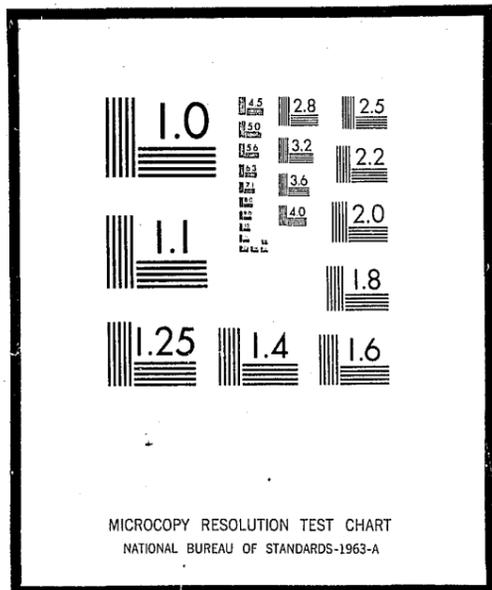


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U.S. DEPARTMENT OF JUSTICE
LAW ENFORCEMENT ASSISTANCE ADMINISTRATION
NATIONAL CRIMINAL JUSTICE REFERENCE SERVICE
WASHINGTON, D.C. 20531

Date filmed, 10/8/75

WASHINGTON OPERATIONS

USE OF INTERACTIVE CCTV TO
PROVIDE LEGAL COUNSELING
SERVICES IN PHILADELPHIA

JUNE 1973

Equipment Systems Improvement Program Report
prepared for



U.S. DEPARTMENT OF JUSTICE
LAW ENFORCEMENT ASSISTANCE ADMINISTRATION
NATIONAL INSTITUTE OF LAW ENFORCEMENT
AND CRIMINAL JUSTICE

MITRE

14964

THE EQUIPMENT SYSTEMS IMPROVEMENT PROGRAM

Following a Congressional mandate* to develop new and improved techniques and equipment to strengthen law enforcement and criminal justice, the National Institute of Law Enforcement and Criminal Justice under the Law Enforcement Assistance Administration of the Department of Justice established the Equipment Systems Improvement Program. The objectives of the Program are to determine the priority needs of the criminal justice community to help in its fight against crime, and to mobilize industry to satisfy these needs. A close working relationship is maintained with operating agencies of the criminal justice community by assigning systems analysts to work directly within the operational departments of police, courts and corrections to conduct studies related to their operational objectives.

This document is a research report from this analytical effort. It is a product of studies performed by systems analysts of the MITRE Corporation, a not-for-profit Federal Contract Research Center retained by the National Institute to assist in the definition of equipment priorities. It is one of a continuing series of reports to support the program decisions of the Institute relative to equipment development, equipment standardization and application guidelines. Comments and recommendations for revision are invited. Suggestions should be addressed to the Director, Advanced Technology Division, National Institute of Law Enforcement and Criminal Justice, Law Enforcement Assistance Administration, U. S. Department of Justice, Washington, D. C. 20530.

Gerald M. Caplan, Director
National Institute of Law
Enforcement and Criminal Justice

* Section 402(b) of the Omnibus Crime Control and Safe Streets Act of 1968, as amended.

MITRE Technical Report

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Philadelphia

Author: Warren Moy
Co-Author: John R. Foulkes
Office of the District Attorney
Philadelphia, Pennsylvania

Dept.: D38

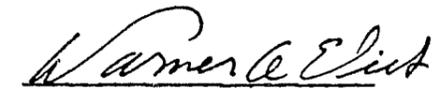
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THE
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Page 1 of 16 Pages

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ABSTRACT

The Philadelphia Police Department is in the process of implementing a closed-circuit television (CCTV) net. This document describes a program wherein the District Attorney's Office could use the net to expand its current effort to provide legal counseling services to all city detective divisions. A plan is presented so that an evaluation can be made of whether CCTV improves these services during a pilot model operation.

EXECUTIVE SUMMARY

The results, to date, of the project by the Philadelphia District Attorney's Office to provide on-site legal counseling services to three city detective divisions have been commendable. As of December 1972, assistant district attorneys in this operation had reviewed 13,886 cases, offered legal advice 724 times, and either drafted or approved 2,349 search warrants. As a direct consequence of these services, prosecution of 4,602 cases involving 7,834 individuals was rejected because of the low likelihood of conviction. The likelihood of conviction in the other cases was markedly increased by these same services.

The Philadelphia Police Department will implement a closed-circuit television (CCTV) net linking Headquarters with all detective division stationhouses and selected special units. Partial implementation will be accomplished by December 1973. This is an interactive net enabling two-way audio and visual communications.

This document was written to describe how the District Attorney's legal counseling effort could be expanded by sharing the Police Department CCTV net. If the results obtained with current three division on-site counseling services can be duplicated by extending the services via the net to all nine division stationhouses, the savings in lost time and wasted efforts would be substantial.

It is not proposed that the capability be extended without further study. The document thus recommends that a 20 month pilot program be initiated to evaluate the operational feasibility of the concept.

An early draft of the document has been appended to a grant application submitted by the Philadelphia District Attorney's Office to the National Institute of Law Enforcement and Criminal Justice (NILECJ).

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1. INTRODUCTION

This paper describes a project to demonstrate and evaluate the application of closed circuit television (CCTV) to the Philadelphia District Attorney's Office to provide legal counseling to police officers at the arrest stage to screen out cases based on violations of due process or insufficiency of evidence. The project envisioned here is made possible by recent advances in both legal and electronics technology.

Nationwide, police, prosecutors and courts are increasingly recognizing that criminal trial time is one of society's scarce resources, and that this resource must not be squandered on cases which cannot be won. Effective and judicious screening in the stationhouse prevents weak cases from usurping the publicly-paid-for efforts of police officers, prosecutors, public defenders, judges, juries, witnesses and detention facilities, from initial judicial appearance through preliminary hearing, indictment, arraignment and eventually to trial.

Large metropolitan areas in this country will be installing cable television systems with special provisions for public uses such as law enforcement, education, traffic, etc. in the decade of the 70's.

Two-way interactive television communication links can be used to significantly improve criminal justice administration not only in Philadelphia but nationwide. This paper is a description of a way in which the television links can be used in conjunction with city-wide networks to prevent the squandering of personnel resources.

2. BACKGROUND

One way in which the Philadelphia Criminal Justice System conserves resources is to have assistant district attorneys counsel police on legalities and procedures prior to the execution of searches and arrests. As a concomitant to this counseling, the assistant screens out cases that are defective despite the counseling effort. With funding from LEAA Action Grants, the Philadelphia District Attorney's Office has been operating a legal counseling service at three police detective division stationhouses for the dual purpose of providing legal advice on arrest, search and seizure procedures and screening out poor-quality cases. To provide this service, an assistant district attorney is available around-the-clock at each stationhouse to review all criminal matters arising within the district. He approves, modifies or rejects charges contemplated against an individual by the police. His review is required before a search warrant is issued, and he supervises line-ups and records confessions of defendants. As of December 31, 1972, assistants had reviewed 13,886 cases involving 19,017 individuals. They rejected prosecution in 4,602 cases that involved 7,834 individuals. These assistants also were called on for other legal advice 724 times and either drafted or approved 2,349 search warrants.

An independent evaluation of the Legal Counseling Project by the Evaluation and Research Unit of the Philadelphia Regional Planning Council of the Governor's Justice Commission (State Block Grant Agency) showed that cases originating from the districts in the project exhibited a higher conviction rate, lower dismissal rate and less suppression of evidence. Given these positive results, it would appear desirable to expand legal counseling service to all detective divisions (nine in number). However, there are a number of impediments to such expansion to be overcome:

- . It is relatively expensive to provide full-time on-site counseling service; it costs about \$125,000 per year per site.
- . It is difficult to recruit assistant district attorneys for permanent assignment to a stationhouse.
- . The assistant district attorney's time is sometimes underutilized at the stationhouse.

3. POTENTIAL SOLUTION

One solution to these impediments is to use two-way interactive television to permit legal counseling service to be delivered from a central location, for example City Hall, where the District Attorney's main operations are located. Assistant district attorneys could still be assigned to police stationhouses during high activity periods, but at other times counseling service would be provided by a central group of assistant district attorneys to all divisions over the two-way television net.

4. ADVANTAGES OF CCTV

1. CCTV allows face-to-face communication between police officers and assistant district attorneys. Such communication is essential to maintaining a harmonious and cooperative working relationship between the two groups.

2. CCTV allows face-to-face communication between defendants and witnesses on the one hand and assistant district attorneys on the other. This facilitates the assistant's understanding of the facts of the case (testimony) and his determination of witness credibility.

3. CCTV lets the assistant view the physical evidence.

4. CCTV has resolution great enough for an assistant to be able to read any documents that may be involved. (A telecopying device could be used in cases where documents had to be passed from the assistant to the stationhouse and vice-versa.)

5. CCTV allows an assistant to observe line-ups and the taking of statements to ensure adherence to constitutional protections.

6. Training programs for police officers can be conducted over CCTV. Assistants could instruct large classes of officers in relevant areas of criminal law and keep them abreast of court decisions. The effectiveness of CCTV as a substitute for lecture classes has been demonstrated on many campuses.

5. ALTERNATIVES TO CCTV

Two alternatives to CCTV are regular telephone service and Bell Picturephone. Regular telephone service severely compromises advantages 1, 2 and 5, above, and eliminates 3 and 4.

To explore the feasibility of using Bell Picturephone, in December, 1972, one of the co-authors of this paper visited the Administrator of the Cook County (Illinois) Circuit Court and the Research and Development Unit of the Chicago Police Department. These agencies jointly sponsor a demonstration project in which preliminary arraignments (initial judicial appearance with consideration of bail) are conducted over Picturephone. The co-author observed a demonstration of the hook-up at each of its two terminals. One terminal is located in the bail courtroom in Police Headquarters, the other is in the lock-ups of the 18th District Stationhouse.

As means of delivering legal counseling service to police stationhouses, three drawbacks to Picturephone are evident at this time:

1. Sharing the use of the Police Department's point-to-point cable CCTV network will be more economical than leasing Picturephone service, based on the following analysis.

- The purchase cost of two-way CCTV transceiver terminal equipment to perform the D.A. functions at each stationhouse is estimated at \$20,000. Amortizing this cost over five years and adding the D.A.'s pro rata share of network operating cost will place the annual communicating service cost per stationhouse in the neighborhood of \$8,444, as derived from the following calculations:

Estimated installation cost of 30 two-way channels for cable CCTV net linking nine locations and police headquarters	\$ 3,000,000
Annual amortization cost 20 years	150,000
Annual net service cost	<u>150,000</u>
Total Annual network operating cost	300,000

Annual operating cost per channel	\$10,000
Pro rata cost to D.A.'s Office for the use of four channels (shared by nine stationhouses)	40,000
Annual communicating charge to D.A.'s Office per stationhouse	4,444
Annual terminal equipment cost (\$20,000 amortized over five years)	<u>4,000</u>
Total annual operating cost per stationhouse	\$ 8,444

Each stationhouse handles an average of 5,000 arrests per year, and each arrest is to be reviewed by an Assistant District Attorney before formal charges are either filed or dropped. Each review requires about 5 to 15 minutes of time. If one assumes for Picturephone service a cost of \$1.75 per call for each arrest review, the annual charge will be \$1.75 x 5,000 or \$8,750, slightly exceeding the \$8,444 estimate derived for shared use of the cable CCTV network. Should picturephone service charge be higher than \$1.75 per call, cable CCTV becomes more attractive, from the viewpoint of the D.A.'s Office as a user shopping for wide-band audio/video communication service.

2. Even more significant than the foregoing economic consideration is the fact that Picturephone service is not available in Philadelphia at the present time. This fact alone rules out the use of Picturephone as an alternative, at least for the near term.

3. Another drawback noted while observing the demonstration at Chicago is the lower resolution of Picturephone compared to that of the Philadelphia cable CCTV. The Picturephone resolution is not sufficient to permit viewing and reading handwritten or typewritten documents. Therefore, it has some limitation in respect to Advantage 4. It is reported, however, that the set being used in Cook County has only one lens, and there is an adapter kit which permits magnification of a portion of an 8½ x 11 sheet. Should this kit be available commercially, it will compensate for the low resolution problem noted.

6. THE PHILADELPHIA POLICE CABLE NET

In pursuing the CCTV idea with other agencies, it was determined that the Police Department is planning a modern multi-purpose, two-way audio/video communication net linking the Department Headquarters with all division stationhouses and selected special units. The current Police Department plan is to complete the installation of the first phase network (five divisions) by December, 1973. It will be an underground cable net with one trunk serving the southern part of the city and the second serving the northern part, allowing point-to-point connections and shared use of channels.

The Police Department already envisions an extensive set of applications for this broadband communication. These applications include:

- . Decentralized booking, Release-On-Recognizance interview and arraignment
- . Remote viewing of line-up
- . High-speed digital communication with computer information systems
- . Surveillance of high-crime areas
- . Transmission links for burglar and other alarms

It seems logical to add legal counseling service to the list and to use the network to demonstrate and evaluate whether two-way interactive television offers a cost-effective means of delivering legal counseling service.

7. OPERATING PLAN

Currently a staff of 16 assistant district attorneys, headed by a division chief and organized into teams, support three detective divisions. The project plan calls for extending services to three additional divisions with the aid of a two-way interactive television and with a minimal increase in staff. If service to these three divisions were added by extending the existing design, three new teams of 16 members total would have to be recruited and hired.

The project will progress in three phases:

- . Preparatory Phase
- . Transitional Phase
- . Operation Evaluation Phase

In the Preparatory Phase, three more assistants will be required. Over a three to six-month period prior to the operational date of the police cable net, these assistants will start providing part-time counseling service to the North, East and Central Detective Divisions, which are not currently receiving such service, but which will be tied into the cable net and thereby become eligible for CCTV counseling service. Past experience has shown that the establishment of a close working relationship and a mutual understanding of the respective authority and responsibility of assistants and detectives are essential to the success of legal counseling services. It will be important to accomplish both of these prior to the introduction of CCTV legal counseling service in these divisions.

The Transitional Phase begins when the cable net starts operation; assistants presently providing on-site counseling to the Narcotics and the North-Central Divisions will become part of the CCTV counseling group which services the five detective divisions tied to the CCTV cable net.

During the Operational Evaluation Phase, beginning perhaps three months after the start of the Transitional Phase, around-the-clock CCTV counseling service will be delivered from a central video communication center located in the City Hall Building. Each detective division will be linked to City Hall by way of a separate two-way television channel. The counseling team will include one, two or three assistants depending on forecasted workload.

Although the objectives of this CCTV Counseling Project are to demonstrate and evaluate whether CCTV is a viable and cost-effective alternative to on-site counseling, the project will also measure the impact of combining CCTV with part-time, on-site service. For example,

assistants may be present at the stationhouses during peak arrest periods such as weekend evenings, while at other times CCTV will be the primary means of providing service with special arrangements for emergency on-call service. The counseling design is summarized in Table I. The first two sites will permit the CCTV project to measure the potential negative impact of partial withdrawal and complete withdrawal of on-site service, and replacement with CCTV service, in terms of changes in "bad-case" rejection rate and "accepted-case" conviction rate. Sites 3, 4 and 5 will allow a determination of whether mixed modes of service or full reliance on CCTV will provide the most cost-effective method of operation for divisions that are not presently supported by the legal counseling program. Site 6 will continue to receive full-time on-site service, as the West Division will not be connected into the Phase 1 Police Cable Television net. Site 6 will serve as an experimental control.

TABLE I
SERVICE SCHEDULE

<u>Detective Division</u>	<u>Current On-Site Service</u>	<u>Under CCTV Project</u>	
		<u>On-Site Service</u>	<u>CCTV Service</u>
1. Narcotic	Yes	Part-Time	Part-Time
2. North-Central	Yes		Full-Time
3. East	No	Part-Time	Part-Time
4. North	No		Full-Time
5. Central	No	On-Call	Full-Time
6. West	Yes	Full-Time	

8. PROJECT EVALUATION

Project evaluation will focus on making two determinations:

. Whether the substitution of CCTV counseling for on-site assistants will significantly reduce "bad-case" rejection rate and "accepted-case" conviction rate in the Narcotic and North-Central Divisions.

. Whether CCTV counseling service can be introduced into divisions not presently receiving any counseling service to produce improvement in conviction rates such as the other two divisions experienced when the on-site legal counseling program was instituted in Philadelphia.

Conclusions on the relative effectiveness of each delivery method will be based on:

. For each division, a comparison of rejection rates and conviction rates derived before and after the introduction of CCTV counseling service. It will be important to ascertain that crime incident patterns have not changed significantly during the evaluation period. If changes are detected, their effect on project performance data should be analyzed and accounted for.

. A comparison of rejection rates and conviction rates between divisions receiving different mixes of services, i.e., on-site, on-site/CCTV, CCTV only.

It will be necessary to start assembling arrest, rejection and conviction data associated with each division six to nine months prior to the introduction of CCTV service. The Police Department and the court computerized information systems, and the data being collected by the District Attorney's Legal Counseling Division, will provide the data source. The service of an operations analyst and programming support will be required to identify and prepare statistical tools and computer programs for capturing, compiling, analyzing and reporting project data throughout the life of the project.

Project results will be monitored continually and affirmative actions will be taken to correct immediately any deficiencies discovered in the design.

9. ESTIMATED RESOURCE REQUIREMENTS

Time

It will take 20 months to complete this three-phase project, allowing:

- . 5 months for the Preparatory Phase
- . 3 months for the Transitional Phase
- . 12 months for Operational Evaluation Phase

Because of the time delays in the judicial process, sufficient time must be allowed for the cases screened by the project to reach the final disposition stage. As disposition data are important to determining the effectiveness of interactive television counseling service, the required lead time to obtain this data is taken into consideration in establishing the project schedule.

Personnel

- . Assistant District Attorneys, 60 man-months
- . Operations Analysts, 20 man-months
- . Programming Support, 12 man-months

Equipment

- . A CCTV communication center in City Hall
- . Terminal equipment at 5 detective divisions and at the Police Administration Building
- . Telecopying equipment

Howard W. Williams
for Warren S. L. Moy

END