

COMPUTER FORENSICS

PROBLEM

What is the problem for Dallas County?

Need for new and advanced technologies to allow law enforcement agencies and crime labs the ability to more effectively combat crime.

Why is this a problem for Dallas County?

Crimes in which a computer is the instrument of the crime, victim of the crime, or contains evidence of a crime are increasing in Dallas County. However, there are limited qualified resources to examine this evidence. Criminals commonly use computers to commit crimes, communicate, store information, and perform financial and other transactions. Digital evidence is volatile and can be easily destroyed, or altered, rendering it useless in court.

What needs to be done to alleviate this problem?

Provide law enforcement agencies with the technology, training and staff to identify, investigate and prosecute computer-related crimes and similar resources to analyze digital evidence.

Impact for Dallas County

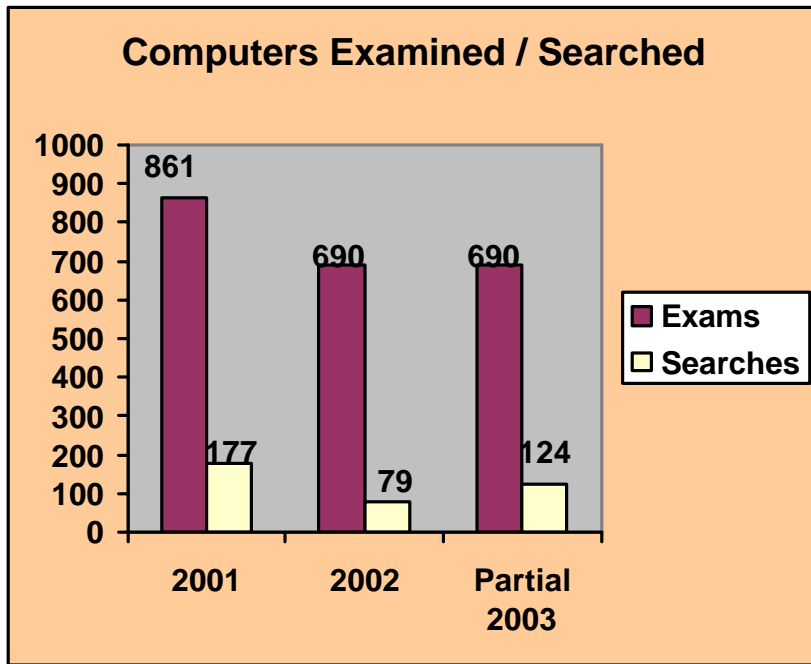
By providing law enforcement agencies with the needed technology, training and, in some cases, personnel, law enforcement agencies would solve more computer crimes and process computer evidence in a more legally defensible manner.

SUPPORTING STATISTICS

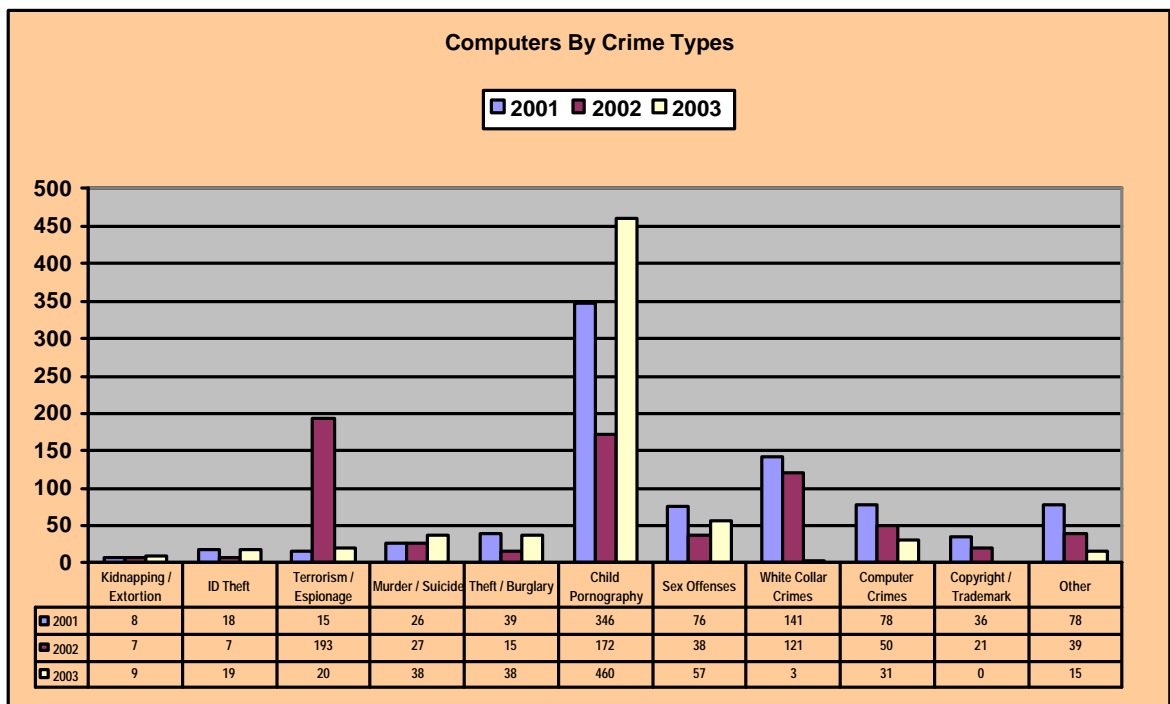
During 2001-2003 (partial year), the North Texas Regional Computer Forensic Laboratory (NTRCFL) provided forensic services to 62 different law enforcement agencies in North Texas. The NTRCFL conducted examinations on 2,241 different computers and performed 380 searches. The largest numbers of examinations were conducted in the following areas, ranked by greatest #s:

1. Child Pornography
2. Terrorism
3. Fraud/White collar crime
4. Computer (hacker) crimes
5. Sexual assaults
6. Copyright/trademark (counterfeiting)
7. Theft
8. Murder/suicide
9. ID theft
10. Kidnapping
11. Other

DATA CHARTS



Source: *The North Texas Regional Computer Forensic Laboratory (NTRCFL)*



CURRENT SERVICE PROVIDERS

The North Texas Regional Computer Forensic Laboratory (NTRCFL)

GAPS IN SERVICE DELIVERY

Most law enforcement agencies do not have the staff or resources to combat computer crime.

GOALS AND OBJECTIVES

Providing law enforcement agencies in North Texas, the Texas Internet Bureau and Department of Public Safety Ranger Division with timely and professional forensic analysis of digital evidence and train these agencies in the proper seizure methods for digital evidence.

Due to advancements in computer technology, the field of computer forensics is constantly changing. In order to properly examine digital evidence an examiner must stay current on various types of computer hardware, operating systems and analysis tools. This type of investment in terms of both manpower and money are prohibitive for a single agency, but are manageable when spread across a "joint" project like the NTRCFL. This project will improve the target area by providing state-of-the-art technology, computer forensic services and training to all law enforcement agencies.

Project activities include: providing guidance in the preparation of search warrants and assistance in the planning and execution of search warrants dealing with computer or digital evidence; conducting impartial and objective analysis of computer evidence using the best available tools and procedures; prepare detailed reports of findings for the investigative officer; be available to prosecutors to testify regarding computers and computer evidence; providing training in the proper techniques for seizing and storing computer evidence.

EVALUATION AND OUTCOME MEASURES

Evidence derived from these computer examinations will be legally defensible and will not be excluded because of evidentiary contamination. The number of days before computer evidence is examined, the numbers of search warrants, examinations and officers trained can measure the effectiveness of this project.

Outcome #1:

Objective: Reduce the average number of days before computer evidence is examined.

Measurement: Number of days before evidence is examined.

Outcome #2:

Objective: Increase number of search warrants executed.

Measurement: Number of search warrants executed.

Outcome #3:

Objective: Increase number of computer examinations done.

Measurement: Number of computer examinations conducted.

Outcome #4:

Objective: Train law enforcement officers local in proper techniques for seizing and storing computer evidence.

Measurement: Number of law enforcement officers trained.

REFERENCES

Federal Bureau of Investigation, Dallas Sheriff's Department, Dallas Police Department, Garland Police Department, Richardson Police Department, Grand Prairie Police Department.