

U.S. Department of Justice  
Office of Justice Programs  
*Bureau of Justice Assistance*



# INDIGENT DEFENSE AND TECHNOLOGY: A PROGRESS REPORT

**BJA** Bureau of Justice Assistance  
Monograph

INDIGENT DEFENSE SERIES

**U.S. Department of Justice  
Office of Justice Programs**  
810 Seventh Street NW.  
Washington, DC 20531

**Janet Reno**  
*Attorney General*

**Daniel Marcus**  
*Acting Associate Attorney General*

**Laurie Robinson**  
*Assistant Attorney General*

**Noël Brennan**  
*Deputy Assistant Attorney General*

**Nancy E. Gist**  
*Director, Bureau of Justice Assistance*

---

**Office of Justice Programs**  
**World Wide Web Home Page**  
[www.ojp.usdoj.gov](http://www.ojp.usdoj.gov)

---

**Bureau of Justice Assistance**  
**World Wide Web Home Page**  
[www.ojp.usdoj.gov/BJA](http://www.ojp.usdoj.gov/BJA)

---

For grant and funding information contact  
**U.S. Department of Justice Response Center**  
1-800-421-6770

---

This document was prepared by The Spangenberg Group for the Bureau of Justice Assistance, Office of Justice Programs, U.S. Department of Justice. The opinions, findings, and conclusions or recommendations expressed in this document are those of the authors and do not necessarily represent the official position or policies of the U.S. Department of Justice.

The Bureau of Justice Assistance is a component of the Office of Justice Programs, which also includes the Bureau of Justice Statistics, the National Institute of Justice, the Office of Juvenile Justice and Delinquency Prevention, and the Office for Victims of Crime.



# **INDIGENT DEFENSE AND TECHNOLOGY: A PROGRESS REPORT**

November 1999

NCJ 179003

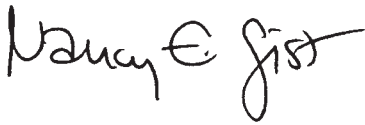
Prepared by The Spangenberg Group  
Robert L. Spangenberg, Marea L. Beeman, David J. Carroll,  
David Freedman, Evelyn Pan, David J. Newhouse, Dorothy Chan

# From the Director

---

Too often, citizens and public officials do not acknowledge that adequately supporting indigent defenders is critical to preserving the constitutional rights of individuals accused of crimes. To function properly, the criminal justice system needs all of its components—prosecution, adjudication, corrections, and defense—operating effectively.

One important way we can bolster indigent defense in this country is by educating criminal justice practitioners, elected officials, and the public about the challenges facing the indigent defense community. This BJA report series addresses key issues that attorneys and managers in indigent defense systems struggle with every day. It is our hope that the information and recommendations provided here serve as a valuable resource for all of us working to improve the justice system.



Nancy E. Jist

# Contents

---

I. Introduction . . . . .	1
II. Online Technology: A Powerful New Tool . . . . .	3
III. Managing Case-Specific Information . . . . .	5
IV. In the Office: Technology's Benefits and Burdens . . . . .	7
V. Case Tracking. . . . .	9
VI. Systemwide Information Integration . . . . .	11
VII. Conclusion . . . . .	15
VIII. Appendix: Overview of Survey Results . . . . .	17
IX. For More Information. . . . .	29

# I. Introduction

---

Just a few years ago, an attorney in Rhode Island's Public Defender Office, like attorneys in other public defender offices around the country, spent much of her time completing routine, labor-intensive tasks. If a motion was due the next day, she would likely write it in longhand for a secretary to type. She had to call colleagues to find out what had happened on a similar motion a few weeks earlier before the same judge. And she had to take time out of her day to sit in the state supreme court's law library to Shepardize the cases she had cited in the motion.

Today in Rhode Island, the agencies that make up that state's criminal justice system have created a comprehensive, statewide information system, and this technology has given public defenders unprecedented ease of access to the information they need. Now, that same attorney can use her personal computer to search quickly through an online file of motions that attorneys in her office have filed in recent weeks. Instead

of spending hours writing out the motion, she can electronically edit one of the samples, inserting the facts of her case. She can use her office's shared CD-ROM to Shepardize the cases cited in her motion without leaving her office. For each task, technology has brought the information she needs to her desktop; she no longer wastes valuable time seeking it out.

This Bureau of Justice Assistance (BJA) special report looks at how technology is changing the way attorneys and staff work in public defender offices. Is technology improving case processing efficiency and the quality of representation of indigent defendants? Or, are the equipment, training, and maintenance costs of new information systems draining resources from public defender offices without significantly benefiting either attorneys or the clients they represent?

It is clear that in public defender offices like Rhode Island's, technology is dramatically changing how

## *About the Authors of This Progress Report*

This progress report was researched and written by the staff of The Spangenberg Group, a nationally recognized criminal justice research and consulting firm working to improve the delivery of indigent defense services. Located in West Newton, Massachusetts, The Spangenberg Group has provided research and technical assistance for justice organizations in every state in the nation.

public defenders and support staff work. Technology is improving client access to attorneys and attorney access to information. It is improving case information management, attorneys' presentation of evidence in court, and attorneys' access to routine pleadings. Little is known, however, about how information integration is affecting the broader issues of case processing and client representation.

Public defenders' ability to use technology effectively is being hampered by disparities in resources and technological expertise. Efforts to integrate information in criminal justice agencies are making progress in a few justice systems, but this kind of information sharing is not yet readily available to public defenders in most areas of the country. Further, many public defender offices are struggling to train staff to use newly acquired technological equipment and information systems. In these offices, the acquisition of sophisticated technology is not saving attorneys time and resources because the technology is either not used effectively or not used at all.

The conclusions of this report are drawn primarily from a survey of public defender offices throughout the United States and the expe-

riences of public defenders in selected jurisdictions. The survey examined the availability and use of a wide range of technology, from fax machines, photographic equipment, and multimedia evidentiary presentation tools to systemwide integrated information systems. Overwhelmingly, respondents felt that in the past 5 years technology has improved the quality of representation their office provides. Many respondents also reported, however, that they are not fully using available technology because their offices do not provide adequate training or do not provide access to new information systems after they are implemented.

This report does not address the use of technology by assigned counsel or contract programs. The survey on which many of this report's conclusions are based was not administered to assigned counsel or contract public defender programs due to cost and time restrictions. Further, assigned counsel and contract programs do not participate formally in most local justice systems' integrated information systems. It is difficult, therefore, to determine the extent to which assigned counsel and attorneys working for contract programs have benefited from recent technological innovations.

## II. Online Technology: A Powerful New Tool

---

Perhaps the most important technological advance for public defenders in the past decade has been the development of desktop computer technology. New computer network and Internet tools are helping public defenders conduct legal research and write pleadings and briefs with a speed and ease unimaginable a short time ago. In Michigan, criminal defense attorneys in the State Appellate Defender Office (SADO) use new computer technology to quickly access information that in the past was either difficult to obtain or unavailable.

“Our goal was to make choices that improved the quality and reduced the time, cost, or the drudgery of everyone’s tasks,” said James Neuhard, SADO’s Executive Director. “The choice ought not be just for speed but for the value added. The payoff of 17 years of work to create an integrated system has been reductions in the ratio of support staff to attorneys, reductions in the cost of production, dramatic reductions in the turnaround time from drafts to filing in court, and reductions in the time it takes our attorneys to access information.”

Since 1972, SADO has served as a depository of briefs and pleadings filed by attorneys in various cases. Attorneys use this brief

bank as a library of case-law documents that they can review and copy. Brief banks save attorneys enormous amounts of time by eliminating the need to re-create, each time, the basic information common to every argument and citation.

SADO’s clearinghouse has evolved into a Web site that includes two large, full-text, searchable databases. The first contains all pleadings, manuals, newsletters, and other documents prepared or collected by SADO, and the second contains messages exchanged between registered attorneys on matters of criminal practice and procedure. The messages are exchanged in the SADO Forum, a 500-member virtual community of practicing criminal defense attorneys across the state. In addition, SADO prepares summaries for all published criminal decisions and selected unpublished criminal decisions.

For SADO and many other defender offices, the upgrade in technology from providing legal assistance by phone to providing it electronically via a Web site has cut costs significantly. For users of the system, the upgrade has enhanced the speed and efficiency with which they can obtain crucial information.



## *Public Defenders in the United States*

Three models in the United States provide representation to those accused of crimes and unable to afford counsel: public defender, assigned counsel, and contract.

- In the **public defender model**, representation is provided by a public or private nonprofit organization with full- or part-time staff attorneys and support personnel, including investigators, paralegals, social workers, and secretaries.
- In the **assigned counsel model**, a jurisdiction assigns indigent criminal cases to private attorneys on a systematic or an ad hoc basis.
- In the **contract model**, a jurisdiction enters into a contract with an attorney, a group of attorneys, a bar association, or a private nonprofit organization to provide representation in some or all indigent defendant cases.

From these three models, states have developed their indigent defense delivery systems. Many states employ some combination of the models. For example, even in states with a statewide public defender system, private attorneys are appointed to represent conflict cases and, in some instances, to alleviate excessive public defender caseloads. In other states, a different model is used in each county: a public defender office in one, assigned counsel in another, and contract counsel in a third.

The most recent comprehensive national survey of indigent defense programs, conducted in 1986, reported that assigned counsel programs operate in 52 percent of the nation's counties, public defender programs operate in 37 percent, and contract systems operate in 11 percent.\* Although these data have not been updated, it is widely believed that significantly more counties now use public defender programs and contract counsel as their primary indigent defense delivery systems.

Public defenders are most commonly found in urban areas, where the number of criminal case filings is high and economies of scale make staffed programs a more cost-effective and efficient way of representing large numbers of indigent defendants. In the past decade, a growing number of counties have opened "second" public defender offices, or conflict offices, to handle a portion of the cases in which the primary public defender has a conflict of interest.

Public defender programs are less common in rural areas, but some small, rural jurisdictions are served by part-time public defenders or regional public defenders. In these areas, public defenders, like judges, often ride circuit, traveling to meet with clients and appear in court in multiple counties.

---

\* *Criminal Defense for the Poor, 1986*. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, September 1988. Research conducted by The Spangenberg Group.

# III. Managing Case-Specific Information

---

A second area in which technology has improved litigation is the management of case-related information. Pioneering jurisdictions such as the one profiled below are using advancements in multimedia technology to create case management systems that allow attorneys to retrieve various case-related documents and items of evidence from a single virtual file.

One of the most innovative recent applications of technology to manage case information was developed in Knoxville, Tennessee, in 1997. That year, Mark Stephens, the Knoxville District Public Defender, was working on a robbery case that had produced a great deal of evidence, including 911 tapes and transcripts, FBI composites, surveillance and evidentiary photographs, time-lapse crime scene videos, and police reports. Concerned about keeping all of these items organized and accessible, Stephens met with his office's information technology specialist, who was developing a case management system. Their conversations led to the realization that attorneys could use the technologies being developed for the case management system to manage case-related multimedia. They called their new application Virtual Casefile.

Virtual Casefile digitizes and stores video- and audiotapes, photographs, and documents on a powerful workstation. These data are categorized, cross-referenced, and integrated with a graphical user interface. The data are then stored permanently on a recordable CD-ROM. The information is organized in much the same way an attorney might organize a case file in banker's boxes. With equal ease, the attorney can read the original police report or search warrant, view a lineup or photo of physical evidence, listen to a recording of a 911 call, navigate a virtual reality crime scene, or watch a clip from the local news using the Virtual Casefile's simple point-and-click interface.

Virtual Casefile is extremely helpful to attorneys handling first-degree murder or death penalty cases, which typically involve an overwhelming amount of evidence and case information in multiple formats. Attorneys working on the case can access information at any time—from an office, at the courthouse, or at home—without wasting time tracking down videotapes, televisions, VCRs, audiotapes, and tape players. The CD-ROM itself requires little storage space, and it can be copied and distributed to every defense attorney working on the case.

In preparing for the robbery case, Stephens brought a laptop and his Virtual Casefile CD-ROM to the jail where his client was being detained before trial. He reviewed the evidence with his client, anticipating what a prosecutor might present in court. They reviewed the time-lapse video evidence together frame-by-frame and examined the

police lineups. They compared the 911 description of the perpetrator with actual photos of the defendant's clothing seized by police. Virtual Casefile gave Stephens' client a clear picture of the evidence he would face in court, and their discussion was made more meaningful by their ability to review the evidence together.

# IV. In the Office: Technology's Benefits and Burdens

---

Advancements in technology that have streamlined the traditional tasks of lawyering are also changing office culture and structure. Because technology allows attorneys to do more of their own research and preparation of materials, many offices have cut costs by shifting resources from support staff to desktop information systems.

Acquiring technology, however, carries risks. New information systems bring with them a need for training and expertise that, in a busy public defender office, can become a serious impediment to the system's day-to-day use. According to the survey conducted for this report, defender offices that form technology committees and involve senior managers as part of the decisionmaking process have the best means to evaluate both the need for new equipment and the capability to provide adequate training. The offices with the least effective transitions to new technology vest this authority in single individuals who do not have the capacity to perform evaluations of need and capability.

## *Disparities Among Public Defender Offices*

All of the offices in the survey reported using some form of recent technology, but they revealed wide

disparities in how much they invest in technology and the extent to which technology is used in their day-to-day operations. The disparities occur even in public defender offices within a single state, especially in jurisdictions in which the provision of indigent defense is a county responsibility.

Wide disparities between defender offices were reported in the following areas: (1) knowledge of computer technology by management; (2) ability to build support to secure general fund appropriations or alternative funding sources for acquiring new technology and training staff; (3) staff capabilities to use technology and office capabilities to train staff and provide technical support; and (4) established contacts with technology specialists in other criminal justice agencies.

Two respondents to the survey, public defender offices from the same state, represent the extremes of this disparity. One office has no automated case management system and still manually tracks cases. The other is implementing a fully automated case-tracking system that allows its staff to check individual case event history and calendaring; check open or pending cases by case type, attorney, date, or court; and run assignment

and disposition reports by a variety of criteria. The system also generates reports during the appropriations process. It is rated excellent by the staff in processing speed, user-friendliness, and reliability.

Both offices reported that their attorneys and support staff can access the Internet, other online research services, and CD-ROM case law databases and digests. Yet in the first office there is only one computer for every seven

attorneys and only three for every four support staff. In the second, every attorney and support staff person has his or her own computer.

When asked to describe the effect technology has had on the quality of representation over the past 5 years, the office with substantially more technology reported major improvements, whereas the other reported little or no improvement due to lack of training, technical support, and funding.

# V. Case Tracking

---

Technology's growing role in improving defendant representation is evident in the courtroom case-tracking system used by the Legal Aid Society in the Bronx, New York. Most mornings in criminal court mean heavy dockets and busy schedules for Legal Aid attorneys in New York City. They must juggle the responsibilities of interviewing defendants in the holding cells, calming concerned family members, checking on defendants' prior criminal histories, completing court paperwork, and consulting with colleagues. Often, they are out of the courtroom when their next case is called.

To bring order to the flurry of activity that surrounds large urban arraignment docket calls, the Legal Aid Society arranged for computers with links to its case-tracking system to be installed in four Bronx arraignment courts. The computer stations are staffed by Legal Aid arraignment clerks who enter court information into the case-tracking system after arraignment. The clerks are stationed at desks inside the well of the court, allowing them to hear the proceedings and update records almost instantaneously. In this way, the clerks catch data that might normally go unrecorded because they are missing from the court paperwork or because the attorney's

busy schedule does not allow him or her to fill out paperwork completely or promptly.

Attorneys leave their case files with the clerks and pursue other responsibilities while the case is updated in the system. At the end of the day, arraignment clerks generate an "arraignment summary report" that lists all the cases entered that day. This report is matched against the daily calendar and the files to ensure that all defendants represented by Legal Aid attorneys are duly recorded.

Having a constant Legal Aid presence in the courtrooms also benefits the courts. Judges and court clerks turn to Legal Aid staff to keep the dockets moving. Legal Aid clerks understand the scheduling needs of each attorney and can suggest how best to order the docket to limit the time court personnel are left waiting. And Legal Aid staff know how to track down their attorneys before the next case is called.

An overwhelming majority of public defender offices report using some form of case-tracking software to input and access information about individual cases and to prepare and run statistical reports on case trends. Case-tracking systems are powerful tools to identify

trends in case processing and to look at what is causing those trends. Using these systems, public defender managers can determine much more accurately whether case processing problems are emanating from outside the office (for example, from the practices of judges or prosecutors), within the office (inefficient attorneys or case-flow glitches), or are specific to a particular type of case.

Case-tracking systems are also saving public defender offices money. A good example of this is in West Virginia, where all funds for indigent defense are provided through the state's general fund. Public Defender Services (PDS) administers, coordinates, and evaluates all local indigent defense programs in the state. Currently, 23 of West Virginia's 55 counties are served by 15 public defender corporations. The remaining 32 counties rely solely on assigned counsel to provide representation to indigent defendants. Approximately 55 percent of indigent defense in the state is provided by public defenders, and 45 percent is provided by private counsel.

PDS is responsible for processing assigned counsel vouchers for the state as well as compiling caseload

data for the public defender corporations. In October 1998, PDS installed a new assigned counsel voucher processing system. Before the conversion, PDS operated on a DOS-based computer system that required substantial personnel hours to enter voucher information. Because of the large number of firms and private attorneys that accept assigned counsel cases in West Virginia (approximately 800 payees), it took many personnel hours to ensure that no duplicate vouchers were submitted, processed, or paid. When counsel submitted multiple billings over several months, duplicate payments often were not caught until months after payment.

The new PDS system operates in a Windows environment that includes pulldown menus of attorneys, charges, case types, judges, circuits, and counties from which the user can select the desired name or phrase instead of having to key it in. The lists save a substantial amount of data-entry time by eliminating key strokes. What is more important, the system eliminates wasted time processing duplicate payments. Since its installation, the system has flagged voucher errors worth more than \$100,000.

# VI. Systemwide Information Integration

---

The integrated criminal justice information systems now being developed and implemented in local and regional justice systems across the country are improving the efficiency and accuracy of court functions by reducing duplicate data entry points. They are also, however, raising concerns for public defenders about protection of the proprietary and sensitive information they need to advocate vigorously for their clients. Integrated systems that preserve the privacy of this information appear to enhance the performance of defender offices and raise the quality of representation. The two jurisdictions discussed below—Marin County, California, and Orange County, Florida—have achieved this important balance.

## *Marin County, California*

Officials in Marin County, California, view information technology as a part of the overall county infrastructure. All county agencies are equipped with current technology for their daily operations. County agencies' information technology needs, including hardware, software, and technical assistance, are supported by the Marin County Information Services and Technology Department (IST). This integrated approach introduced technological parity among county agencies, increased efficiency, and cut costs for the county.

IST has its own budget and is responsible for supplying and maintaining information technology services in the county. To allow county agencies to communicate with one another, IST wired them to the county's mainframe computer through a wide area network (WAN). The public defender office is networked via a local area network (LAN) to the county's WAN and to the Internet. IST provides shared resources, such as e-mail, and serves as a help desk to the public defender office.

In addition, Marin County's legal offices, which include the county counsel, public defender, and district attorney's offices, share a license for Westlaw legal research software. The county supported this approach not only because it cut costs, but also because it gave more attorneys and support staff access to electronic legal research. The public defender office supplements Westlaw with a single-user license for the Lexis-Nexis research system.

A second integral part of Marin's countywide infrastructure is the Criminal Justice Information System (CJIS). CJIS is an integrated system that links the police, district attorney, courts, public defender office, and probation department. With the system, attorneys in the public defender office can access court records,



calendaring information, law enforcement booking data, charging data, court data, and probation and civil case data.

The majority of public defender programs surveyed reported that their jurisdiction has some sort of shared, integrated criminal justice information system. Some jurisdictions share information on a statewide basis, some do so on a countywide basis, and a few share information by judicial district. Some jurisdictions have integrated law enforcement information but deny public defender offices access to that information.

In Marin County, access to information varies greatly from jurisdiction to jurisdiction. Public defender offices reported having access to defendant arrest records in about half of the integrated systems, and slightly more than half of the systems provide defender offices access to defendants' biographical information. Nearly all offices reported having access to court docket and calendaring information, more than half have access to jail rosters, a third have access to department of motor vehicles information, and a few systems share defendant tax, property, and asset information.

### *Orange County, Florida*

In the early 1990s, the public defender and state's attorney offices in Orange County, Florida, agreed that they needed an integrated case management system.

The two agencies persuaded the Orange County Board of Commissioners that such a system would cut costs significantly by moving cases through the criminal justice system more efficiently. The system became operational in 1992.

Each day, the Orange County sheriff's, state's attorney, and public defender offices enter information into an integrated database that tracks docket numbers, basic client information, affidavits, attorney assignments, event history and calendaring information, communications, criminal histories, discovery and witness information, subpoenas, and sentencing information. The system is also used to generate statistical reports such as caseload information.

The state's attorney and public defender offices have avoided logistical concerns over security or mishandling of proprietary information by developing strict protocols for access to information that is not public. The public defender office exercises discretion in deciding who may access certain contents of the database. Private notes placed on the system by public defenders, for example, are inaccessible to prosecutors and other attorneys.

"Our system is an outstanding example of cooperation between opposing agencies," said Joseph DuRocher, Public Defender for the Ninth Judicial Circuit in Florida.

“Our success in securing county support can be attributed to the time and effort the two agencies spent working together to educate the commissioners.”

Orange County’s system has cut costs. First, the integrated database has eliminated the need to enter the same information into separate prosecution and defense databases, reducing the need for additional staff and the potential for data entry errors. Second,

because the data are accessible to state’s attorneys and public defenders early in the life of a case, meaningful work can begin earlier, leading to quicker resolution of cases and decreasing the time defendants must be detained before trial. Finally, the database helps defenders and prosecutors move cases through the justice system more efficiently by informing them of new events or the availability of discovery in a timely manner.

# VII. Conclusion

---

Public defender organizations across the country constantly face difficult decisions about how to use limited budget resources, often placing human and technological resource needs in competition. Advances in technology are altering how indigent defense services are delivered, changing national perceptions of what constitutes an efficiently managed public defender office, and making decisions about the allocation of resources even more challenging. In the years to come, the pace of technological change may make such choices vital to the ability of public defender organizations to improve quality indigent defense services.

The experiences of the public defender offices studied for this report suggest that the most effective users of technology do the following:

- Train all of their staff to use new technology.
- Employ an information specialist to manage information systems and to help evaluate rapid changes in technology.
- Network with other public defenders and other information specialists to avoid needlessly duplicating another office's advancements.

- Evaluate the current and future needs of the office with a committee made up of representatives from every level of the organization.
- Build support from local elected officials and within the local criminal justice system to secure general fund appropriations as well as funds from new sources.

Local justice systems work most efficiently when the agencies that compose them operate with parity in staffing and technological resources. Many public defenders responding to this study felt that their office's technological capabilities lag behind those of the other components in the criminal justice system. Before the gap between defenders' technological capabilities and those of prosecutors, courts, police, probation, and corrections widens, state and local jurisdictions should recommit themselves to the ideals of balanced and adequate criminal justice system funding, and they should provide public defenders with the technological tools necessary to allow them to better serve the people they are asked to defend.

As the experiences of the public defenders in this report make clear, building specific systems for public

defenders to share information with other criminal justice agencies makes sense. When staff are adequately trained and information is shared within a local justice system, technology improves defenders' representation of clients, makes offices more efficient, and enhances the capability of public defenders to evaluate their work.

Putting these impressive advances to work in every public

defender office, however, remains an elusive goal. Resources for acquiring technology and providing training for staff still are not available to many offices. Moreover, some offices continue to waste the funds they do have reinventing systems that already exist. To bring technology's benefits to the work of more public defenders, jurisdictions must redouble their efforts to share their successes and failures with one another.

# VIII. Appendix: Overview of Survey Results

The survey conducted for this report examined the use of a wide range of technology by public defender offices in the United States. It was conducted April 13–23, 1999, by the staff of The Spangenberg Group, a criminal justice research and consulting firm in West Newton, Massachusetts, that specializes in the study of indigent defense systems.

## *Part 1. Methodology*

The Spangenberg Group sent survey questionnaires to 115 public defender offices throughout the country to gather basic information about computerization, case management, and information access capabilities. The offices surveyed included all statewide trial and appellate defender offices, as well as selected public defender offices in counties and judicial districts of various populations and locations.<sup>1</sup>

In total, 52 (or 45 percent) of the 115 surveys were returned. Defender offices surveyed were grouped into six categories according to the size and scope of the client population they serve, and responses were grouped in these categories (table 1). The first category, “Statewide Public Defender

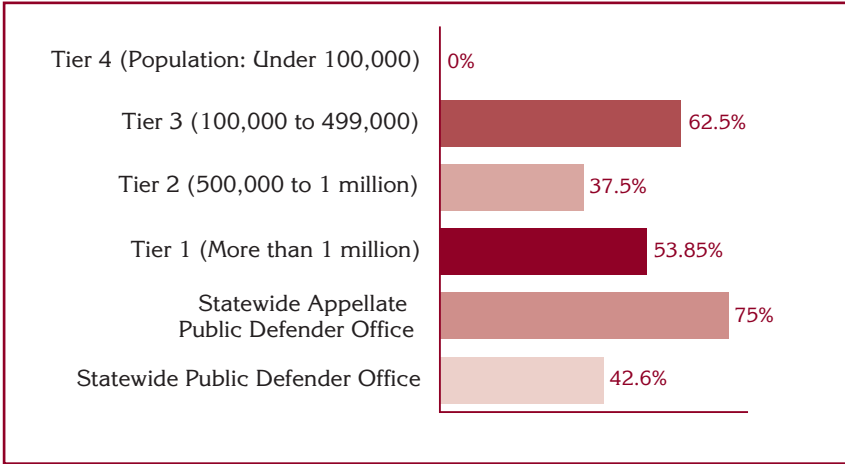
Office,” contains statewide programs that handle only trial representation or a mixture of both trial and appellate representation. On average, these offices have a staff of 266 employees, 52 percent of whom are attorneys. The second category, “Statewide Appellate Defender Offices,” contains statewide offices that handle only appellate representation. On average, these offices have a staff of 65 employees, 55 percent of whom are attorneys.

The other 37 respondents’ public defender programs were categorized into four tiers according to population. Table 1 displays the response rates and population criteria for each category. Tier 1 programs (those with a client population numbering more than 1 million), on average, consist of 256 employees, 59 percent of whom are attorneys. The average size of Tier 2 programs (those with a client population numbering between 500,000 and 1 million) is 75 employees, 62 percent of whom are attorneys. Tier 3 public defender programs (those with a client population numbering between 100,000 and 499,999) have an average staff of 34 employees, 61 percent of whom are attorneys.

---

<sup>1</sup> Because the survey respondents were not chosen statistically at random and represent only a small portion of the national indigent defense community, the survey results should be used for informational purposes only.

**Table 1**  
**Survey Response Rates by Program Classification**



Response rates for each category are presented in table 1. No survey responses were received from the Tier 4 programs (those with a client population numbering less than 100,000).

Staff of The Spangenberg Group conducted a followup telephone survey of Tier 4 programs to determine why these programs did not respond. Of the 10 program directors who participated in the phone survey, 70 percent cited a lack of time due to their workload or part-time status. These programs were excluded from the survey analysis.

### ***Part 2. The Survey Instrument***

Survey respondents were asked to complete a 12-page questionnaire, divided into four parts. Part One sought basic information about the respondent's

office, including how much of the organization's most recent budget was allocated to technology issues. Part One also sought information about individuals within each defender office who are responsible for support and maintenance in the areas of case management, information integration, and litigation support.

Part Two focused exclusively on case management systems. Questions in this section sought information about how public defenders use case management systems in their daily activities and to what extent administrators use case management information to assist them in projecting and reviewing the organization's resource utilization.

Part Three surveyed ways in which information is shared among

components of a respondent's justice system. Part Four sought information about the ways in which public defenders are using technology for litigation support. This section collected information about the technologies available for investigative and evidentiary work, as well as emerging in-court uses of technology such as video conferencing and multimedia evidentiary presentation tools.

### ***Part 3. Survey Results: Technology Budgets, Staff, and Needs***

The survey asked defender offices to provide information about their overall budget and the portion of the budget dedicated to technology. On average, respondents' technology budgets make up 2.7 percent of their total budgets. Table 2 displays the average, median, and range of overall and technology budgets for public defender programs submitting information. Table 2 also calculates the percentage of the overall budget devoted to technology in each program category.

To ensure that the public defender technology budgets reported were not aberrations, the survey asked respondents to estimate the amount their programs spent annually on technology over the past 3 years. Table 3 displays this information for 39 of the 52 respondents.

Another measure of technology use surveyed for the report was whether public defender offices employ an individual to maintain the office's management information system (MIS). If an office answered yes, it was asked to specify whether the individual was a full-time or part-time staff member dedicated to management information systems, an outside consultant, or an existing staff member who divides his or her time between system upkeep and other duties.

The great majority of public defender offices surveyed (84.3 percent) employ an individual—whether a staff member or outside consultant—dedicated to maintaining management information systems (table 4). However, nearly half of the offices (47.1 percent) use an existing staff member who performs other duties.

Defender offices were asked to list their most pressing technological needs. Several themes emerged from the data received from the 48 respondents who answered the question. Many public defenders, especially those in statewide offices and statewide appellate offices, desire hardware upgrades to equip every staff member with a computer, to allow faster Internet processing, or to provide attorneys with laptop computers in the courtrooms. Several respondents reported needing hardware upgrades to ensure Y2K compliance or to match the courtroom presentation

capabilities of district attorneys in their jurisdiction. Those programs without good case-tracking systems tended to respond that poor data reporting was a problem in their offices and that more staff training was needed. Finally, many public defenders without integrated criminal justice systems reported that they needed better access to court data.

*Part 4. Survey Results: Use of Technology in Litigation Support, Case Tracking, and Information Integration Across Agencies*

**Litigation Support**

The survey asked public defender offices for information about how they use litigation support

**Table 2**  
Percentage of Total Annual Budget Devoted to Technology

I. Total Budget	# of Responses*	Average	Median	Range
Statewide	9	\$20,475,743	\$13,117,614	\$3,619,373–\$68,400,000
Statewide Appellate	5	\$5,527,908	\$4,500,000	\$830,344–\$11,000,000
Tier 1	18	\$19,556,243	\$8,050,000	\$665,406–\$94,600,000
Tier 2	6	\$5,055,002	\$4,840,000	\$3,461,434–\$7,027,000
Tier 3	10	\$2,162,714	\$1,616,268	\$830,344–\$11,000,000
II. Technology Budget	# of Responses*	Average	Median	Range
Statewide	8	\$807,272	\$318,400	\$8,000–\$2,370,000
Statewide Appellate	3	\$306,667	\$80,000	\$40,000–\$800,000
Tier 1	14	\$562,103	\$99,500	\$10,000–\$3,600,000
Tier 2	5	\$97,895	\$60,000	\$510–\$276,700
Tier 3	6	\$60,979	\$53,324	\$10,000–\$150,000
III. Percentage of Total Budget Devoted to Technology	# of Responses	Average	Median	Range
Statewide	8	3.1%	1.6%	0.08%–12.9%
Statewide Appellate	3	5.8%	1.8%	0.4%–9.6%
Tier 1	14	1.9%	1.5%	0.2%–6.1%
Tier 2	5	1.6%	1.8%	0.9%–5.0%
Tier 3	6	3.0%	7.3%	0.4%–9.6%

\*Number of responses for each question may not add up to 52 because not all respondents answered each survey question.



technologies. These technologies include investigative and evidentiary tools (still photography, video cameras, etc.), emerging in-court technology such as video conferencing and multimedia presentation equipment, as well as everyday office equipment such as fax machines, voice- and e-mail, and personal computers.

All 52 survey respondents reported using fax machines, and

nearly all reported using e-mail (94 percent) and the Internet (81 percent). A full 69 percent of offices use individual voice-mail accounts, and 33 percent have a general office voice-mail system.

Thirty-six (69 percent) of the offices that responded reported that they have a 1:1 attorney-to-computer ratio, and 10 (19 percent) reported a 2:1 ratio (table 5). Six offices (12 percent) reported a

**Table 3**  
Annual Technology Budgets Over 3 Years

	# of Responses	Average	Median	Range
Statewide	8	\$694,827	\$357,000	\$87,000– \$1,415,000
Statewide Appellate	4	\$615,000	\$192,500	\$75,000 –\$2,000,000
Tier 1	14	\$1,234,899	\$481,000	\$30,000– \$6,500,000
Tier 2	6	\$240,869	\$150,000	\$20,000– \$537,100
Tier 3	7	\$107,851	\$60,000	\$7,500– \$2,000,000

**Table 4**  
How Public Defenders Maintain Management Information Systems

	# of Responses*	No Oversight	Dedicated MIS Staff Person	Outside Consultant	Use Existing Staff With Other Duties
Statewide	9	--	44.4%	--	55.6%
Statewide Appellate	5	20.0%	20.0%	20.0%	40.0%
Tier 1	21	14.3%	38.1%	9.5%	38.1%
Tier 2	6	16.7%	16.7%	16.7%	50.0%
Tier 3	10	30.0%	--	--	60.0%
<b>Average</b>		<b>15.7%</b>	<b>29.4%</b>	<b>7.8%</b>	<b>47.1%</b>

\*Number of responses for each question may not add up to 52 because not all respondents answered each survey question.

**Table 5**  
**Ratio of Staff to Computers and Printers**

	Attorney:Computer				Support Staff:Computer			
	1:1 or Better	2:1	3:1	5:1 or Worse	1:1 or Better	2:1	5:1	8:1 or Worse
Statewide	56%	--	33%	11%	78%	11%	--	11%
Statewide Appellate	83%	17%	--	--	83%	17%	--	--
Tier 1	62%	33%	--	5%	81%	19%	--	--
Tier 2	67%	33%	--	--	100%	--	--	--
Tier 3	90%	--	10%	--	90%	10%	--	--
<b>Average</b>	<b>69%</b>	<b>19%</b>	<b>8%</b>	<b>4%</b>	<b>85%</b>	<b>13%</b>	<b>0%</b>	<b>2%</b>

3:1 ratio or worse. Support staff fared much better: 44 offices (85 percent) reported a 1:1 staff-to-computer ratio and 7 offices (13 percent) reported a 2:1 ratio.

Forty-five of the respondents (87 percent) reported having a traditional law library. In addition, 42 (81 percent) use an online legal research service, 40 (71 percent) have state laws on CD-ROM, and 29 (56 percent) have federal laws on CD-ROM (table 6).

Table 7 shows public defender use of in-court technologies. Table 8 presents data on defender offices' use of investigation technologies.

**Case Tracking**

Forty-four of the 52 defender offices responding to the survey reported that they use an automated case-tracking system. Only 11.5 percent of respondents reported that they rely solely on

a manual system. Four of the 21 offices in Tier 1, or those serving populations numbering more than 1 million, reported that they do not use an automated case-tracking system, the highest proportion of any category.

The survey also sought information on whether each office's attorneys have access to its case-tracking system (table 9). More than 90 percent of offices responding reported that they provide attorneys access, and 65 percent reported that they provide access from attorneys' desktop computers.

In addition, the survey asked the respondents to estimate how often attorneys consult information on the case management system. Table 10 shows that the majority of attorneys (76 percent) in the programs surveyed access information on a daily basis.

Survey participants were asked whether attorneys and support

**Table 6**  
Public Defender Office Research Capabilities

	Traditional Law Library	CD-ROM: State Law	CD-ROM: Federal Law	Online Services (Westlaw, Lexis-Nexus)	Internet
Statewide	78%	78%	33%	100%	78%
Statewide Appellate	83%	67%	50%	100%	83%
Tier 1	90%	62%	62%	76%	81%
Tier 2	100%	67%	33%	67%	83%
Tier 3	80%	90%	80%	70%	90%
<b>Average</b>	<b>87%</b>	<b>71%</b>	<b>56%</b>	<b>81%</b>	<b>83%</b>

**Table 7**  
Use of In-Court Technologies

	In-Court Computer Use			Video Arraignment	Electronic Filing Models	Demonstrative Tools		
	Electronic Research	Communication With Office	Case Tracking			Crime Scene	Video Playback	Overhead Projection
Statewide	33%	--	--	44%	22%	--	33%	44%
Statewide Appellate	33%	17%	--	17%	--	17%	50%	50%
Tier 1	19%	5%	5%	52%	5%	--	62%	48%
Tier 2	17%	33%	--	67%	--	--	67%	50%
Tier 3	30%	10%	10%	20%	20%	20%	50%	40%
<b>Average</b>	<b>25%</b>	<b>10%</b>	<b>6%</b>	<b>42%</b>	<b>10%</b>	<b>6%</b>	<b>54%</b>	<b>46%</b>

**Table 8**  
Use of Investigation or Evidentiary Technologies

	Cameras				Software		Other	
	Still	Video	Digital	3-D	Composite Sketching	Crime Scene Reconstruction	Tape Recorder	VCR Projection
Statewide	89%	89%	22%	--	--	--	100%	89%
Statewide Appellate	33%	33%	33%	--	--	--	33%	50%
Tier 1	100%	86%	19%	--	10%	14%	100%	100%
Tier 2	100%	83%	17%	--	--	--	100%	100%
Tier 3	90%	60%	10%	--	--	20%	80%	80%
<b>Average</b>	<b>88%</b>	<b>75%</b>	<b>19%</b>	<b>0%</b>	<b>4%</b>	<b>10%</b>	<b>88%</b>	<b>88%</b>

**Table 9**  
Attorney Access to Case Management Systems

	# of Responses*	No Access	Accessible From Attorneys' Desks	Accessible From Dedicated Office Terminal	Accessible From Other Source
Statewide	8	--	50.0%	37.5%	12.5%; System for attorneys to access from desktops in planning stages.
Statewide Appellate	5	--	80.0%	--	20%; System for attorneys to access from desktops only in some offices.
Tier 1	17	11.7%	58.8%	23.5%	5.9%; Answered Yes with no further clarification
Tier 2	6	16.7%	66.7%	16.7%	--
Tier 3	10	--	80.0%	10.0%	10%; Answered Yes with no further clarification
Average		6.5%	65.2%	19.6%	8.7%

\*Number of responses for each question may not add up to 52 because not all respondents answered each survey question.

**Table 10**  
Frequency Attorneys Consult Information on the Case Management System

	# of Responses*	Daily	2-3 Times/Week	1 Time/Week	2-3 Times/Month	1 Time/Month
Statewide	6	50%	--	16.7%	16.7%	16.7%
Statewide Appellate	3	67%	33.0%	--	--	--
Tier 1	13	77%	7.7%	7.7%	7.7%	--
Tier 2	5	80%	20.0%	--	--	--
Tier 3	7	100%	--	--	--	--
Average		76%	8.8%	5.9%	5.9%	2.9%

\*Number of responses for each question may not add up to 52 because not all respondents answered each survey question.

staff were trained to use the case management system. In 78 percent of the public defender programs that answered, both attorneys and support staff received training. Yet only 34 percent of respondents reported that their systems are being fully used. Respondents in programs serving populations numbering more than 1 million (Tier 1 programs) felt the least satisfaction with their systems (23.5 percent).

Next, defender offices were asked how their case management system has affected the quality of representation they have provided over the past 5 years. Of the 33 survey participants who answered the question, nearly half (48.5 percent) felt that their system had made a substantial improvement, and 42 percent felt that the system had made some improvement. Nine percent felt that a computer-

ized case management system has made little or no improvement to the quality of the services they provide to clients.

Public defender satisfaction levels were assessed in six areas of case tracking. These areas were processing speed, user-friendliness, reliability/accuracy, compatibility with public defender practice, accessibility, and enhancement of productivity. Each respondent was asked to rate his or her office's satisfaction level (excellent, very good, good, fair, or poor) for each category. The results are presented in table 11.

Overall, public defenders rated their case-tracking systems as "very good," particularly in reliability/accuracy, compatibility with public defender practice, accessibility, and enhancement of productivity. They rated their systems as

**Table 11**  
**Public Defender Satisfaction Levels**

Category	Excellent	Very Good	Good	Fair	Poor
Reliability/ Accuracy	9.1%	43.2%	29.5%	11.4%	6.8%
Enhancement of Productivity	14.0%	34.9%	20.9%	20.9%	9.3%
Compatibility with Practice	17.1%	48.8%	19.5%	9.7%	4.9%
User- Friendliness	15.9%	20.4%	27.3%	25.0%	11.4%
Accessibility	31.8%	36.4%	13.6%	9.1%	9.1%
Processing Speed	18.2%	22.7%	29.5%	18.2%	11.4%

“good” in processing speed and user-friendliness.

### **Information Integration Across Agencies**

Of the 52 public defender programs that responded to the survey, 60 percent indicated that the jurisdiction they represent uses some sort of shared, integrated criminal justice information system. Nine of these jurisdictions share information on a statewide basis, 16 on a countywide basis, and 6 by judicial district. In 25 of the 31 jurisdictions with shared information, public defenders are included as a part of the system.

Public defender access to information in these integrated systems varies greatly. Defendant arrest records were available to 56 percent of respondents with access to an integrated system, while 84 percent indicated that disposition records were available electronically. Three respondents reported that their systems provide access to warrant information. Slightly more than half of the respondents have access to general biographical information of defendants through their systems, and 92 percent have access to court docket and calendaring information. Jail rosters are available to 61 percent (19 of 31) of the systems reported, 35 percent (11 of 31) of the systems share department of motor vehicles information, and 16 percent

(5 of 31) share defendant tax, property, and asset information.

Eleven respondents use integrated criminal justice information systems that house shared data within a single database. This means that these jurisdictions share a commonly accessible database that assembles all information about a criminal case step-by-step, from arrest through sentencing or probation, and stores the data in one location. The other 14 programs that use integrated criminal justice information systems not located on a single database have multiple databases. Under this scenario, each criminal justice agency has its own database, which other agencies can access to retrieve data.

Of the 25 respondents that reported using an integrated system, 36 percent do not share any information originating in the public defender offices with any other criminal justice agency. Of the remaining 16 systems, 56 percent share attorney-of-record information, and 13 percent share basic information about defendants and witnesses. Seven of the 25 respondents reported that they have the ability to decide which agencies may access database contents and what types of information are accessible.

As shown in table 12, the majority of offices rating their satisfaction

with integrated information systems believe that their system has improved the quality of their representation. Many stated that the improvement was substantial.

Overall, public defenders were less satisfied with their criminal justice integrated information system than they were with their internal case management systems.

**Table 12**  
**Survey Respondents' Satisfaction With Their Jurisdiction's Integrated Information System**

Category	Excellent	Very Good	Good	Fair	Poor
Availability of Critical Public Defender Information	3.5%	31.0%	31.0%	31.0%	3.5%
Security of Confidential Information	24.0%	36.0%	28.0%	8.0%	4.0%
Accuracy of Information Retrieved	4.0%	36.0%	40.0%	20.0%	--
User-Friendliness	7.5%	7.5%	31.0%	27.0%	27.0%
System Processing/ Response Time	16.0%	8.0%	52.0%	24.0%	--
Availability of Support	4.0%	13.0%	54.0%	21.0%	8.0%
Average	10.0%	22.0%	39.0%	22.0%	7.0%

# IX. For More Information

---

To receive more information on the initiatives described in this report, contact the following individuals or organizations:

## ***Marin County, California***

Joseph L. Spaeth, Public Defender  
Office of the Public Defender,  
Marin County  
Hall of Justice  
3501 Civic Center Drive, Room 139  
San Rafael, CA 94903-4166  
Phone: 415-499-6321  
Fax: 415-499-6898  
World Wide Web:  
[marin2.marin.org/mc/pd/index.html](http://marin2.marin.org/mc/pd/index.html)

## ***Orange County, Florida***

Joseph W. DuRocher,  
Public Defender  
Ninth Judicial Circuit Public Defender  
435 North Orange Avenue  
Orlando, FL 32801  
Phone: 407-836-4800  
Fax: 407-836-2196

## ***Michigan State Appellate Defender Office***

James R. Neuhard, State Appellate Defender  
State Appellate Defender Office,  
State of Michigan  
645 Griswold, Penobscot Building,  
Suite 3300  
Detroit, MI 48226  
Phone: 313-256-9833  
Fax: 313-965-0372  
World Wide Web: [www.sado.org](http://www.sado.org)

## ***Legal Aid Society Bronx County, New York***

Irwin Shaw, Attorney-in-Charge  
Legal Aid Society, Criminal Defense  
Division  
1020 Grand Concourse  
Bronx, NY 10451  
Phone: 718-579-3158  
Fax: 718-588-2611

## ***Rhode Island State Public Defender***

Stephen Nugent, Chief Public Defender  
Office of the Public Defender  
State of Rhode Island  
100 North Main Street, Fourth Floor  
Providence, RI 02903  
Phone: 401-222-3492  
Fax: 401-222-3289

## ***Knoxville, Tennessee***

Mark Stephens, District Public Defender  
Public Defender for the Sixth Judicial District  
1209 Euclid Avenue  
Knoxville, TN 37601-0996  
Phone: 423-594-6120  
Fax: 423-594-6169



***West Virginia Public  
Defender Services***

John A. Rogers, Executive Director  
1900 Kanawha Boulevard East  
Building 3, Room 330  
Charleston, WV 25305  
Phone: 304-558-3905  
Fax: 304-558-1098

***The Spangenberg Group***

Robert L. Spangenberg, President  
1001 Watertown Street  
West Newton, MA 02465  
Phone: 617-969-3820  
Fax: 617-965-3966  
E-mail: [tsg@spangenberggroup.com](mailto:tsg@spangenberggroup.com)

For additional information on BJA grants and programs, contact:

***Bureau of Justice  
Assistance Clearinghouse***

P.O. Box 6000  
Rockville, MD 20849-6000  
1-800-688-4252  
World Wide Web: [www.ncjrs.org](http://www.ncjrs.org)

Clearinghouse staff are available Monday through Friday, 8:30 a.m. to 7 p.m. eastern time. Ask to be placed on the BJA mailing list.

***U.S. Department of Justice  
Response Center***

1-800-421-6770 or 202-307-1480

Response Center staff are available Monday through Friday, 9 a.m. to 5 p.m. eastern time.

# Bureau of Justice Assistance Information

---

## General Information

Callers may contact the U.S. Department of Justice Response Center for general information or specific needs, such as assistance in submitting grant applications and information on training. To contact the Response Center, call 1-800-421-6770 or write to 1100 Vermont Avenue NW., Washington, DC 20005.

## Indepth Information

For more indepth information about BJA, its programs, and its funding opportunities, requesters can call the BJA Clearinghouse. The BJA Clearinghouse, a component of the National Criminal Justice Reference Service (NCJRS), shares BJA program information with state and local agencies and community groups across the country. Information specialists are available to provide reference and referral services, publication distribution, participation and support for conferences, and other networking and outreach activities. The Clearinghouse can be reached by:

- Mail**  
P.O. Box 6000  
Rockville, MD 20849-6000
- Visit**  
2277 Research Boulevard  
Rockville, MD 20850
- Telephone**  
1-800-688-4252  
Monday through Friday  
8:30 a.m. to 7 p.m.  
eastern time
- Fax**  
301-519-5212
- Fax on Demand**  
1-800-688-4252
- BJA Home Page**  
[www.ojp.usdoj.gov/BJA](http://www.ojp.usdoj.gov/BJA)
- NCJRS World Wide Web**  
[www.ncjrs.org](http://www.ncjrs.org)
- E-mail**  
[askncjrs@ncjrs.org](mailto:askncjrs@ncjrs.org)
- JUSTINFO Newsletter**  
E-mail to [listproc@ncjrs.org](mailto:listproc@ncjrs.org)  
Leave the subject line blank  
In the body of the message,  
type:  
subscribe justinfo  
[your name]

The logo for the Bureau of Justice Assistance (BJA) features the letters 'BJA' in a large, bold, serif font. The letters are black and have a slightly stylized appearance, with the 'B' and 'J' being particularly prominent.