using modems and dial up phone lines for server to server connectivity.

Responses

MA	NY	CT	VT	RI	AVERAGE
1	1	2	1	1	1.2



The dissatisfied scores across the board strongly indicate that the NEGIS participants recognize modem connectivity between servers has the potential to become a large bottleneck in the system as it grows. All participants recognize that replication over the Internet is something that needs to be considered as NEGIS grows.

Hardware Configuration Comments - While participants were quick to point out problems and issues with the server configurations, most of them resulted from the folding of CompuCom into CIC Systems. Because there is no way to foresee this happening there is little that could have been done better to configure the server hardware for NEGIS.

The worst satisfaction scores in the hardware configuration section were for the necessity of using modems and phone lines for computer-to-computer communications. The well-publicized use of the Internet for low-cost communications has made the participants realize that there is a better way to perform this task. However, the ability of Lotus Notes to utilize this low cost solution until the various organizations can get connected to the Internet is a benefit for NEGIS.

4 *NEGIS Configuration Issues*

The "NEGIS Configuration" section of the survey deals with the set of Notes Databases that act as the repository of shared gang-related information. NEGIS consists of four Notes databases in conjunction with the native Notes Mail functionality to enable gang investigators to catalog and share information between states. The five functions of NEGIS and their functionality are:

1. Notes Mail – Email communication
2. SPIN – Intelligence Database
3. Library of Gang Related Material – Reference database
4. Investigators Directory – Provides a contact management facility that catalogs gang investigators, their individual skills and how to contact them.
5. Leads Database – Discussion database that allows investigators to post a questions or a lead and receive feedback on it. This must be purged to comply with 28CFR

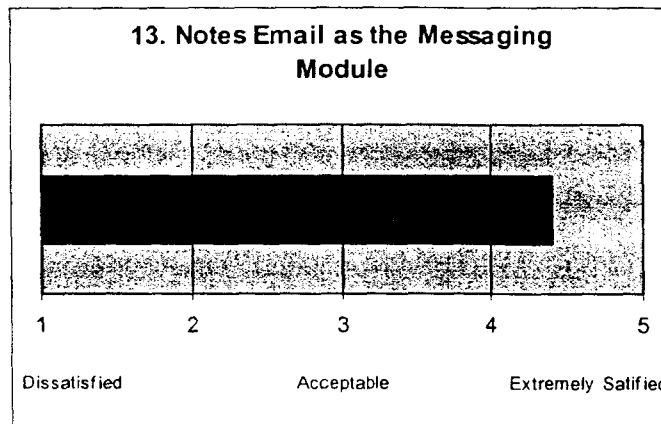
NEGIS Configuration Satisfaction

13. Notes Email as the messaging module

Notes Email is being utilized as part of NEGIS to facilitate communications between the different states. Even though it seems as if this piece is just a throw-in because it comes as a standard part of Notes, it has taken on great importance because the majority of the states had no interstate Email capability in the past.

Responses

MA	NY	CT	VT	RI	AVERAGE
5	5	5	3	4	4.4



The Email component with a rating of 4.4 is the part of NEGIS that users are most satisfied with. In addition to getting a high satisfaction rating, when the users were asked what component of NEGIS was most beneficial three states, MA, NY and CT all listed the Email communications among the most beneficial elements of the project.

MA – Email messaging is the most beneficial component of NEGIS because of improved communications. The MSP has found a lot of value by adding the

SMTP MTA onto their Notes Server to enable the use of Internet mail. Now every user registered for NEGIS automatically gets Internet Email as a no cost add-on. The added functionality makes Notes mail very useful.

CT – Email and the Bulletin board are the two most beneficial components of NEGIS

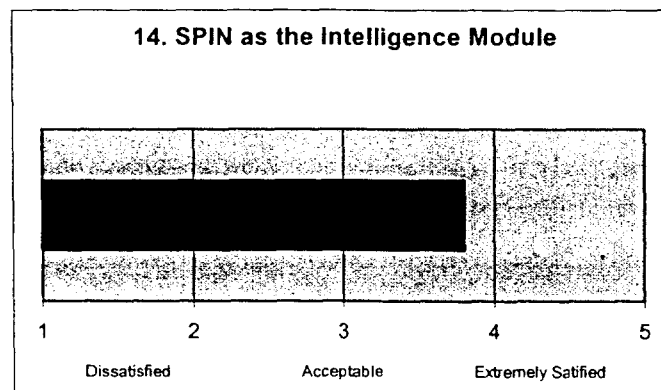
NY – Email and the ability to share applications is the biggest benefit. No need to re-invent the wheel.

14. SPIN as the intelligence module

SPIN is the intelligence module of NEGIS and was adapted from the Connecticut SPIN system. The original plan was to have an intelligence piece developed specifically for NEGIS, but the cut in the grant money resulted in the participants having to use the existing SPIN development effort as part of NEGIS. Because SPIN was not designed to be shared between states the component resides only in Connecticut. NEGIS users from other states must submit a request to Connecticut to be resolved.

Responses

MA	NY	CT	VT	RI	AVERAGE
2	4	5	4	4	3.8



Behind Email, SPIN was rated the second highest in terms of satisfaction for NEGIS components. Individual state’s comments on SPIN all have a common thread that the component could be improved if it was modified and shared among the states.

MA – Technically this component is good, but it is based on the state of Connecticut’s highly centralized model. Massachusetts works in a more decentralized manner; thus it is not the best solution for the state.

CT – SPIN is beneficial, but not as much as it could be if it was shared across states.

NY – SPIN is good but it needs work. It was designed for Connecticut and it needs modifications to work well as a multi-state platform. We need more money to fix this. If the grant went forward with the full amount this could have been addressed.

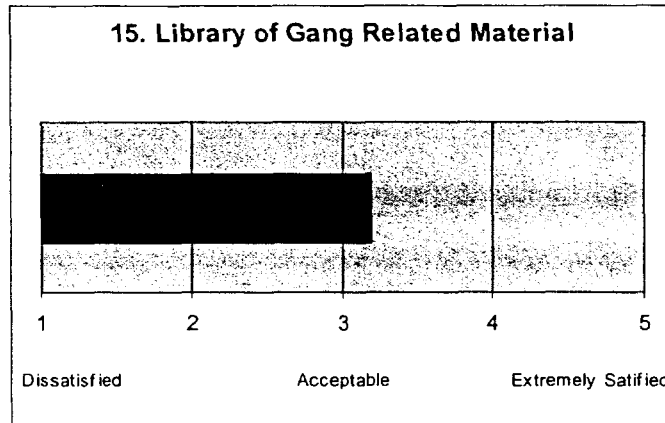
VT – SPIN and the Discussion Database are the most useful components of NEGIS

15. Library of Gang Related Material

The Library of Gang Related Material is a reference database that contains general information that does not fall under 28CFR. It is being used in part as an educational tool.

Responses

MA	NY	CT	VT	RI	AVERAGE
3	4	5	1	3	3.2



After Email and SPIN, the other three NEGIS databases all score between 3.2-3.25 which is just above acceptable in terms of satisfaction. General comments about these components' usefulness indicate that it is a lack of current information entered in the system, and not technical issues that are limiting their usefulness. A consolidated push to get people using the other components of NEGIS would most likely increase overall satisfaction with the system. The components that meet an urgent need are being used regularly, and people are happy with them. The other sections are limited in value until users recognize the value of a combined knowledge base and begin contributing to the system regularly.

MA – Thomas Kerle stated that, “Technically this piece is fine, but it has not caught on. The content is lacking that could make this piece useful. Lt. Kerle believes that reluctance to change is the primary reason for this.”

RI – James Shea stated that the “NEGIS Resource Library is the least beneficial piece of NEGIS because it is not well populated with data.”

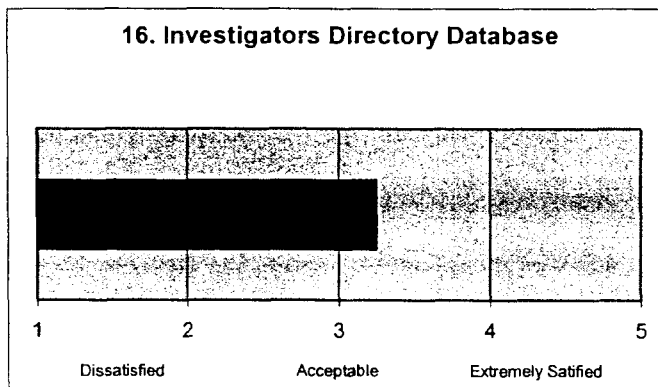
VT – Jim Colgan stated that, “The other databases are not being kept up to date. A bunch of data was dumped in initially, but no updates have been done.”

16. Investigators Directory Database

The Investigators Directory Database is a “contact management” component of NEGIS. It lists all of the investigators that are using NEGIS, what their specialties are and how to get in touch with them.

Responses

MA	NY	CT	VT	RI	AVERAGE
4	5	*NA	1	3	3.25



Much like the Library of Gang Related Material, the Directory database receives acceptable satisfaction ratings on average largely because NEGIS users have yet to widely adopt it.

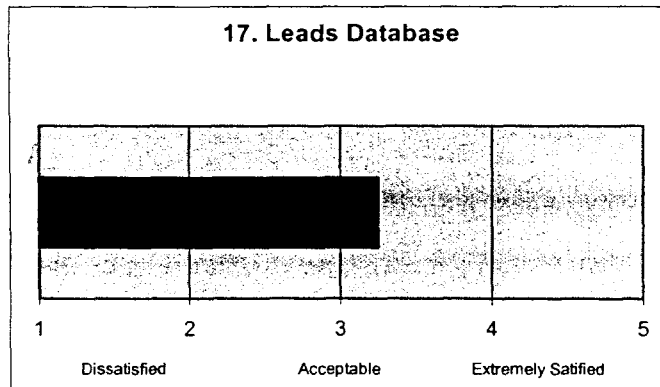
*NOTE: Connecticut does not currently have a replicating copy of this database so they had no way to evaluate it.

17. Leads Database

The Leads Database is based on a Notes Discussion database, and is meant to be a resource for investigators to post questions, or relevant information about cases they are working on. This database is subject to 28CFR regulations.

Responses

MA	NY	CT	VT	RI	AVERAGE
4	5	*NA	1	3	3.25



Although the Leads database satisfaction rating averages out to just over a 3 (acceptable), it gets high ratings from Massachusetts and New York, while getting medium to low ratings from Vermont and Rhode Island. From the interviews conducted, Xerox Connect learned that the Massachusetts State Police developed the Leads database. The fact that Massachusetts, New York and Rhode Island state police organizations all find the leads database useful indicates that improved communication with the Vermont and Connecticut State Police could improve the overall satisfaction of the Leads component of NEGIS.

VT – Jim Colgan stated that, “The other databases (Leads and Investigator Resources) are not being kept up to date.”

RI – James Shea stated that, “The gang unit particularly likes the Gang Discussion database (Leads). It enables him to post data that he is looking for and receive input on his posting.”

NY – Along with Email, Leads is the most widely used database

MA – Thomas Kerle commented, “All effort is devoted to 28CFR issues instead of the real problem, which is gang related violence. 28CFR made us dumb down the system and lots of information is lost because of the requirement to comply. There is a huge administrative overhead, instead of people spending time investigating crime they are spending time dealing with the administration of this requirement.”

*NOTE: Connecticut is not replicating a copy of the Leads Database so they had no way to evaluate it.

NEGIS Configuration Comments – Most of the comments regarding issues with NEGIS configuration are management or monetary issues. The only technical limitations mentioned were regarding SPIN, and the fact that there was not enough resources to change the design to work in a multi-state environment.

The non-technical issues surrounding NEGIS all had to do with the data in the system being out of date, or not robust enough. An evangelist team, made up of at least one member from each state could be utilized to get gang investigators involved in using the system. The evangelist team should work together to share system knowledge and spread success stories as NEGIS use grows. The lack of training on how individuals are meant to use the system has hurt its acceptance according to James Shea of Rhode Island, "Training was provided for the OS but not for the use of NEGIS related material on site."

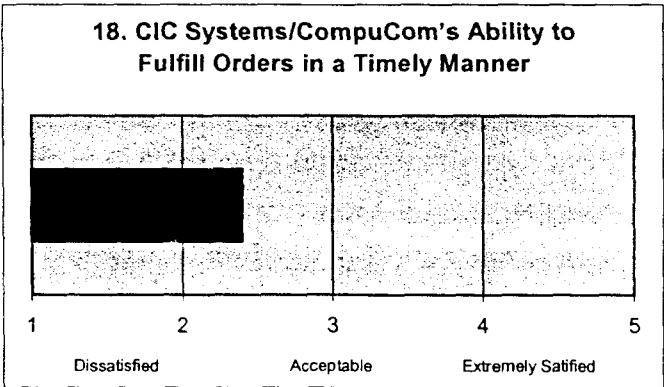
5 Implementation Issues

The Implementation section of the survey deals with the participant's satisfaction with the selected vendors' abilities to deliver the products and services to support NEGIS. The hardware procurement contract was given to CompuCom, which was bought in the middle of the project, and changed its name to CIC Systems. Synetics provided training for Lotus Notes administration.

18. CIC Systems/CompuCom's ability to fulfill orders in a timely manner

Responses

MA	NY	CT	VT	RI	AVERAGE
4	3	1	1	3	2.4



Because of the confusion resulting from the takeover there was a lot of dissatisfaction with CIC Systems/CompuCom. Respondents marked their satisfaction with the company's performance as less than 3 (Acceptable) on average in all three areas evaluated.

RI – James Shea, "Sole source (should be given) to vendors who have a past track record of excellent performance."

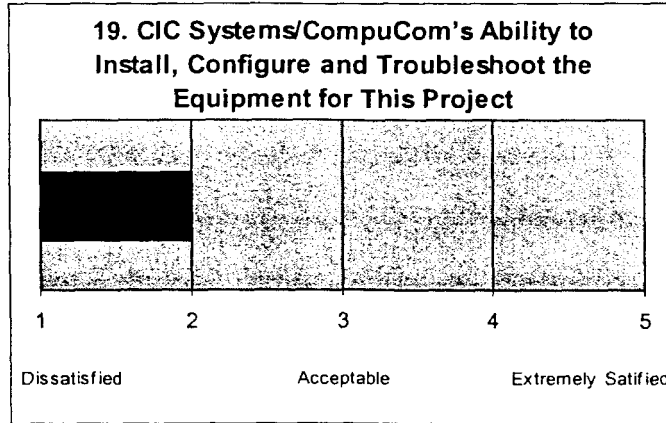
CT – Andy Russell, "We were victimized by vendor selection, and are still waiting for CD ROM writer equipment from CIC Systems. No one at the vendor seems to know what the status is."

NY – CIC Systems was supposed to install Cheyenne and InnocuLan Protection suite but we did not get it in time. It ended up being shipped directly to NY."

19. CIC Systems/CompuCom's ability to install, configure and troubleshoot the equipment for this project

Responses

MA	NY	CT	VT	RI	AVERAGE
3	1	1	2	3	2.0

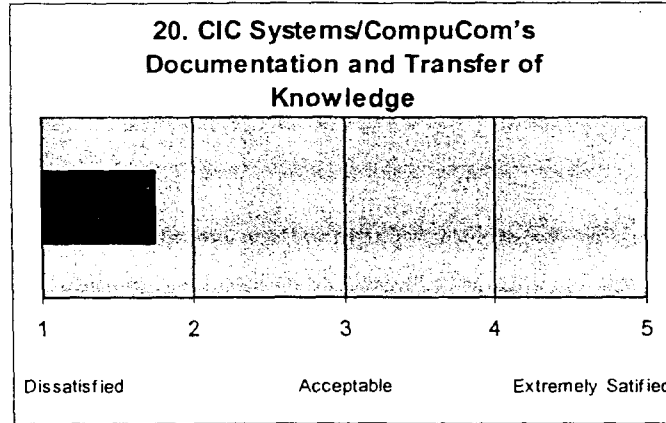


CT – Andy Russell commented that “Our requirements were for CompuCom to bring the new server in and transfer the Notes Server from our old Dell server to the new server. The person who came to move the Notes software over did not have any Windows NT experience. The server as delivered had hardware and software conflicts that they had a hard time resolving.”

20. CIC Systems/CompuCom's documentation and or transfer of knowledge that accompanied the installation and configuration of selected systems

Responses

MA	NY	CT	VT	RI	AVERAGE
NA	1	1	3	2	1.75

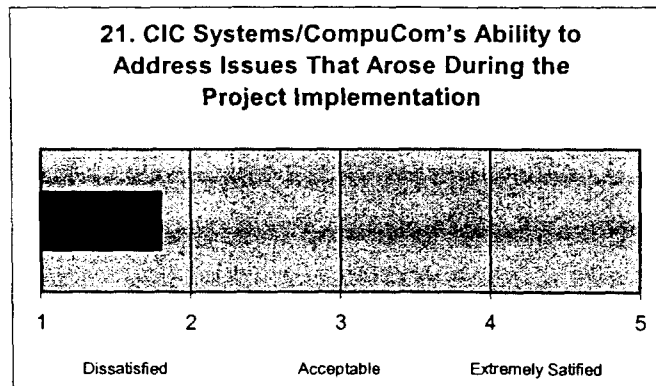


There were no relevant comments regarding documentation and transfer of knowledge.

21. CIC Systems/CompuCom's ability to address questions, issues or concerns that arose during the project implementation

Responses

MA	NY	CT	VT	RI	AVERAGE
3	1	1	1	3	1.8



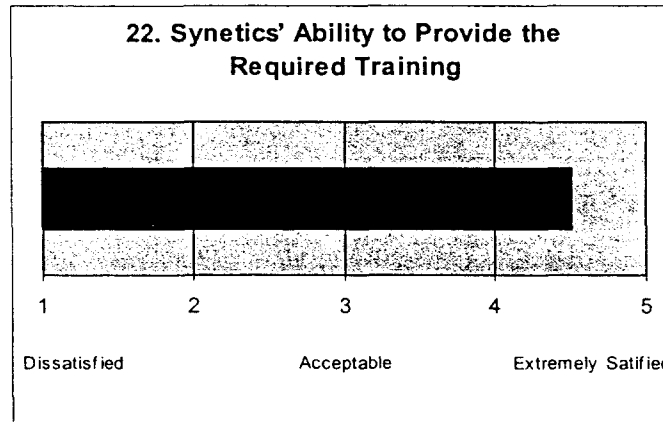
NY – John Shultis “When we turned on the Notes aspect of the protection suite Notes stopped working, we cannot run the part that protects Notes. CIC Systems has not addressed this with Cheyenne yet.”

22. Synetics' ability to provide the required training

Synetics provided all Lotus Notes training for the NEGIS project.

Responses

MA	NY	CT	VT	RI	AVERAGE
5	5	4	4	NA	4.5



Overall, there were positive comments about the training provided by Synetics. Everyone interviewed was very satisfied with the company. The only change participant's would like to see is having training available in multiple locations.

MA Tom Kerle – "Synetics was very accommodating"

CT Andy Russell – "The training was fine for the people we sent. I would have preferred to have the option of having my people trained locally. The project did pick up the tab for the training, but having to send our people to MA resulted in lost man-hours."

RI James Shea – "More consideration to geographic locations"

VT Jim Colgan – "The training was really good."

Implementation Comments – Even though there were many complaints regarding CIC Systems/CompuCom, everyone interviewed was satisfied with the vendor selection process. The only change that could be recommended is ensuring that future projects include a project manager from the vendor side who will be a single point of contact responsible for resolving all problems with the order. The high satisfaction ratings for training highlights the importance that quality training can have in ensuring the success of this type of initiative.

6 *Unresolved Issues*

The last two questions on the survey regarded any unresolved issues each state has with the NEGIS project. They are included here broken out by state.

Massachusetts

- There are unresolved issues regarding the Cheyenne backup software
- The project was initially budgeted for \$1 million but got cut to \$460,000 for the entire project. To supply all the needed hardware, software and training for five states this did not go far. The bottom line is that \$460,000 for a five-state project is peanuts. It is amazing that they could get anything rolled out across five states for that amount. The fact that the states were able to implement a partial solution on the reduced grant proves that this approach is a viable solution. The biggest unresolved issue is getting NEGIS rolled out past the original five states. Where will the money come from?

Connecticut

- CT was brought into the loop a little after the fact. The Massachusetts State Police did the initial demo, and there was a lot of pressure to come up with a product with different perspectives of what to do. In August of last year there was a meeting in CT where the organizations came up with a consensus of how the system was going to look. After this meeting MA and NY made a unilateral decision to not use the intelligence (SPIN) part and go off and do something else. MA should have brought up they couldn't use SPIN earlier. Thinks agenda with MA and NY was to get equipment and hit the road, CT agenda was to implement shared intelligence. This is the first project I have seen where they had the money before they had the grant objectives. Some of the design was done unilaterally. I still don't know what MA and NY is doing about intelligence. I see the primary cause of this problem being the political agenda to get something done fast, before any real planning could be done.
- Training is critical component and is a key to the success of this type of project. I would like to see more training. Project was focused around MA, Lt. Tom Kerle and Mike Kalmbach did a good job.
- We were victimized by vendor selection, and are still waiting for CD ROM writer equipment from CIC Systems. No one at the vendor seems to know what the status is.
- As far as I am concerned we have not met the objectives of the grant funding. CT still does not have access to the Leads database and the Investigator Resource Database developed by MA. CT is not cross-certified with any of the other states except for MA (and they were already cross-certified with MA before the NEGIS project started). CT has to go through the MA server to share data with any of the other states.
- One of the biggest problems is there is no ongoing support, both technically and administrative. We have all of these independent systems, but nothing has really changed. CT is basically in the same position as we were before the project, except for the new hardware we received.

- There was not a good delegation of specific responsibilities, which was partially a geographic problem. It was never determined who would be responsible for ongoing support and rollout of the different Notes components. MA designed some of the other pieces of NEGIS, but they have never been rolled out to CT. This is not to point a finger at Tom Kerle and Mike Kalmbach, they have had this stuff dumped in their laps. Overall, agency agendas were not brought to the forefront early enough in the process to make adjustments to the plan.
- As part of the specification in the RFP we should have made project management a bigger part of the requirements. The vendor selected should have been responsible for not only getting the equipment installed at all of the states, but also to get everyone cross certified, communicating, and all of the components installed.

New York

- In any implementation it is very critical that the people designated to run the system are trained up front so they are in place to run and maintain the security on it. The software is easy to use so the end-users should not have that much of a problem. The beauty of Notes is that it is easy to use for end users.
- Most avidly I would like to behoove the National Institute of Justice (NIJ), the President and Janet Reno to provide us with at least the other half of the grant money. Evaluate the project every year if you have to before moving forward. There are some 600 agencies in NY that want to come on board. We accomplished a great deal with the \$460,000, with the other half we could accomplish a lot more. Something should be put together with the panel of people who rolled out NEGIS to show nationwide the benefits of working on a common platform. NIJ can really manage and help law enforcement to share development efforts across states. We should stop reinventing the wheel. If NEGIS is moved forward to other states than at the very least, everyone will be connected in a secure environment. It takes money to do it, but in the long run it will save money if people are sharing applications. We should break down the barriers; criminals do not have jurisdiction, why should we be hampered by boundaries. Cost of Notes license is so low that it really is cost effective. We need the right type of planning to keep this project moving forward. There are tons of agencies that want to come on board right now, but they don't have the hardware to support them. Its worthwhile for them to take a look at what was accomplished with the money they spent.
- I am very proud of what was accomplished and the work that was done by Tom Kerle and the US attorney. We want to see it move forward and we need help doing it. It benefits so many people.

Rhode Island

- Did any one check to see if this system was year 2000 compliant? In the design phase no consideration was given to departments that do not have the resources to give NEGIS the attention it will need as it grows.

Vermont

- The initial concept of NEGIS was a good one. Unfortunately, because of each states' needs and issues it has become impossible to keep NEGIS intact. The NEGIS project was constantly under scrutiny and time pressure, and when it came to the closing period we never put on a demonstration. There

were a number of meetings that were scheduled for preparation of a display of NEGIS, but they never came to be. Overall the project has slipped through the cracks. On the positive side, we have established connectivity with five states. The ability to communicate immediately with the other states via e-mail is effective. The potential exists to share databases, if the project gets back on track. The infrastructure is intact, with the potential to add further states and organizations; it is up to the existing states to push this project further.

- There is still some equipment we ordered that has not arrived to date – 3Com HUB 24port – CD ROM Writer
- We need to have a meeting in October to re-establish NEGIS, tie up loose ends, establish future goals and draw the project back together.

7. Appendix A: User Surveys

STATE – CT

INTERVIEWEE – Andy Russell

Please rate your satisfaction with the following aspects of the NEGIS project on a scale of 1 to 5 with one being least satisfied and five being extremely satisfied. Select NA if the question is not applicable.

Scale						
1	2	3	4	5		
Dissatisfied		Acceptable		Extremely Satisfied		
Please put an X in the appropriate box.						
Architecture/Platform Issues						
1	2	3	4	5	NA	
1. Lotus Notes as the software platform for NEGIS				X		
2. Windows NT as the operating system platform for the Notes Servers			X			
3. Hewlett-Packard as the selected server brand		X				
4. Hewlett-Packard as the selected desktop brand		X				
5. Panasonic ruggedized as the selected portable brand	X					
Hardware Configuration						
6. The ability of your server(s) as configured to meet your initial needs under NEGIS (consider performance, number of users supported, reliability etc.)		X				
7. The ability of your server(s) to meet your needs for NEGIS as your use of the system grows (consider performance, scalability etc.)			X			
8. The ability of the workstations as configured to meet your needs for NEGIS			X			
9. The ability of the portables as configured to meet your needs for NEGIS		X				
10. Client to server communication (modem phone line)		X				
11. Suitability of modems and telephone lines for server to server communications for current NEGIS use			X			
12. Suitability of modems and telephone lines for server to server communications for future NEGIS use		X				
NEGIS Configuration						
13. Notes eMail as the messaging module				X		
14. SPIN as the intelligence module				X		
15. Library of Gang Related Material (bulletin board -)				X		
16. Investigators Directory Database					X	
17. Leads Database					X	
Implementation						
18. CIC Systems/CompuCom's ability to fulfill orders in a timely manner	X					
19. CIC Systems/CompuCom's ability to install, configure and troubleshoot the equipment for this project	X					
20. CIC Systems/CompuCom's documentation and or transfer of knowledge that accompanied the installation and configuration of selected systems	X					
21. CIC Systems/CompuCom's ability to address questions, issues or concerns that arose during the project implementation	X					
22. Synetics' ability to provide the required training			X			

Architecture/Platform Issues

21. What benefits and problems have you experienced with the deployment of Lotus Notes as the platform for NEGIS? Please cite specific benefits and/or problems.

Benefits – Lotus Notes is a perfect architecture for the open exchange of data across multiple jurisdictions.

Potential Problem – Lotus Notes is not a relational database. It is great for collecting and sharing data, but down the road we believe we will have to overlay the data in a relational database. I am concerned that on the intelligence side the database will become hard to use when it gets larger than 100,000 records.

Problem – CT is currently only cross-certified with MA, we would like to be certified with all of the participating states. (This is more of a communications issue, rather than a Notes issue).

22. What, if anything, would you recommend be done differently in evaluating/selecting software platforms?

Nothing

23. What, if anything, would you recommend be done differently in evaluating/selecting hardware brands?

As far as desktops and servers go that they are all basically the same, brand does not matter. Regarding the Panasonic portables, they gave up a lot of performance for the rugged design, and the trade off was not worth it. Because of the poor performance, no-one is currently using the portable.

Hardware Configuration

24. What specific problems have you experienced with the selected hardware? Please cite specific configurations (including brand) that you have had problems with, and describe the problems in detail.

Connecticut had an existing Windows NT/Lotus Notes Server. Their requirements were for CompuCom to bring the new server in and transfer the Notes Server from their old Dell server to the new server. The person who came to move the Notes software over did not have any Windows NT experience. The server as delivered had hardware and software conflicts that they had problems resolving. The new server did not come with enough ports. Now that they finally have the server configuration problems fixed it is functioning fine.

25. What, if any, changes would you recommend in the hardware configurations selected for this project? Please cite the specific system(s) and what changes you would recommend.

No changes are needed as far as desktops, and servers. We would recommend full performance portables instead of the ruggedized ones.

The communications infrastructure in the state is not adequate (between client and server). Modems and phone lines are too slow for the type of data they are dealing with. They are storing/sending a lot of images (jpeg) files which are quite large. Modems and phone lines are adequate for replication between the Notes Servers in separate states.

NEGIS Configuration

26. What components of NEGIS do you find the most beneficial? Please cite specific reasons.

Email and the Bulletin Board are the two most beneficial components. SPIN is also very beneficial, but not as much as it could be if it was shared across states. Both VT and RI will be going to SPIN and then it should be a true multi-state multi-jurisdictional intelligence database.

27. What components of NEGIS do you find the least beneficial or most in need of improvement? Please cite specific reasons or issues.

No comment – haven't used the other two.

Implementation

28. What, if anything, would you recommend be done differently in evaluating/selecting vendors for order fulfillment? Cite specific reasons and issues.

Would have liked it if there had been more time to come up with the specifications. Lt. Thomas Kerle took the lead and drafted specifications and did a good job, but I would have preferred if there had been more time to get others involved. The process was acceptable in the time allotted. I feel that there were political reasons why things were rushed. It was the first project I have seen where the grant money was awarded before there was a finished plan. Despite all this, and the problems with the selected vendor the decision process was good at the time. There was no way to foresee the buyout of the selected vendor that led to all of the implementation problems we faced. I give Lt. Kerle a lot of credit.

29. What, if anything, would you recommend be done differently in evaluating/selecting vendors for training? Cite specific reasons and issues.

The training was fine for the people we sent. I would have preferred to have the option of having my people trained locally. The project did pick up the tab for the training, but having to send our people to MA resulted in lost man-hours.

Other Issues

30. What would you like to tell us about the design, implementation, training etc. that we did not ask about above? Please be as candid and specific as possible.

CT was brought into the loop a little after the fact. The Massachusetts State Police did the initial demo, and there was a lot of pressure to come up with product with different perspectives of what to do. In August of last year there was a meeting in CT where the organizations came up with a consensus of how the system was going to look. After this meeting MA and NY made a unilateral decision to not use the intelligence (SPIN) part and go off and do something else. MA should have brought up they couldn't use SPIN earlier. Thinks agenda with MA and NY was to get equipment and hit the road – CT agenda was to implement shared intelligence. This is the first project I have seen where they had the money before they had the grant objectives. Some of the design was done unilaterally – I still don't know what MA and NY is doing about intelligence. I see the primary cause of this problem being the political agenda to get something done fast, before any real planning could be done.

Training is critical component and is a key to the success of this type of project. I would like to see more training. Project was focused around MA, Lt. Tom Kerle and Mike Kalmbach did a good job.

31. Are there any unresolved issues? If so how can they best be addressed?

We were victimized by vendor selection, and are still waiting for CD ROM writer equipment from CIC Systems. No one at the vendor seems to know what the status is.

As far as I am concerned we have not met the objectives of the grant funding. CT still does not have access to the Leads database and the Investigator Resource Database developed by MA. CT is not cross-certified

with any of the other states except for MA (and they were already cross-certified with MA before the NEGIS project started). CT has to go through the MA server to share data with any of the other states.

One of the biggest problems is there is no ongoing support, both technically and administrative. We have all of these independent systems, but nothing has really changed. CT is basically in the same position as we were before the project, except for the new hardware we received.

There was not a good delegation of specific responsibilities, which was partially a geographic problem. It was never determined who would be responsible for ongoing support and rollout of the different Notes components. MA designed some of the other pieces of NEGIS, but they have never been rolled out to CT. This is not to point a finger at Tom Kerle and Mike Kalmbach, they have had this stuff dumped in their laps. Overall, agency agendas were not brought to the forefront early enough in the process to make adjustments to the plan.

As part of the specification in the RFP we should have made project management a bigger part of the requirements. The vendor selected should have been responsible for not only getting the equipment installed at all of the states, but also to get everyone cross-certified, communicating, and all of the components installed.

If I had to grade this project I would give it a D.

STATE – Massachusetts
INTERVIEWEE – Lt. Thomas Kerle

Please rate your satisfaction with the following aspects of the NEGIS project on a scale of 1 to 5 with one being least satisfied and five being extremely satisfied. Select NA if the question is not applicable.

Scale						
1	2	3	4	5		
Dissatisfied		Acceptable		Extremely Satisfied		
Please put an X in the appropriate box.						
Architecture/Platform Issues						
1. Lotus Notes as the software platform for NEGIS				X		
2. Windows NT as the operating system platform for the Notes Servers				X		
3. Hewlett-Packard as the selected server brand				X		
4. Hewlett-Packard as the selected desktop brand						X
5. Panasonic ruggedized as the selected portable brand			X			
Hardware Configuration						
6. The ability of your server(s) as configured to meet your initial needs under NEGIS (consider performance, number of users supported, reliability etc.)					X	
7. The ability of your server(s) to meet your needs for NEGIS as your use of the system grows (consider performance, scalability etc.)					X	
8. The ability of the workstations as configured to meet your needs for NEGIS						X
9. The ability of the portables as configured to meet your needs for NEGIS				X		
10. Client to server communication (modem phone line)			X			
11. Suitability of modems and telephone lines for server to server communications for current NEGIS use			X			
12. Suitability of modems and telephone lines for server to server communications for future NEGIS use	X					
NEGIS Configuration						
13. Notes eMail as the messaging module					X	
14. SPIN as the intelligence module		X				
15. Library of Gang Related Material			X			
16. Investigators Directory Database				X		
17. Leads Database				X		
Implementation						
18. CIC Systems/CompuCom's ability to fulfill orders in a timely manner				X		
19. CIC Systems/CompuCom's ability to install, configure and troubleshoot the equipment for this project			X			
20. CIC Systems/CompuCom's documentation and or transfer of knowledge that accompanied the installation and configuration of selected systems						X
21. CIC Systems/CompuCom's ability to address questions, issues or concerns that arose during the project implementation			X			
22. Synetics' ability to provide the required training					X	

Architecture/Platform Issues

21. What benefits and problems have you experienced with the deployment of Lotus Notes as the platform for NEGIS? Please cite specific benefits and/or problems.

The MSP was already using Notes as its Email System. There have been no real substantive problems. The primary benefit of Lotus Notes as the NEGIS platform is that people already familiar with it.

22. What, if anything, would you recommend be done differently in evaluating/selecting software platforms?

NOTHING

23. What, if anything, would you recommend be done differently in evaluating/selecting hardware brands?

NOTHING

Hardware Configuration

24. What specific problems have you experienced with the selected hardware? Please cite specific configurations (including brand) that you have had problems with, and describe the problems in detail.

The state has had no hardware problems. The higher cost and lower performance of the ruggedized portable make it a questionable choice. They are acceptable, but it would be a tossup to get three more powerful machines for the price of two ruggedized ones.

25. What, if any, changes would you recommend in the hardware configurations selected for this project? Please cite the specific system(s) and what changes you would recommend.

Cheyenne ArcServe backup software – company was difficult to deal with

NEGIS Configuration

26. What components of NEGIS do you find the most beneficial? Please cite specific reasons.

Email Messaging is the most beneficial because of improved communications. The MSP has found a lot of value by adding the SMTP MTA onto their Notes server to allow for Internet Email. Now every user registered for NEGIS automatically get Internet Email as a no cost add on. The added functionality makes Notes Mail very useful.

The leads database is the second most beneficial component. It allows users to submit a query or question in one location to a wide audience. In addition to providing solutions to specific problems it acts as a training tool. The only reason why Lt. Kerle is not extremely satisfied with this component is because of the required 90 day purge, which reduces its investigative value.

Library of gang related material – Technically this piece is fine, but it has not caught on. The content is lacking that could make this piece useful. Lt. Kerle believes that reluctance to change is the main reason for this.

27. What components of NEGIS do you find the least beneficial or most in need of improvement? Please cite specific reasons or issues.

SPIN – Technically this component is good, but it is based on the state of Connecticut’s highly centralized model. Massachusetts works in a more decentralized manner, thus it is not the best solution for the state.

Intelligence Component – All effort is devoted to 28CFR issues instead of the real problem, which is gang-related violence. 28CFR made us dumb down the system and lots of information is lost because of the requirement to comply. There is a huge administrative overhead, instead of people spending time investigating crime they are spending time dealing with the administration of this requirement.

Implementation

28. What, if anything, would you recommend be done differently in evaluating/selecting vendors for order fulfillment? Cite specific reasons and issues.

Nothing

29. What, if anything, would you recommend be done differently in evaluating/selecting vendors for training? Cite specific reasons and issues.

Nothing, Synetics was very accommodating.

Other Issues

30. What would you like to tell us about the design, implementation, training etc. that we did not ask about above? Please be as candid and specific as possible.

There are unresolved issues regarding the Cheyenne backup software.

31. Are there any unresolved issues? If so how can they best be addressed?

The project was initially budgeted for \$1 million but got cut to \$460,000 for the entire project. To supply all the needed hardware, software and training for five states this did not go far. The bottom line is that \$460,000 for a five state project is peanuts. It is amazing that they could get anything rolled out across five states for that amount. The fact that the states were able to implement a partial solution on the reduced grant proves that this approach is a viable solution. The biggest unresolved issue is getting NEGIS rolled out past the original five states. Where will the money come from?

STATE – NY
INTERVIEWEE – John Shultis

Please rate your satisfaction with the following aspects of the NEGIS project on a scale of 1 to 5 with one being least satisfied and five being extremely satisfied. Select NA if the question is not applicable.

Scale						
1	2	3	4	5		
Dissatisfied		Acceptable		Extremely Satisfied		
Please put an X in the appropriate box.						
Architecture/Platform Issues						
1. Lotus Notes as the software platform for NEGIS				X		
2. Windows NT as the operating system platform for the Notes Servers			X			
3. Hewlett-Packard as the selected server brand				X		
4. Hewlett-Packard as the selected desktop brand				X		
5. Panasonic ruggedized as the selected portable brand				X		
Hardware Configuration						
6. The ability of your server(s) as configured to meet your initial needs under NEGIS (consider performance, number of users supported, reliability etc.)				X		
7. The ability of your server(s) to meet your needs for NEGIS as your use of the system grows (consider performance, scalability etc.)				X		
8. The ability of the workstations as configured to meet your needs for NEGIS				X		
9. The ability of the portables as configured to meet your needs for NEGIS				X		
10. Client to server communication (modem phone line)			X			
11. Suitability of modems and telephone lines for server to server communications for current NEGIS use			X			
12. Suitability of modems and telephone lines for server to server communications for future NEGIS use	X					
NEGIS Configuration						
13. Notes eMail as the messaging module					X	
14. SPIN as the intelligence module				X		
15. Library of Gang Related Material				X		
16. Investigators Directory Database					X	
17. Leads Database					X	
Implementation						
18. CIC Systems/CompuCom's ability to fulfill orders in a timely manner			X			
19. CIC Systems/CompuCom's ability to install, configure and troubleshoot the equipment for this project.	X					
20. CIC Systems/CompuCom's documentation and or transfer of knowledge that accompanied the installation and configuration of selected systems	X					
21. CIC Systems/CompuCom's ability to address questions, issues or concerns that arose during the project implementation.	X					
22. Synetics' ability to provide the required training .					X	

Architecture/Platform Issues

21. What benefits and problems have you experienced with the deployment of Lotus Notes as the platform for NEGIS? Please cite specific benefits and/or problems.

For law enforcement Notes is great platform with its integrated database mail and Internet capabilities. It is a very good front end to move data to relational databases. The product's security is good. NEGIS was the New York State Police's first Notes project, but we see lots of ways to use it. We are using it in many different spin-offs and are finding communications improved with other states using Notes. Additionally, we are cross-certifying with other New York state organizations that use Notes to improve intra-state communications.

The ability to expand the use of Notes outside of NEGIS. Additionally, the ability to communicate with Neighboring states and other agencies has been a huge benefit. The ability to share and use databases across states is great it can eliminate the re-inventing of the wheel. If other organizations see that this works it could go national. Instead of the NIJ giving continuous grant money they can share information using existing systems. Notes can move shared data around the whole country, it doesn't matter where it is stored, the back end intelligence database can be the same. Five states including NH and ME are chomping at the bit to get involved.

Problems – Training – not everyone was trained at the same time at the same level. There is a steep initial learning curve for people running the networks and designing the applications. The current end user training is fine. A little more effort could be put into up front administrator and developer training, people have to be designated and trained right away when new states come on board. Mike Kalmbach(MSP) did a lot of traveling to help other states.

22. What, if anything, would you recommend be done differently in evaluating/selecting software platforms?

NOTHING

23. What, if anything, would you recommend be done differently in evaluating/selecting hardware brands?

NOTHING

Hardware Configuration

24. What specific problems have you experienced with the selected hardware? Please cite specific configurations (including brand) that you have had problems with, and describe the problems in detail.

There was a problem with the Cheyenne and InnocuLan backup and virus protection software. When the Notes aspect of the software was turned on it made Notes inoperable. Cheyenne is supposed to be the leading vendor in this category. CIC was supposed to setup this software, but it was not shipped in time. The software was shipped directly to the state police. CIC to date has not yet addressed the problem with the protection software. We spent money hiring outside consultants to fix the problem and it is still not fixed. Cheyenne still has not patched the software. This is a problem with both CIC and Cheyenne. CIC has not managed to stay on top of the problem by dealing with Cheyenne.

25. What, if any, changes would you recommend in the hardware configurations selected for this project? Please cite the specific system(s) and what changes you would recommend.

For the money we had to work with and what systems everyone got, they did fine. Nobody was greedy.

Instead of using phone lines it would be nice to use the Internet (IP) to communicate. AT&T was supposed to provide Frame Relay but they didn't. Phone lines and modems was a backup, and it works, but it could be improved in the future.

NEGIS Configuration

26. What components of NEGIS do you find the most beneficial? Please cite specific reasons.

Email and sharing the same applications.

Leads – most widely used with Email

Directory – Just look up somebody

27. What components of NEGIS do you find the least beneficial or most in need of improvement? Please cite specific reasons or issues.

SPIN is good but it needs work. It was designed specifically for Connecticut and it needs modifications so it will work well as a multi-state platform. We need money to make these changes. NY does not work the same way as CT. If we had the full amount of the grant instead of having it cut in half this could have been addressed. The two year wait also was not good.

Implementation

28. What, if anything, would you recommend be done differently in evaluating/selecting vendors for order fulfillment? Cite specific reasons and issues.

NOTHING – The process of selecting vendors via bid to meet the specifications was done well. The vendors have to comply with the document, but there is no way to predict things like buy-outs.

During the implementation the company was bought out. During the shuffle, how they handled their obligations changed. We were left hanging. The product was delivered okay, but there were problems and the problems were not addressed. We still need to exchange equipment.

29. What, if anything, would you recommend be done differently in evaluating/selecting vendors for training? Cite specific reasons and issues.

NOTHING

Other Issues

30. What would you like to tell us about the design, implementation, training etc. that we did not ask about above? Please be as candid and specific as possible.

During any implementation it is very critical that people designated to come on board are trained up front. This is especially important so the people are in place to run and maintain the security on the project. The software is easy to use so the end-users should not have that much of a problem learning it. End user ease of use is one of the best features of Notes.

31. Are there any unresolved issues? If so how can they best be addressed?

Getting CIC and Cheyenne to address the exchange of equipment. Most avidly, I would like to behoove the NIJ, the President and Janet Reno to provide us with at least the other half of the grant money. Evaluate the project every year if they have to before moving forward. There are some 600 agencies in NY that want to come on board. We accomplished a great deal with the \$460,000, and with the other half we could accomplish a lot more.

A program should be put together with the panel of people who implemented NEGIS to show nationwide the benefits of working on a common platform. The NIJ can really manage and help law enforcement to share development efforts across states. We should stop reinventing the wheel. At least everyone will be connected in a secure environment. It takes money to do it, but in the long run if people share this stuff it will save money. We can use tools like this to break down the barriers. Criminals do not have jurisdiction why should the police be hampered by boundaries. The cost of a Notes license is so low it really is cost effective. We need the right type of planning to keep this project moving forward. There are tons of agencies that want to come on board right now, but they don't have the hardware to support them. Its worthwhile for the NIJ to take a look at what was accomplished with the money they spent.

I am very proud of what was accomplished and would like to continue to work with Tom Kerle and the US attorney to see it move forward, but we need help doing it. It benefits so many people, and is very cost effective once you do it.

STATE – RI
INTERVIEWEE – James Shea

Please rate your satisfaction with the following aspects of the NEGIS project on a scale of 1 to 5 with one being least satisfied and five being extremely satisfied. Select NA if the question is not applicable.

Scale						
1	2	3	4	5		
Dissatisfied		Acceptable		Extremely Satisfied		
Please put an X in the appropriate box.						
Architecture/Platform Issues						
1. Lotus Notes as the software platform for NEGIS				X		
2. Windows NT as the operating system platform for the Notes Servers				X		
3. Hewlett-Packard as the selected server brand			X			
4. Hewlett-Packard as the selected desktop brand			X			
5. Panasonic ruggedized as the selected portable brand				X		
Hardware Configuration						
6. The ability of your server(s) as configured to meet your initial needs under NEGIS (consider performance, number of users supported, reliability etc.)				X		
7. The ability of your server(s) to meet your needs for NEGIS as your use of the system grows (consider performance, scalability etc.)				X		
8. The ability of the workstations as configured to meet your needs for NEGIS				X		
9. The ability of the portables as configured to meet your needs for NEGIS				X		
10. Client to server communication (modem phone line)			X			
11. Suitability of modems and telephone lines for server to server communications for current NEGIS use		X				
12. Suitability of modems and telephone lines for server to server communications for future NEGIS use	X					
NEGIS Configuration						
13. Notes eMail as the messaging module				X		
14. SPIN as the intelligence module				X		
15. Library of Gang Related Material			X			
16. Investigators Directory Database			X			
17. Leads Database			X			
Implementation						
18. CIC Systems/CompuCom's ability to fulfill orders in a timely manner			X			
19. CIC Systems/CompuCom's ability to install, configure and troubleshoot the equipment for this project			X			
20. CIC Systems/CompuCom's documentation and or transfer of knowledge that accompanied the installation and configuration of selected systems		X				
21. CIC Systems/CompuCom's ability to address questions, issues or concerns that arose during the project implementation			X			
22. Synetics' ability to provide the required training						X

Architecture/Platform Issues

21. What benefits and problems have you experienced with the deployment of Lotus Notes as the platform for NEGIS? Please cite specific benefits and/or problems.

Training was provided for the OS but not for the use of NEGIS related material on site.

22. What, if anything, would you recommend be done differently in evaluating/selecting software platforms?

More input from technical personnel who actually use the software.

23. What, if anything, would you recommend be done differently in evaluating/selecting hardware brands?

More input from technical personnel who actually use the software.

Hardware Configuration

24. What specific problems have you experienced with the selected hardware? Please cite specific configurations (including brand) that you have had problems with, and describe the problems in detail.

None

25. What, if any, changes would you recommend in the hardware configurations selected for this project? Please cite the specific system(s) and what changes you would recommend.

None

NEGIS Configuration

26. What components of NEGIS do you find the most beneficial? Please cite specific reasons.

The Gang Unit particularly likes the Gang Discussion database. It enables them to post data that they are looking for and receive input on his posting.

27. What components of NEGIS do you find the least beneficial or most in need of improvement? Please cite specific reasons or issues.

Population of the NEGIS Resource Library

Implementation

28. What, if anything, would you recommend be done differently in evaluating/selecting vendors for order fulfillment? Cite specific reasons and issues.

Sole source to vendors who have a past track record of excellent performance.

29. What, if anything, would you recommend be done differently in evaluating/selecting vendors for training? Cite specific reasons and issues.

More consideration to geographic locations

Other Issues

30. What would you like to tell us about the design, implementation, training etc. that we did not ask about above? Please be as candid and specific as possible.

Did any one check to see if this system was year 2000 compliant? In the design phase no consideration was given to departments that do not have the resources to give NEGIS the attention it will need as it grows.

31. Are there any unresolved issues? If so how can they best be addressed?

STATE – VT
INTERVIEWEE – Jim Colgan

Please rate your satisfaction with the following aspects of the NEGIS project on a scale of 1 to 5 with one being least satisfied and five being extremely satisfied. Select NA if the question is not applicable.

Scale						
1	2	3	4	5		
Dissatisfied		Acceptable		Extremely Satisfied		
Please put an X in the appropriate box.						
Architecture/Platform Issues						
1. Lotus Notes as the software platform for NEGIS				X		
2. Windows NT as the operating system platform for the Notes Servers				X		
3. Hewlett-Packard as the selected server brand		X				
4. Hewlett-Packard as the selected desktop brand		X				
5. Panasonic ruggedized as the selected portable brand					X	
Hardware Configuration						
6. The ability of your server(s) as configured to meet your initial needs under NEGIS (consider performance, number of users supported, reliability etc.)			X			
7. The ability of your server(s) to meet your needs for NEGIS as your use of the system grows (consider performance, scalability etc.)			X			
8. The ability of the workstations as configured to meet your needs for NEGIS -		X				
9. The ability of the portables as configured to meet your needs for NEGIS			X			
10. Client to server communication (modem phone line)						X
11. Suitability of modems and telephone lines for server to server communications for current NEGIS use			X			
12. Suitability of modems and telephone lines for server to server communications for future NEGIS use	X					
NEGIS Configuration						
13. Notes eMail as the messaging module			X			
14. SPIN as the intelligence module				X		
15. Library of Gang Related Material (bulletin board -)	X					
16. Investigators Directory Database	X					
17. Leads Database	X					
Implementation						
18. CIC Systems/CompuCom's ability to fulfill orders in a timely manner	X					
19. CIC Systems/CompuCom's ability to install, configure and troubleshoot the equipment for this project		X				
20. CIC Systems/CompuCom's documentation and or transfer of knowledge that accompanied the installation and configuration of selected systems			X			
21. CIC Systems/CompuCom's ability to address questions, issues or concerns that arose during the project implementation	X					
22. Synthetics' ability to provide the required training				X		

Architecture/Platform Issues

21. What benefits and problems have you experienced with the deployment of Lotus Notes as the platform for NEGIS? Please cite specific benefits and/or problems.

Benefits – There were no large immediate benefits from installing Notes because the state already had a good communication/network infrastructure. There was already a WAN and a great eMail system with all of the state PDs connected. It has been useful to be able to send eMail to the other states, but it was not a great leap.

Problems – There were no significant problems with Notes. There were some problems with SPIN, but they have been addressed. Notes has been a suitable platform.

22. What, if anything, would you recommend be done differently in evaluating/selecting software platforms?

Notes was picked before Vermont was involved. There was no analysis of software options. I would have wanted to see a wide range of vendors evaluated and what they have to offer.

23. What, if anything, would you recommend be done differently in evaluating/selecting hardware brands?

I would have preferred it if each state could have selected its own hardware within price limitations. Vermont has standardized on Gateway, and now we have several systems that don't conform to the standard. It is not a big deal, but we would have preferred to stick with one brand.

Hardware Configuration

24. What specific problems have you experienced with the selected hardware? Please cite specific configurations (including brand) that you have had problems with, and describe the problems in detail.

The Hewlett Packard desktops are constantly locking up and crashing. The hardware configurations are ok, except for the crashes. Having to reboot constantly is the biggest user dissatisfaction.

25. What, if any, changes would you recommend in the hardware configurations selected for this project? Please cite the specific system(s) and what changes you would recommend.

No comments

NEGIS Configuration

26. What components of NEGIS do you find the most beneficial? Please cite specific reasons.

The discussion database and SPIN are the most useful, because information and photographs can be distributed in a timely manner.

27. What components of NEGIS do you find the least beneficial or most in need of improvement? Please cite specific reasons or issues.

The others databases (Leads, and Investigator Resources) are not being kept up to date. A bunch of data was dumped in initially, but no updates have been done.

Implementation

28. What, if anything, would you recommend be done differently in evaluating/selecting vendors for order fulfillment? Cite specific reasons and issues.

There was a lot of work put into this, especially by Lt. Thomas Kerle. Selection was made based on best value according to the specifications. Nothing should have been done differently.

29. What, if anything, would you recommend be done differently in evaluating/selecting vendors for training? Cite specific reasons and issues.

The training was really good, no changes.

Other Issues

30. What would you like to tell us about the design, implementation, training etc. that we did not ask about above? Please be as candid and specific as possible.

The initial concept of NEGIS was a good one. Unfortunately, because of each states' needs and issues it has become impossible to keep NEGIS intact. The NEGIS project was constantly under scrutiny and time pressure, and when it came to the closing period we never put on a demonstration. There were a number of meetings that were scheduled for preparation of a display of NEGIS, but they never came to be. Overall the project has slipped through the cracks. On the positive side, we have established connectivity with five states. The ability to communicate immediately with the other states via eMail is effective. The potential exists to share databases, if the project gets back on track. The infrastructure is intact, with the potential to add further states and organizations; it is up to the existing states to push this project further.

31. Are there any unresolved issues? If so how can they best be addressed?

A number of issues

1 There is still some equipment we ordered that has not arrived to date – 3Com HUB 24port – CD ROM Writer.

2. We need to have a meeting in October to re-establish NEGIS, tie up loose ends, establish future goals and draw the project back together.

Basically, to this point what Vermont has gotten out of this project is hardware. The foundation is there, but we need to figure out how to get the states working together on databases.