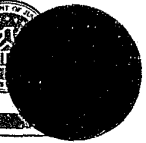
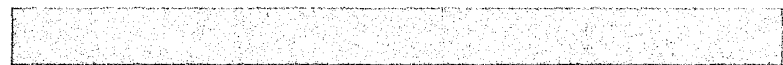


U.S. Department of Justice  
Office of Justice Programs  
National Institute of Justice

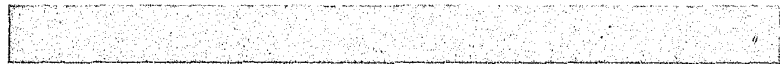


# NATIONAL INSTITUTE OF JUSTICE

Research Report



## Guidelines for State Monitoring Under the Drug Control Formula Grant Program



136609

Evaluation

---

# About the National Institute of Justice

The National Institute of Justice (NIJ), a component of the Office of Justice Programs, is the research and development agency of the U.S. Department of Justice. NIJ was established to prevent and reduce crime and to improve the criminal justice system. Specific mandates established by Congress in the Omnibus Crime Control and Safe Streets Act of 1968, as amended, and the Anti-Drug Abuse Act of 1988 direct the National Institute of Justice to:

- *Sponsor special projects and research and development programs* that will improve and strengthen the criminal justice system and reduce or prevent crime.
- *Conduct national demonstration projects* that employ innovative or promising approaches for improving criminal justice.
- *Develop new technologies* to fight crime and improve criminal justice.
- *Evaluate the effectiveness of criminal justice programs* and identify programs that promise to be successful if continued or repeated.
- *Recommend actions* that can be taken by Federal, State, and local governments as well as private organizations to improve criminal justice.
- *Carry out research on criminal behavior.*
- *Develop new methods of crime prevention* and reduction of crime and delinquency.

The National Institute of Justice has a long history of accomplishments, including the following:

- Basic research on career criminals that led to development of special police and prosecutor units to deal with repeat offenders.
- Research that confirmed the link between drugs and crime.
- The research and development program that resulted in the creation of police body armor that has meant the difference between life and death to hundreds of police officers.
- Pioneering scientific advances such as the research and development of DNA analysis to positively identify suspects and eliminate the innocent from suspicion.
- The evaluation of innovative justice programs to determine what works, including drug enforcement, community policing, community anti-drug initiatives, prosecution of complex drug cases, drug testing throughout the criminal justice system, and user accountability programs.
- Creation of a corrections information-sharing system that enables State and local officials to exchange more efficient and cost-effective concepts and techniques for planning, financing, and constructing new prisons and jails.
- Operation of the world's largest criminal justice information clearinghouse, a resource used by State and local officials across the Nation and by criminal justice agencies in foreign countries.

The Institute Director, through the Assistant Attorney General, establishes the Institute's objectives, guided by the priorities of the Department of Justice and the needs of the criminal justice field. The Institute actively solicits the views of criminal justice professionals to identify their most critical problems. Dedicated to the priorities of Federal, State, and local criminal justice agencies, research and development at the National Institute of Justice continues to search for answers to what works and why in the Nation's war on drugs and crime.

136609

# **Guidelines for State Monitoring Under the Drug Control Formula Grant Program**

Terence Dunworth  
Aaron J. Saiger

July 1992

**NCJRS**

**JUL 31 1992**

**ACQUISITIONS**

National Institute of Justice

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

**National Institute of Justice  
Charles B. DeWitt  
Director**

**Michael J. Russell  
Deputy Director**

This project was supported by grant number 90-DD-CX-0003, awarded to the RAND Corporation by the National Institute of Justice under the Omnibus Crime Control and Safe Streets Act of 1968, as amended. Opinions or points of view expressed in this document are those of the authors and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

**NCJ 136609**

136609

U.S. Department of Justice  
National Institute of Justice

This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated in this document are those of the authors and do not necessarily represent the official position or policies of the National Institute of Justice.

Permission to reproduce this ~~copyrighted~~ material has been granted by

Public Domain/CJP/NIJ  
U.S. Department of Justice

to the National Criminal Justice Reference Service (NCJRS).

Further reproduction outside of the NCJRS system requires permission of the ~~copyright~~ owner.

## Foreword

It is vital that Federal, State, and local agencies share the lessons learned from efforts to prevent and reduce drug abuse and crime. Under the Anti-Drug Abuse Act of 1988, the National Institute of Justice (NIJ) is mandated to evaluate drug control efforts supported through the Drug Control and System Improvement Formula Grant Program operated by the Bureau of Justice Assistance, Office of Justice Programs.

An integral part of State anti-drug efforts is the development of strategic plans for using Federal, State, and local resources to mount a comprehensive attack. As one of the first evaluations conducted under the 1988 Act, the National Institute of Justice commissioned a two-stage review of the planning process. An earlier report, *State Strategic Planning Under the Formula Grant Program* (NCJ 136610), presented the results of the first phase of that evaluation.

The study, which was carried out for NIJ by the RAND Corporation, reviewed the approaches used by the States in structuring their plans as well as the usefulness of Federal guidelines for planning. The results have been used by the Bureau of Justice Assistance to strengthen its partnership with the States and to improve its data bases on State awards and its reporting on project activities to Congress, other Federal agencies, and the States.

To accompany that evaluation, NIJ also sponsored this present study of procedures used by the States to monitor their awards of subgrants, *Guidelines for State Monitoring Under the Formula Grant Program*.

The goal of NIJ's program is to discover what works in reducing crime and drug abuse, how well it works, and what makes it work. The Drug Control Formula Grant Program is working, and NIJ is pleased to provide both these reports to those Federal and State officials charged with developing strategies that work against the scourge of drugs and crime.

Charles B. DeWitt  
Director  
National Institute of Justice

# Executive Summary

## Scope and Objectives of These Guidelines

In 1986 Congress established the Drug Control and System Improvement Formula Grant Program to provide Federal aid for State and local drug control programs. Additional legislation expanded the program in 1988, and appropriations have increased steadily since then.

The program provides formula grants to 56 agencies at the State (or equivalent) level of government.<sup>1</sup> It requires all 56 recipients to create a State strategy for combating crime deriving from drug trafficking and abuse. After the Bureau of Justice Assistance has approved the State strategy, States distribute their allocations as subgrants to State and local agencies. Subgrant awards are preceded by agreements regarding subgrant scope between the State and individual subgrantees. After supported projects commence, States are required to monitor subgrantee activities and to report on their progress. This monitoring function is the topic of this document.

These guidelines are the result of Phase II of a review of the formula grant program commissioned by the National Institute of Justice (NIJ) and conducted for NIJ by the RAND Corporation. The purpose of the guidelines is to assist States in developing and implementing effective methods of monitoring and reporting the activities of their subgrantees. The guidelines have the following objectives:

1. To identify what must be done to design a monitoring system.
2. To assess the most important issues to which a monitoring system must respond.
3. To provide examples of alternative monitoring practices.

These guidelines do not describe an implementation-ready monitoring template that States can simply adopt. Instead, they discuss several of the important concepts, issues, and choices that surround the design of a monitoring system. We have based this discussion on current Federal requirements, the experience of monitoring in other Federal programs, and interviews with Federal and State officials, including an intensive examination of monitoring in six States: California, Massachusetts, Missouri, Montana, Ohio, and Virginia. These States do not constitute a random sample, but were chosen in consultation with the Bureau of Justice Assistance in order to provide information on a wide range of approaches to monitoring.

---

1. Unless the text clearly indicates otherwise, the term "State" is used in this document to identify all 56 recipients of formula grant funds: the 50 States, the District of Columbia, American Samoa, U.S. Virgin Islands, Guam, Commonwealth of Puerto Rico, and the Northern Mariana Islands.

## **The Goals of Monitoring**

The purpose of monitoring is to improve program activity and to have an impact on funding, planning, distribution of funds, grants management, subgrant staff, and the streets.

Because of the decentralized nature of the formula grant, monitoring can have such an impact only if it meets three related, but distinct, goals:

- To document subgrant activities and to ensure that subgrantees meet their commitments and adhere to program guidelines.
- To improve State activities, including grants management, strategic planning, and evaluation, by providing relevant information on subgrant performance.
- To inform the Bureau of Justice Assistance about the use of formula funds so that it can (a) manage the program more effectively and (b) meet its obligation to report to Congress on program activities.

These goals require that monitoring systems function in a variety of contexts. At one level, the role of monitoring is to maintain consistent records for each subgrant. Documentation must be sufficiently detailed to demonstrate that subgrants have met the requirements of the subgrant agreement and conformed to all applicable State and Federal regulations.

At the same time, monitoring is a management tool for the States, informing a wide range of State decisions and activities. Monitoring allows State grants managers to keep abreast of changing circumstances, to react to problems as they develop, and to target technical assistance. Monitoring enhances State strategic planning by allowing States to track the nature of the drug problem, interagency coordination, and the results of previous strategic choices. In addition, monitoring data serve as an important resource for States' efforts to evaluate subgrant activities.

At the Federal level, monitoring data is one of the Bureau of Justice Assistance's most important information resources. The Bureau uses this information for a variety of internal management purposes and to prepare an annual report to Congress. This report is an important input to congressional appropriations and program reauthorization decisions.

Currently, the Bureau's primary source of monitoring data is the Annual Project Report that is submitted for each project annually and at the conclusion of subgrant activities. However, though these annual reports constitute technical compliance with the Federal monitoring requirement, the Bureau strongly supports States' efforts to design and implement more comprehensive monitoring systems that meet their particular needs.

## **The Elements of Monitoring System Design**

The design of a monitoring system includes three kinds of activities:

*1. Planning for a monitoring system.* Considerable thought and planning should precede the implementation of a monitoring system. A well-thought-out and well-constructed design is needed. This takes time and effort, but the informational payoff is substantial; and the short-term savings of skimpy planning will quickly be obscured by the costs of unsatisfactory monitoring performance.

Therefore, States should define their information needs systematically. They should relate the goals of monitoring to their own specific context, creating a specific statement of objectives; identify the consumers of monitoring information and involve them in the goal determination process; and use the results of these activities to produce a list of the specific types of data to be gathered and the way in which they are to be used.

*2. Developing systems for data reporting.* A range of monitoring techniques and tools is available for meeting the needs described in the monitoring plan. These include written forms that subgrantees are asked to submit periodically; site visits by State personnel to subgrant locations; and cluster meetings and workshops, sponsored by the State, in which groups of subgrantees participate. States should establish the types of data that will be gathered through each of these mechanisms, draft data collection tools for each, and determine how the mechanisms will work together.

States should strive to present the collection of monitoring data as a cooperative venture between the State and subgrantees. Subgrantees are likely to be receptive to such an approach if States have taken pains to identify subgrantee needs that can be met by the monitoring system and to incorporate them into State procedures. States can also improve their monitoring requirements, as well as forestall subgrantee resentment and resistance to monitoring, by delineating specific monitoring requirements in advance. This is best done by emphasizing monitoring during the subgrant application and award process.

*3. Ensuring that monitoring information is used.* Designers of monitoring systems must take an active role in seeing that the data they collect are actually put to use. They must present their data in a variety of forms, each of which targets the specific needs of particular users. State officials responsible for troubleshooting, for example, need different information than those responsible for planning; and the needs of both are different from those of the public or the State legislature.

Moreover, monitoring systems should provide information consumers with a way to comment on the utility of the information that they receive and to suggest changes. Such a feedback mechanism may then lead to revisions in monitoring objectives and procedures.



## **Acknowledgments**

For their unstinting cooperation throughout the course of this research, our thanks go to the formula grant managers and staff in the States where we focused our attention: Judy O'Neal in California; Mary Lou Szulborski, Teresa Mayors, Bill Holmes, and Phil Weiner in Massachusetts; Ken Higgins and Marcie Haldiman of Missouri; Ed Hall and Cathy Kendall in Montana; Bob Swisher and Jeff Knowles of Ohio; and Martin Mait, Joe Marshall, and Dick Hall-Sizemore in Virginia. Thanks are also due to officials in all of the other States who shared their experiences and ideas with us.

David Hayeslip and Ed Zedlewski at the National Institute of Justice and Bob Kirchner and Andy Mitchell at the Bureau of Justice Assistance provided guidance throughout the project and commented on earlier drafts of these guidelines. Their observations were instructive and helpful. As always, responsibility for any remaining problems is our own.

# Contents

Foreword .....	iii
Executive Summary .....	v
Acknowledgments .....	viii
1. Introduction .....	1
The BJA Formula Grant Program .....	1
Current Federal Monitoring Requirements .....	1
Scope and Organization of the Guidelines .....	2
2. The Goals of a Monitoring System .....	5
Documenting Subgrant Activities .....	5
Distinguishing Between Fiscal and Programmatic Monitoring .....	5
Coping With Subgrant Variety .....	6
Improving State Activities .....	7
Monitoring and Grants Management .....	7
Monitoring and Strategic Planning .....	7
Monitoring and Evaluation .....	8
Providing Information to BJA .....	10
3. Planning Requirements .....	11
Delineating Monitoring Objectives .....	11
Identifying Monitoring Consumers .....	12
State Planners and Administrators .....	13
State Evaluators .....	13
Subgrantees .....	13
Other State and Local Agencies .....	14
Bureau of Justice Assistance Officials .....	15
Other Federal Agencies .....	16
Creating an Information Blueprint .....	16
Be Specific About Information Needs .....	17
Specify Qualitative and Quantitative Data .....	17
Implement Consistent Measures Across Projects .....	17
Make the System Comprehensive .....	18
Anticipate Future Needs .....	18
Organizing State Management of Monitoring .....	18
Summary .....	19

4. Principal Elements of a Monitoring System .....	21
Advance Agreements Between the State and Subgrantees .....	21
Data Reporting Forms .....	22
Frequency of Reporting .....	23
General Rules About Forms .....	23
Developing Forms .....	26
Site Visits .....	27
Frequency of Visits .....	27
Agenda for Site Visits .....	27
Integrating Site Visits With Other State Activities .....	28
Cluster Meetings and Other Techniques .....	29
Summary .....	29
5. Using Monitoring Information .....	31
Promoting the Use of Monitoring Information .....	31
Disseminate Information Appropriately .....	31
Provide Information Quickly .....	31
Formalize Procedures for Responding to Monitoring Information .....	32
Solicit Feedback From Information Consumers .....	32
Monitoring as a Tool .....	32
Monitoring as a Tool for Grants Management .....	33
Monitoring as a Tool for Strategic Decisionmaking .....	33
Monitoring as a Tool for Evaluation .....	34
Monitoring as a Tool for Communication .....	36
Summary .....	36
6. Automation and Monitoring .....	37
Full Automation .....	37
Automating Particular Monitoring Tasks .....	38
Supplementing a Manual System With Computers .....	39
References .....	41

# 1. Introduction

## The BJA Formula Grant Program

The guidelines presented in this document focus on the monitoring of subgrants that formula grant recipients perform under the Drug Control and System Improvement Formula Grant Program. This program was authorized by Congress in 1986 and amended in 1988.<sup>1</sup> It comprises a system of Federal grants-in-aid, the purpose of which is to support State and local initiatives to control violent and drug-related crime.

The program provides formula grants to 56 agencies at the State (or equivalent) level of government.<sup>2</sup> It requires all 56 recipients to create a State strategy for combating crime deriving from drug trafficking and abuse. After the Bureau of Justice Assistance (BJA) has approved the State strategy, States distribute their allocations as subgrants to State and local agencies. Subgrant awards are preceded by agreements regarding subgrant scope between the State and individual subgrantees. After supported projects commence, States are required to monitor subgrantee activities and to report on their progress. This monitoring function is the topic of this document.

The goal of these guidelines is to assist States in developing effective monitoring and reporting systems. Specific objectives are:

1. To identify what must be done to design a monitoring system.
2. To assess the most important issues to which a monitoring system must respond.
3. To provide examples of alternative monitoring practices.

## Current Federal Monitoring Requirements

Current monitoring requirements are based on three provisions of the Anti-Drug Abuse Act of 1988. First, the act requires that all subgrants have an evaluation component, which can be waived by the Bureau of Justice Assistance only on a project-by-project basis.<sup>3</sup> Second, each State must submit an annual report to BJA that reviews subgrant activities, summarizes any evaluation results, assesses the impact of these activities on the State's drug problem, and discusses the coordination of subgrant activities with federally funded initiatives in drug education, prevention, treatment, and research.<sup>4</sup> Finally, subgrants are subject to whatever monitoring procedures the Bureau of Justice Assistance deems necessary to "assure fiscal control, proper management, and efficient disbursement of funds."<sup>5</sup>

BJA has operationalized these requirements in several ways. First, BJA requires States to meet the same fiscal, bookkeeping, and auditing requirements that are incumbent on any recipient of Federal funds (BJA 1989). Second, BJA has defined minimum compliance with the evaluation requirement as the analysis of the performance indicators that make up its Annual Project Report (APR) form, which must be filed for each subgrant annually and within 45 days of termination of the project (BJA 1991).

The APR's currently request five types of information. Three pertain to program implementation: general project information, staffing and budget data, and plans for project continuation. A fourth comprises data on project performance and outcomes: client slots filled, arrests, activities conducted, and so on. A fifth section requests narrative comments. Because performance measures vary for different types of projects—measures appropriate to a drug prosecution initiative are not appropriate to a treatment program, for example—BJA makes the fourth section available in nine versions, each of which corresponds to a different substantive program area, as well as a “standard” version to be used for the remaining purpose areas.<sup>6</sup>

Finally, BJA has encouraged States to go beyond the APR requirements and to develop monitoring systems that reflect their particular information needs. Numerous States have done so, supplementing BJA requirements with their own monitoring procedures and systems. Many aspects of these systems are described below.

## **Scope and Organization of the Guidelines**

These guidelines do not describe an implementation-ready monitoring template that States can simply adopt. Because of the variation in drug problems, strategic approaches, and funding levels from State to State, no single monitoring system is appropriate to all States. Moreover, it is difficult to compare existing monitoring systems. At this point in the program's history, most States' monitoring systems are still evolving; this makes recommending particular systems difficult.

Instead, the remainder of these guidelines focus on the concepts, issues, and choices that surround the design of a monitoring system. We have based this discussion on current Federal requirements, the experience of monitoring in other Federal programs, and interviews with officials in several States, including intensive examination of six States' monitoring systems: California, Massachusetts, Missouri, Montana, Ohio, and Virginia. These States do not constitute a random sample, but were chosen in consultation with BJA in order to provide information on a wide range of approaches to monitoring.

The guidelines are organized into six chapters. Chapters 1 and 2 are relatively broad and nontechnical in orientation. Chapter 1 provides background on the program and describes current monitoring requirements and the future of Federal monitoring requirements. Chapter 2 discusses the goals of monitoring and places

monitoring in the context of other formula grant program activities at the Federal, State, and local levels.

The remainder of the guidelines are oriented towards individuals who are actually involved in creating or improving monitoring systems. It is organized according to the process that States should follow to design a new monitoring system or to improve an existing one. This process has three steps:

- *Planning for a monitoring system.* Any monitoring effort must be based on a monitoring plan that describes the goals of the system, the ways the system will be used, and the types of information that it will gather.
- *Developing data collection systems.* A range of techniques and tools is available for meeting the information needs described in the monitoring plan. These include the development of monitoring forms, of protocols for site visits and other types of supervision, and of methods for tracking and enforcing compliance with monitoring requirements.
- *Ensuring that monitoring information is used.* A variety of groups can productively use monitoring information. States should not only identify these groups and provide them with information but also should facilitate their use of monitoring data by tailoring multiple presentations of the data to the particular needs of various information consumers.

Chapters 3 through 5 are organized according to this scheme. Chapter 3 discusses planning requirements, chapter 4 data collection, and chapter 5 data utilization. A final chapter provides a brief discussion of the use of computers in monitoring systems.

## Notes

1. In 1986, after a decade of increasing concern about drug abuse, Congress passed the first Anti-Drug Abuse Act (Public Law 99-570.). This act established the formula grant program. A second Anti-Drug Abuse Act (Public Law 100-690), passed in 1988, expanded and amended the first. Grant appropriations have been made annually since 1987. For a more complete description of the program and its requirements, see Dunworth and Saiger (1991).
2. Unless the text clearly indicates otherwise, the term "State" is used in this document to identify all 56 recipients of formula grant funds: the 50 States, the District of Columbia, American Samoa, U.S. Virgin Islands, Guam, Commonwealth of Puerto Rico, and the Northern Mariana Islands.
3. Anti-Drug Abuse Act of 1988, §522(a).
4. Anti-Drug Abuse Act of 1988, §522(a).

5. Anti-Drug Abuse Act of 1988, §503(a)(7).

6. As of October 1989, the nine areas for which specific APR's are provided are multijurisdictional task forces, domestic source control, organized crime, prosecution of career criminals, courts, corrections, treatment, alternative sanctions, and other enforcement and prosecution of street drug sales.

## 2. The Goals of a Monitoring System

The formula grant program involves State and Federal agencies as well as subgrantees. Therefore, monitoring systems do not exist simply to document subgrant activity. Monitoring systems must also support a wide range of State activities: policymaking, strategic planning, making subgrant decisions, managing subgrant awards once they are made, and evaluation. And monitoring must provide information to the Bureau of Justice Assistance (BJA) so that it can manage the program more effectively and meet its obligation to report to Congress on program activities.

This chapter discusses each of these three goals of monitoring—documenting subgrant activities, improving State activities, and providing information to BJA.

### **Documenting Subgrant Activities**

The first goal of monitoring—to document subgrant activities and to ensure that they conform to project design and comply with Federal regulations—is not unique to the formula grant program. Any award of Government funds is generally accompanied by a system by which recipients can document their activities and their compliance with the project plan.

Nevertheless, the specific monitoring requirements imposed by BJA and the nature of the subgrants themselves raise some issues not associated with other Federal programs. Two of the most important of these issues—distinguishing between fiscal and programmatic monitoring and coping with the variety of subgrant initiatives—are discussed below.

### **Distinguishing Between Fiscal and Programmatic Monitoring**

BJA requires States to conduct two types of monitoring: fiscal and programmatic. These two requirements are related but distinct.

*Fiscal* monitoring is conducted to ensure that subgrant expenditures conform to contractual, regulatory, and legal constraints. In addition to fiscal restrictions on particular subgrants, which are part of individual subgrant agreements, fiscal monitoring also documents adherence to financial restrictions generally applicable to the formula grant program—e.g., requirements for matching funds—and to all Federal grants—e.g., the requirements for documenting capital acquisitions.

This report does not discuss fiscal monitoring requirements, which are often quite detailed and specific. States' fiscal monitoring is overseen by the Office of the Comptroller in the Office of Justice Programs, the parent agency of BJA. The Comptroller's office should be consulted on all matters related to fiscal monitoring.



While fiscal monitoring is concerned with documenting subgrant expenditures, *programmatic* monitoring focuses on documenting subgrant activities. It is concerned with subgrant activities and their outcomes: actions that are taken, the techniques and intensity with which they are pursued, and the outcomes that result. Programmatic monitoring may also investigate the relationship between actual subgrant activities and the project plan.

Clearly, programmatic monitoring is concerned with measures other than subgrant expenditures. Such measures include descriptions of project activities, data on staffing and training, and counts of arrests, clients treated, and so on.

It is just as clear, however, that expenditures should not be excluded from the set of measures by which subgrant activities are documented. Financial records, for example, are the principal documentation for the purchase and use of equipment, staffing and overtime rates, and scheduling—all of which are central to a programmatic description.

Thus, while the fiscal monitor examines financial records for regulatory compliance, the programmatic monitor uses them to help describe subgrant activities. The distinction between these uses of financial information should not be minimized, even as the information itself is shared.<sup>1</sup>

### **Coping With Subgrant Variety**

Subgrant initiatives that are supported with formula funds vary across the spectrum of drug control initiatives. The 21 purpose areas authorized by the act range from multijurisdictional task forces to victim assistance initiatives, and from technology enhancement to programs that emphasize drug treatment and prevention. Extraordinary variety may be found even within program areas; for example, the organization, implementation, and outcomes of a multijurisdictional task force aimed at marijuana transshipments on interstate highways are very different from those of a task force whose primary goal is to control urban street-level drug markets.

This variety poses a particular challenge for monitoring. On one hand, monitoring should strive to gather a set of well-defined measures that can be compared across time and from project to project. At the same time, monitoring must accommodate the natural variation between projects and within projects over time that flows from differing local circumstances, the multifaceted and fluid character of the drug problem, the spectrum of drug control techniques, and modifications in the State drug control strategy.

## **Improving State Activities**

Monitoring should do more than simply document subgrant activity. It should be a primary mechanism through which information enters the complex of activities the Anti-Drug Abuse Act requires States to undertake. In the absence of such feedback on actual program operations, activities like strategic planning and evaluation can become sterile intellectual exercises rather than efforts to maximize the impact of drug control funds.

One important consequence of this idea is that monitoring must fulfill more than one set of State information needs. Monitoring systems should be designed to provide information useful to the entire spectrum of State activities: grants management, strategic planning, and evaluation. The following sections discuss each of these three areas.

### **Monitoring and Grants Management**

Monitoring data are a grants management tool for States. They allow States to identify problems, focus technical assistance, and respond to changing circumstances. In this way, States can improve subgrant activities on an ongoing basis rather than simply passing judgment on projects after they have been completed.

Monitoring information can support both troubleshooting and routine grants management. For example, most States routinely review reports from all subgrantees in order to track subgrantees' progress. However, a subgrantee's failure to report, or reports of outcome data (e.g., arrests made, clients served) that are radically different from expectations, should trigger immediate State followup. Similarly, many States both schedule regular monitoring site visits for all subgrantees to gather information and to provide technical assistance, supplementing these with additional visits in cases where problems have been detected.

### **Monitoring and Strategic Planning**

The Anti-Drug Abuse Acts' mandate that States distribute formula funds in accordance with a drug control strategy leads inevitably to a requirement that States monitor the subgrants they have made. Good plans require good information, and a good strategy must be based on an understanding of its consequences. This is especially so now that formula funding is entering its sixth year and the initial time lag between the implementation of a strategy and the development of information about it has passed.

The primary mechanism that States use to assess the results of previous strategies is evaluation. Evaluation allows States to reach reliable conclusions about the failure or success of elements of the strategy (NIJ 1989). This makes the links between monitoring and evaluation, discussed in the next subsection, particularly important for strategic planning.

However, there are several important constraints on the extent to which evaluation can guide the State strategy. Most important, evaluation is both time-consuming and expensive. As a result, relatively little evaluation is conducted, and what is done normally takes longer than the Federal funding cycle. Therefore, when preparing the State strategy for any given year, few States have access to evaluation findings about subgrants funded in the previous year. To compensate, many States use monitoring information directly to develop strategic plans. They do so in a variety of ways.

Monitoring plays an important role in helping States to fulfill the strategy's data collection requirement. Qualitative data gathered by monitoring often provide information about the scope of drug problems, the nature of interagency coordination, and the relative need of various regions within the States. States also use monitoring information to assess the overall success of particular programs and strategic elements pending the availability of evaluation results.

Finally, States use monitoring data to determine whether to provide continuation funding to a particular subgrant. Since the majority of a State's formula allocation is often devoted to continuation grants, such projects are a key component of the State strategy. When continuation decisions are made, monitoring data are often used to fill the gap created by the lack of current evaluation results. While less informative than a full-blown evaluation, information on actual subgrant activities and outcomes is a significant asset for State officials who might otherwise be forced to rely exclusively on qualitative impressions or analogies to other programs in making their decisions.

### **Monitoring and Evaluation**

The basic purpose of monitoring and evaluation is the same: to use information about previous activities to influence decisions about the future. However, there are important differences between the two functions. The purpose of a monitoring system is to identify and collect data about project activities and outcomes and to present those data in a usable form. Evaluation, by contrast, is a "systematic assessment of whether and to what extent projects or programs are implemented as intended and whether they achieve their intended objectives" (NIJ 1990). Thus, monitoring focuses on documenting project activities; evaluation tries to assess implementation and impact. Monitoring is rarely concerned with causality; evaluation often is. Monitoring yields results throughout the life of a project; evaluations typically must await a project's conclusion. A central goal of monitoring is to provide feedback to projects on an ongoing basis, so that changes can be made; this is only an ancillary—and sometimes unnecessary or even undesirable—feature of evaluations.

In practice, however, it is often hard to draw the line between monitoring and evaluation. Both strive to describe project outcomes; both document project implementation; and both develop data intended to inform funding and strategic

decisions. Monitoring programs often have the explicit goal of gathering data usable by evaluations; and evaluation plans often incorporate data collection methods that are indistinguishable from monitoring. Given these similarities, it is not surprising that the respective roles of the two functions often blur.

To some extent, this is a semantic issue. States are required to collect performance and outcome measures for all funded projects; whether they do so as "evaluators" or "monitors" is irrelevant. However, since many States are organized into discrete monitoring and evaluation units, it is important to define the various ways in which these two groups can interact.

In large part, this interaction is determined by a State's evaluation strategy.<sup>2</sup> In States where evaluation concentrates on detailed assessments of a small number of single projects, monitoring systems should collect data on all projects independently. Since most projects will not be included in the detailed evaluation, monitoring has sole responsibility for documenting the majority of the activities and outcomes that the program funds. This requires monitors to develop a rich set of performance and outcome measures for a wide variety of projects. Moreover, as new evaluations begin, evaluators may turn to a monitoring system for initial data. Designers of monitoring systems can also enhance ongoing evaluation efforts by incorporating measures developed by evaluation teams into the monitoring of similar projects not being evaluated.

Several States, such as Ohio, have evaluation strategies that focus on classes of subgrants. For example, evaluators might assess all multijurisdictional task forces, or all inmate-treatment programs. In such cases, the evaluation design will incorporate both a set of variables to be measured for each subgrant and a strategy for collecting that information. Often, these strategies will closely overlap with a monitoring system.

In such circumstances, monitoring should fulfill several functions. First, it can support the evaluations by sharing data collection procedures, retrospective data, and data management techniques. Often, for example, evaluators can collect required data simply by supplementing existing monitoring tools. Second, monitoring systems should continue to collect data not being used by evaluators. Monitors should continue to collect implementation data independently of impact-oriented evaluations, for example, and should continue to gather outcome measures not of interest to the evaluation effort. Third, monitors should work with the evaluation staff to ensure that information is shared as much as possible, in order to minimize the reporting burden on subgrantees. And finally, monitors should continue to collect data on projects that fall outside of the purpose areas under evaluation.

Other evaluation strategies mandate programwide evaluations, which assess all funded subgrants. In States that take such an approach, the evaluation unit may perform much of the work usually associated with programmatic monitoring:

defining measures for a wide variety of projects, orchestrating the collection of implementation and outcome data, and synthesizing the information it receives on each subgrant into programwide reports and analyses.

States that adopt this approach may still identify a need for monitors in addition to the evaluation staff, though they may use the terms “evaluation” and “monitoring” in unusual ways. In Massachusetts, for example, the “monitoring” staff members focus on grants management, while evaluators focus on gathering descriptive data on both implementation and outcomes. This system is characterized by a high degree of information sharing and cooperation between monitors and evaluators, both in collecting information from subgrantees and in using monitoring data.

Finally, it should be noted that while evaluation strategies may change with State priorities, monitoring systems work best when they are consistently implemented. Therefore, monitoring design should take the possibility of changes in evaluation approach into account, particularly in States where evaluation strategies are relatively undeveloped or change frequently.

### **Providing Information to BJA**

Just as monitoring directs the variety of activities that the act requires at the State level, it must also enlighten the activities of the Bureau of Justice Assistance at the Federal level. As we have noted, BJA has codified its information needs in its Annual Project Report (APR) forms. These must be completed by each subgrantee annually and at the conclusion of the project.

States should include completion of the APR among the monitoring requirements it imposes on subgrantees. This allows grant recipients to respond to a single set of monitoring directives. States should also take the responsibility of collecting the APR's and transmitting them to BJA. This makes monitoring much more efficient, by allowing subgrantees to report—and BJA to receive—data from a single State point of contact. Such a procedure also gives States access to the data on the APR's for their own use, and reduces the need for subgrantees to report the same data repeatedly.

### **Notes**

1. Because these guidelines are restricted to programmatic monitoring only, the term “monitoring” is used throughout exclusively to indicate programmatic monitoring, except where the context clearly indicates otherwise.
2. For a discussion of the development of an evaluation strategy, see National Institute of Justice (1989).

### 3. Planning Requirements

A good monitoring system is an *information* system, not just a compilation of reports of subgrant activities. It should not only certify subgrantees' compliance with Federal rules and regulations but should enlighten the wide range of State- and Federal-level decisions regarding strategic priorities, initial and continuation award decisions, grants management procedures, and so on.

Therefore, considerable thought and planning is warranted before a monitoring system is put into effect. A well-thought-out and well-constructed design is needed. This takes time and effort, but the informational payoff is substantial, and the short-term savings of skimpy planning will quickly be obscured by unsatisfactory monitoring performance.

Because of the diversity among States, and among subgrants within each State, it is not possible to present a precise and final specification of the information that monitoring systems should collect. This will vary from State to State. However, this chapter will describe the set of activities that States should undertake in creating an effective monitoring plan. These are as follows:

- *Delineate the goals of the monitoring system.* What should the system allow the State to do?
- *Determine the consumers of monitoring information.* Who will use monitoring information, and what are their information needs?
- *Create an information blueprint.* What types of information are required to accomplish the system's goals and objectives, and to meet the needs of its various consumers?
- *Organize State information management procedures.* How will responsibilities for collecting, maintaining, and analyzing information be assigned?

#### **Delineating Monitoring Objectives**

Chapter 2 describes three basic goals of monitoring: to document subgrant activities, to inform State management, and to provide information to the Bureau of Justice Assistance (BJA). It also describes the links between monitoring and other State activities: grants management, strategic planning, and evaluation.

States should begin the planning process by relating these goals to their own needs and context. What information could monitoring make available that would lead to improvements in grants management procedures? How could monitoring information be used to improve State strategic planning? What types of documentation about current projects will be most helpful to managers deciding whether to provide them with continuation funds?

This process should result in a State-specific statement of goals and objectives. Goals should be explicit and associated with particular information management objectives. Typical goals and objectives include:

- Improving decisions on continuation funding by providing measures of projects' effectiveness in advance of renewal decisions.
- Increasing efficiency by integrating the data management procedures used for directing technical assistance, fiscal controls, and evaluation.
- Managing subgrantees' implementation of project plans more closely by requiring monthly narrative reports on their progress.
- Increasing the input that State personnel have into grants management by circulating monitoring reports more widely.
- Avoiding ad hoc decisions by formalizing monitoring procedures.
- Increasing State and subgrantee accountability by gathering data for inclusion in an Annual Project Report (APR).
- Minimizing subgrant requirements by revising State monitoring forms so that they do not duplicate the APR.

As these examples show, monitoring objectives should be specifically geared to States' own assessment of their needs. No two States are likely to have identical goals. However, whatever their content, goals should be specifically related to achievable monitoring objectives, and they should be formulated early enough to have an impact on monitoring system design.

### **Identifying Monitoring Consumers**

The designers of monitoring systems cannot determine the goals of monitoring alone. Instead, they must identify the various consumers of monitoring information and involve them in the planning process. States must work with a variety of individuals to determine how their responsibilities relate to a monitoring system and what their information needs are. At the same time, the needs of some monitoring consumers, such as subgrantees or Federal officials, must be anticipated in the absence of their direct participation.

This section discusses the needs of the various groups that should participate in the definition of information needs. These groups include:

- State planners and administrators.
- State evaluators.
- Subgrantees.
- Other State and local agencies.

- Bureau of Justice Assistance officials.
- Other Federal agencies.

Each of these groups is discussed in the following subsections.

### **State Planners and Administrators**

The formula grant program, like other block grants, imposes only broad restrictions on State-level planners' and administrators' determination of how available funds are used. For this reason, these officials are the most important consumers of monitoring information. They use such data to aid funding decisions, management practices, and development of the State strategy.

Therefore, designers of monitoring systems should work closely with these officials to determine exactly what types of information are likely to be of most use. Needs are often both nonobvious and idiosyncratic; in Massachusetts, for example, the State administrator uses the ratio of officer staff time to arrests as a principal measure of the performance of multijurisdictional task forces. State administrators may also request that specific types of qualitative information be gathered, such as apparent trends in the popularity of various drugs in the served population.

State planners and administrators often suffer from information overload. It is therefore especially important that the monitoring measures on which they are expected to base their decisions be meaningful and useful to them. Brief, specific reports are usually best suited to their needs. Pages of data describing every aspect of a subgrantee's activities may be of no more use than no data at all. This issue is discussed in more detail in chapter 5.

### **State Evaluators**

Chapter 2 noted how closely monitoring and evaluation are related. The nature of this relationship, which depends heavily on the State's evaluation strategy, varies from State to State. In virtually all situations, however, evaluators should be consulted when designing a monitoring system. Evaluators should be asked several questions:

- Which baseline data are needed for project evaluations?
- What information would help to develop or manage the evaluation strategy?
- What indicators could be used to select projects for evaluation?
- What data elements being used in evaluations could also be useful in monitoring measures of projects that are not candidates for evaluation?

### **Subgrantees**

It is useful when defining information needs to keep in mind subgrantees' two major criteria for a good monitoring system:



- That it minimize unnecessary requirements.
- That it provide feedback to subgrantees on the information they supply.

States should weigh potential monitoring requirements against the burdens they create for subgrantees. Some types of information are particularly difficult for local agencies to collect. An example might be quantified historical data on how a neighborhood acquired a decades-old reputation for drug problems. The State should weigh the importance of such information against the difficulty to a subgrantee of collecting it before requiring the information.

At the same time, the perceived burden imposed by monitoring requirements can be reduced by providing feedback to subgrantees. By responding to monitoring reports with basic analyses of the information they contain, States can dramatically improve both compliance with requirements and, not incidentally, subgrant operations. Massachusetts reports that simply compiling subgrantees' answers to qualitative questions and providing them to subgrantees as "project narratives" has led to considerable subgrantee enthusiasm. This issue is discussed in more detail in chapter 5.

Subgrantee compliance with monitoring requirements can also be considerably enhanced by including monitoring requirements in subgrant agreements. This process is discussed in chapter 4.

### **Other State and Local Agencies**

Just as Federal agencies outside BJA are potential consumers of monitoring information, so are State and local agencies outside the formula grant structure. Where possible, their information needs should be accommodated. This will become increasingly important if several current trends—e.g., centralized planning across all aspects of drug control and sources of funding—continue.

State and local agencies whose information needs should be considered include:

- *State drug control planning offices.* These State agencies, whose directors are often referred to colloquially as "State drug czars," are an increasingly common feature of State drug planning. Often, they are organizationally independent of the formula grant program and may even be unaware of formula grant activities. As these offices mature and awareness of the program rises, it is reasonable to expect them to request information. Where possible, therefore, State monitoring systems should collect information likely to be useful in a broad policy context spanning all areas of the State and all areas of drug control, including criminal justice, education, and treatment.
- *State and local elected officials.* Governors, mayors, State legislatures, city councils, and county boards of supervisors are also potential information

consumers. Again, these groups may know relatively little about the program and are likely to need summary information that provides an overview of program activities. Legislators are likely to be particularly interested in information that can be tied to particular geographic areas.

- *Criminal justice, treatment, and education agencies* with which formula activities interact. These agencies tend to need more operational information, especially information related to project implementation. Using monitoring as a way to communicate with these agencies is also likely to lead to increased communication overall, which can provide new ideas and enhance the effectiveness of subgrant programs.

### **Bureau of Justice Assistance Officials**

BJA's current monitoring requirements are codified by the APR forms (see chapter 1). The APR's therefore form an initial statement of BJA's information needs. A review of APR data indicators may also help State personnel specify their own information needs.

While the APR's represent BJA's monitoring *requirement*, States should not ignore other BJA activities that can enhance their monitoring systems. For example, the monitoring system could contribute to the data collection requirement associated with the State strategy (BJA 1991). Monitoring can make only a limited contribution in this area, since it gathers data on formula-funded projects only, while the strategy requires data that encompass all State activities regardless of funding source. However, monitoring systems that describe BJA-funded projects are often an important first step in the process of building the capability to gather statewide data.

There is considerable variety in States' approach to meeting the APR requirement. Some States do so by submitting data to the State drug consortium using software provided by the Justice Research Statistics Association (JRSA). Use of the consortium data management system (CDMS) allows States to meet Federal requirements within the context of their own monitoring systems. By contrast, other States avoid the need to synthesize their own needs with Federal requirements by asking subgrantees to submit State monitoring forms to the State *and* to submit APR's directly to BJA. While this reduces the State's workload, the reduction is achieved by increasing the burden placed upon subgrantees. Depending on the nature of the State requirements, it may also diminish the influence that States have on subgrantees by suggesting that the State sees monitoring as not much more than compliance with Federal requirements.

## **Other Federal Agencies**

The utility of a monitoring system can be increased by considering not only BJA requirements but the information needs of other Federal agencies. This is not a requirement. However, taking these needs into account can spare States the duplication and frustration associated with external data requests and help to build cooperative relationships.

Several Federal agencies' information activities are relevant to the design of monitoring systems:

- The Office of National Drug Control Policy (ONDCP) currently requests information on a frequent but irregular basis. While ONDCP does not now request periodic reports that could be used to guide monitoring design, it is often possible to take past and anticipated ONDCP requests into account when designing an information system.
- Nationwide data-gathering efforts, especially the Uniform Crime Reports (UCR) program managed by the Federal Bureau of Investigation, should be consulted during the design process. Making monitoring systems compatible with the definitions used by the UCR program or by other Federal data collection efforts can spare considerable duplication in State reporting and enhance comparability.
- Data may be needed by local branches of Federal agencies, such as the Drug Enforcement Administration (DEA) or the Customs Bureau. States should solicit views on data needs from local representatives of these agencies; such representatives are often included on the State drug policy boards. While these data needs may be negligible, designers of monitoring systems may find that they are relatively easy to take into account.

## **Creating an Information Blueprint**

Once the goals of the monitoring system have been determined, information consumers have been identified, and their information needs have been assessed, States are ready to create a statement of information needs. This statement should be a specific listing of the data elements that monitors will collect and the ways in which that information will be used.

As noted, the fluidity of Federal requirements, the differences among States' needs and priorities, and the variety of subgrants within the States make it impossible to specify such a blueprint here. The statement of information needs can only be developed by a State-specific process of planning and consultation. However, there are several characteristics that describe effective information blueprints:

- Specific statements of information needs.
- Inclusion of both qualitative and quantitative elements.

- Consistency across types of projects.
- Comprehensiveness.
- Anticipation of future needs.

### **Be Specific About Information Needs**

It is important to avoid vagueness. For example, it is insufficient to decide to gather data about "arrests." In what categories (possession, possession with intent, trafficking) should drug arrests be reported? What provisions should be made for arrests for nondrug crimes? Should arrests also be reported by drug type? What data should be collected about arrestees? Must followup data about dispositions or sentences be correlated with different types of arrests or arrestees?

Similarly, a decision to collect data about expenditures should involve consideration of how to categorize income (block grant, match, cash and in-kind seizures, etc.), expenditures (staff, overtime, supplies, buy money, etc.), and budget period.

These issues should be addressed in as much detail as possible as early as possible. Often, working at this level of specificity will help individuals not only to communicate their needs more accurately but actually determine the precise types of information they use to make decisions.

### **Specify Qualitative and Quantitative Data**

Neither qualitative nor quantitative data are sufficient in and of themselves. Qualitative data alone lack precision, are contaminated by bias, and do not allow cross-project comparisons. On the other hand, using quantitative data without a qualitative context can obscure the results of a project, especially when the project has unanticipated effects or must cope with unforeseen new circumstances.

States should define their need for qualitative as well as quantitative data as precisely as possible. What qualitative information is most important? Should projects be asked to describe their accomplishments to date, their needs, the relationship between planned and actual activities, and/or their beliefs regarding the impact of their activities? Should qualitative data be tied to quantitative measures, should questions be more open-ended—or both?

### **Implement Consistent Measures Across Projects**

The breadth of projects funded by formula grants makes it impractical to collect the same data for each subgrant. Arrest and prosecution data generated by multijurisdictional task force projects are different from data describing treatment clients and capacity for Treatment Alternatives to Street Crime (TASC) programs. It is desirable, however, to implement consistent definitions across projects whenever possible. For example, data describing arrestee characteristics should be defined as similarly as possible to data describing treatment clients. Expenditures should be reported in the same categories for all projects. By easing cross-project

comparisons, these similarities increase the utility of the overall monitoring data base, especially where managers turn to monitoring information while making choices among various types of projects.

### **Make the System Comprehensive**

Monitoring designs should be robust; they should incorporate all major types of monitoring data. BJA's APR forms provide a useful delineation of major categories of monitoring data: project characteristics, staffing and budget, continuation plans, project performance and outcomes, and qualitative comments. States should include each of these areas in their statement of information needs. It is also important during the process of monitoring design to consider ways to document cases in which subgrantees may depart from existing data definitions due to the unusual nature of their project or problems with the availability of data.

### **Anticipate Future Needs**

Anticipating the future is especially difficult when defining *current* needs is itself a major undertaking. However, designers of monitoring systems should remember that data no one is currently using might form the basis of a retrospective analysis at some time in the future. Of course, lack of interest in a particular type of data should lead monitors to consider eliminating it from the data base; but obviously important data elements should not be omitted from monitoring requirements simply because they have not been used in the past. Good information generates its own applications.

One rule of thumb is to avoid omissions that are likely to cause future planners, evaluators, or monitors to ask, "How could they have possibly failed to collect this data element?" For example, monitors for a treatment program that sees clients whose drug use is almost exclusively confined to cocaine may see little motivation for categorizing data by drug of abuse or in soliciting information on users' secondary and tertiary drugs of abuse. However, in the event that changes in drug use patterns began to develop in the area, longitudinal information on the appearance of other drugs in the target population could become very important to strategic planners.

### **Organizing State Management of Monitoring**

States face several decisions regarding how to organize their monitoring efforts. Data collection and onsite monitoring can be organized in two basic ways. Some States, like California, use a regional system, where each monitor is assigned a specific county or group of counties and monitors all the programs therein. Others, like Massachusetts, use a programmatic system, where one monitor works with law enforcement projects, another with treatment projects, etc. Mixtures of these approaches are also possible. In Montana, for example, monitors are assigned projects based on need, workload, and interest.

States' individual circumstances should dictate the choice of regional or programmatic division of responsibility. Regional organization is often well suited to large, diverse States that fund projects in a large number of substantive areas. States that use a formula to distribute subgrant funds are also well suited to a regional approach. Programmatic organization, by contrast, is often preferable for small or relatively homogeneous States, or to States that restrict their subgrant awards to a small number of purpose areas. States can also use programmatic organization to take advantage of staff members who have special expertise in particular areas such as the court or drug treatment systems.

Regardless of the organization of monitoring itself, it is usually desirable that data management and data analysis functions be the responsibility of a single person or group. This allows for the development of expertise, especially with computer systems, and facilitates the analysis of multiple projects. It also increases accountability and efficiency.

Often, the best candidates for managing monitoring data are personnel who work with criminal justice statistics in other contexts, such as officials of the State's statistical analysis center or those officials responsible for Uniform Crime Reports. However, this should be done only when these officials are well integrated into the formula grant program structure.

## **Summary**

The success of a monitoring system depends on the extent to which the system is designed in response to a considered and thorough monitoring plan. The responsible State agency should begin the design process by creating a statement of monitoring goals and by determining the information needs of the various potential consumers of monitoring information. These activities should form the basis of a monitoring blueprint: a specific, comprehensive, and consistent statement of the types of information to be gathered, the ways they will be used, and the organization that will undertake their collection and management.

Once the blueprint has been made final, States are ready to develop systems and mechanisms to collect the data that it describes. This process is the topic of the next chapter.

## **4. Principal Elements of a Monitoring System**

Once information needs have been defined, a system must be constructed to gather the information that meets those needs. This chapter describes four of the major components of such a monitoring system:

- State/subgrantee monitoring agreements.
- Data reporting forms.
- Site visits.
- Cluster meetings.

### **Advance Agreements Between the State and Subgrantees**

The Anti-Drug Abuse Act makes monitoring a condition of the receipt of Federal funds. When dealing with subgrantees, States should emphasize that this is no less important a requirement than, for example, the match requirement. Failure to meet the monitoring guidelines established by the State constitutes a breach of Federal as well as State regulations.

It is important for States to demonstrate to subgrantees that monitoring requirements are serious. Massachusetts reports that high levels of subgrantee compliance with monitoring guidelines resulted after funds were withdrawn from one subgrantee agency for noncompliance. States can also, as was done in Virginia, block drawdown of funds until monitoring requirements are fulfilled.

Most often, however, States do not need to interfere with the flow of funds. One important way in which States can encourage compliance with monitoring guidelines without such interference is to describe monitoring requirements in subgrant application materials. Several States, including California, Montana, and Virginia, describe monitoring procedures and requirements at length in subgrant application packets.

Moreover, States often require applicants to include plans for compliance with monitoring requirements in their proposals. Specific aspects of monitoring that potential subgrantees are required to discuss involve these questions:

- Who will be responsible for maintaining and reporting fiscal and programmatic data?
- What procedures will personnel in the field use to record data?
- What particular data elements will be collected? Their definitions?
- How can monitoring data be used to measure the project against "specific, measurable, and time-bound" project objectives?

Subgrant monitoring proposals should then become the basis of a State/subgrant negotiation over final monitoring requirements. The method of this negotiation varies. Missouri, for example, has found it valuable to base final monitoring requirements on agreements reached during a pre-award visit to the site by State personnel. The specific monitoring requirements that result from this negotiation should then be included as part of the formal subgrant agreement. Subgrantee contracts should spell out the data elements that subgrantees must collect, the format in which they are to be reported, and the frequency of required reports.

Discussing monitoring in subgrant applications and during grant negotiations has several advantages:

- It mitigates potential subgrantee resentment and resistance to requirements. Subgrantees cannot claim that they did not know in advance what monitoring activities will be required. Moreover, by including monitoring in the agreement, the State promotes a view of monitoring as one of the activities for which funds are being provided, rather than as a bureaucratic requirement imposed on the use of funds already committed elsewhere.
- It enhances the effectiveness of monitoring. Early delineation of monitoring requirements allows subgrantees to incorporate data gathering and reporting into their administrative and operational procedures. Subgrantees may also suggest outcome measures and data techniques in their applications more suited to subgrant activities than those developed in a more general context at the State level.
- It allows States to treat failure to meet requirements by subgrantees as a breach of the subgrant agreement.<sup>1</sup>

In general, it is desirable to avoid problems of compliance as much as possible. The best way to do this is to present monitoring as a cooperative undertaking that involves State and subgrantees working together as partners. Subgrantees are likely to be receptive to such an approach if States have taken pains to identify subgrantee needs that can be met by the monitoring system and to incorporate them into State procedures. At the very least, States should provide feedback on monitoring reports to subgrantees so that they can see that the information they provide is actually being used.<sup>2</sup>

### **Data Reporting Forms**

In order to ensure that subgrantees report the types of information required in the necessary format, States should develop a set of written forms for subgrantees to complete on a periodic basis. The forms can then be submitted to the State and analyzed at the State level. Of course, subgrantees may also wish to analyze some of their own data.



## **Frequency of Reporting**

Most States ask subgrantees to file forms on a quarterly basis. Quarterly reporting seems to strike a good balance among competing considerations: maintaining a flow of information to the State throughout the project, assuring that timely data are available, and not overburdening subgrantee staff with paperwork. Often, States ask that subgrantees supplement their quarterly reports with annual summaries, which may also contain variables not suitable to quarterly reporting, and with an end-of-project summary. Annual and end-of-project requirements are often coordinated with the Bureau of Justice Assistance Annual Project Report.

A number of considerations may lead States to assign different reporting periods to particular projects. Projects that have high volume and rapid turnover, such as street sweeps in outdoor drug markets or short-term treatment projects, may benefit from monthly reporting. Similarly, some projects cannot generate useful data every quarter; semiannual or annual reports may be more appropriate for efforts focusing on high-level investigations or innovative projects involving the reorganization of services. All such decisions should be made prior to project startup.

Some States, such as Ohio and Missouri, find quarterly reporting insufficient; they use monthly reports for all projects. Reasons for this approach vary; Missouri, for example, felt that a quarterly system provided insufficient accountability. Other States ask for monthly reports only from subgrantees whose activities are a focus of special concern or interest. Motives for such a request may include concern about a project's progress, previous reports containing unusual or hard-to-explain data, or the need to get preliminary feedback prior to beginning a similar project elsewhere.

## **General Rules About Forms**

Designing good forms is not a simple matter. This section describes some general guidelines for avoiding several of the more common problems associated with data forms.

*Forms should be specific and unambiguous.* Every effort should be made to make instructions clear and open to only one interpretation. Possible misinterpretations should be considered. For example, a request for the number of "drug arrests" might yield a tally of arrests for which drugs are the primary charge, arrests for which a drug charge is filed, or arrests that are considered to be "drug-related." Instructions should clearly indicate which of these categories is desired. Moreover, if data on more than one category are to be gathered, categories should be reported separately.

Other common ambiguities and concerns to be avoided include:

- Confusion over whether some categories are subsets of others. For example, requests for arrests for “cocaine” and “crack” may yield two independent tallies from one task force and a total and subtotal from another.
- Confusion over which activities are to be reported. This confusion is especially common for subgrants that fund particular activities within an agency whose ongoing funding comes from elsewhere. Should task forces report only those arrests made by officers whose salaries are paid by the formula grant or all task force arrests? In which of these categories should the subgrantee report arrests made by officers paid with funds formally designated as match? These questions should be addressed either by writing specific instructions, by including space for multiple categories on the forms, or by asking subgrantees to clearly indicate the type of data they are reporting.
- Confusion over what is being measured. Many important terms, such as street names of drugs, offense categories, and descriptions of treatment modalities, are used differently in operational, legal, and analytical contexts, as well as in different geographical regions. Such terms should be clearly defined. Lists of common synonyms should also be provided, such as slang equivalents for the names of drugs.

*Forms should allow for comparisons over time.* It is possible to overemphasize consistency at the expense of other values. If old forms are poorly defined, insufficiently detailed, or no longer applicable to current needs, they should be changed. However, it is best to avoid frequent revisions of monitoring forms, especially over the life of a single subgrant. Such changes both decrease the utility of monitoring data and increase the burden on subgrantees. Similarly, keeping forms consistent from project to project enhances the State’s capability to perform useful comparative analyses.

*Forms should allow for comparisons between subgrantees.* Different types of forms—for multijurisdictional task forces, treatment programs, etc.—should define key terms, such as drug and offense types, similarly whenever possible. Such interproject consistency can dramatically increase the power of analyses of the monitoring data base.

*Forms should allow users to document data deviations.* Despite all efforts to create clearly defined standards and to elicit compliance with those standards, some subgrantees will be unable to collect data that precisely match State specifications. In these cases, States should ask subgrantees not to leave large sections of the monitoring forms blank but to report what data are available. Though incomplete, such data reporting still allows States to fulfill some of the purposes of monitoring, such as State oversight and decisions regarding funding continuation.

Such idiosyncratic data, however, cannot be compared to the data provided by other projects. Therefore, reporting forms must provide an opportunity for

subgrantees to explain any “data deviations”—ways in which the data they provide differ from established definitions. Typical data deviations include grouping of one or more drugs into one combined category, reporting data for only part of a requested time period, and only reporting data from certain project sites. Subgrantees should be required to provide detailed documentation of all departures they make from standard definitions. Massachusetts accomplishes this goal by asking subgrantees to document all data deviations in a single narrative at the end of the quarterly monitoring report.

It is also important that data deviations not be ignored once they are reported. States should not simply enter data into a spreadsheet or other information system while ignoring whatever writing is on the page. This can destroy the validity of any subsequent analysis. Instead, deviation reports should be preserved throughout the information flow. Of course, States may choose to respond to deviation reports by working with subgrantees to allow them to collect data in the required categories.

*Forms should include a qualitative element.* Efforts to ensure the consistency and clarity of monitoring reports should not be allowed to suppress the complexity of the real world. Subgrants are unique projects, run by unique individuals in very different contexts, and similar numbers may be generated by very different situations. Therefore, subgrantees should be given the opportunity to describe their progress qualitatively. Qualitative information is particularly important in order to preserve the fairness of a system that is used to evaluate projects for future funding.

States approach the collection of qualitative information in different ways. Montana, for example, asks subgrantees to describe program activities during the quarter as a program narrative. The State asks the subgrantee to “use facts and figures”; but which facts and figures are used, and what areas are emphasized in the narrative, are left to subgrantee discretion.

Other States, by contrast, have found that single, vague queries such as “Please describe the progress of the program” or “Any comments?” often yield poor results. Instead, these States ask a series of questions that require several-sentence answers about the project. Sample questions include:

- What has the project achieved since the last report?
- What problems have developed in this reporting period, and how have they been addressed?
- Have changing circumstances affected project activities? In what ways?
- How could project operations be improved?
- What types of technical assistance and information could the State provide that would be useful to the project?

## **Developing Forms**

States' monitoring forms should be based on their monitoring plans. However, States need not develop forms from scratch. As we have noted, BJA's APR's can form a basis for the development of reporting forms. This is true especially since subgrantees must fill out the APR's in addition to any other forms imposed by the States.

States can also make use of the forms developed by the State drug consortium. These forms were developed through a process of consultation and cooperation among various States and thus reflect States' actual needs and experiences. The consortium forms also have the advantage of being compatible with the consortium data management system (CDMS).

Some States, such as Ohio and Missouri, make few or no changes to the APR's and the consortium forms. The APR's are used as annual and final reports, and the consortium forms are used for quarterly data reporting. These States supplement these forms almost exclusively with narrative questions. Montana, which also takes this approach, does ask subgrantees to employ significant amounts of quantitative data in project narratives.

This approach has several advantages. It streamlines State requirements; it allows States to use the analytic resources, including software, of the consortium; it permits comparisons among States; and it obviates the need for States to develop their own forms.

At the same time, many States find it necessary to adjust as well as to supplement the BJA and consortium forms. Reasons for these adjustments include the following:

- The assessment of information needs has led to the identification of data elements not described on prepared forms.
- The State feels that the Federal forms are too long, too detailed in some areas, or not detailed enough in others.
- Federal forms use classification systems for drugs and offense types that are inconsistent with those set by State law.
- The data elements listed on the BJA and consortium forms focus on substantive areas different from those funded by the State.

States that do adjust the Federal forms generally create and print their own instruments, incorporating some of the elements of other forms in their design. Virginia created a single master form for law enforcement monitoring, based on the APR, the consortium forms, and its own work; it then used the form as a model to develop particular instruments for other types of projects. Other States, such as California, developed several types of forms at once.

Such revisions should be encouraged. However, States should avoid arbitrary departures from the style and definitions of the BJA and consortium forms. This helps to retain interstate comparability of data and to lessen the burden imposed on subgrantees when APR's and State monitoring become largely independent requirements.

Regardless of the extent of revisions, States should be especially careful to design and edit forms appropriately. Editing new forms is almost always a laborious and iterative process and should include a pretest of each instrument. Pretests should ask subgrantees both to comment on the design of the forms and to complete them. Only through actually filling out the draft instrument can ambiguities and problems with data definitions be identified. If a pretest results in a large number of changes, a second pretest may be warranted.

### **Site Visits**

Regular visits by monitoring staff to subgrant sites are a valuable supplement to written reports. Like reports, the frequency and purpose of monitoring visits should be provided for in the subgrantee agreement.

### **Frequency of Visits**

Site visits for monitoring are generally made annually (Montana) or semiannually (Ohio). States often have particular rules about the scheduling of these visits and their coordination with other types of monitoring: California tries to visit all projects within 6 months; Missouri visits each subgrantee before the project begins. Most States schedule additional visits to subgrantees where problems have been identified.

The number of site visits is generally determined by resource limitations rather than because more frequent visits are not valuable. These limitations may be imposed both by State administrative budgets, and in large, sparsely populated States like Montana, by distance, weather, and the availability of transportation. (Montana's policy is to conduct one site visit a year wherever possible.)

### **Agenda for Site Visits**

In the monitoring context, site visits supplement written reports in two important ways.

First, site visits allow States to assess the quality of written monitoring reports. Monitors can examine first-hand the procedures used to collect, collate, and enter the information that subgrantees report, and ensure that information is complete and accurate. California requires monitors to check the source documentation used to complete quarterly reports in all cases, though the monitors do so with special care in cases where written reports have provided data that seem unrealistic or unlikely. Often, monitors can resolve any problems on the spot.

In addition, site visits allow monitors to collect richer and more detailed data than can be obtained through written reports. Onsite visits are interactive and permit immediate followup when data are unclear. This is particularly true of data on project implementation, since written answers to questions about project implementation tend both to be brief and to be colored by subgrantees' desires to put things in the best possible light. Interviews and direct observation do not, in general, share these difficulties.

Particular agendas for site visits can be relatively flexible or can be set in advance. Regardless, the site visit should be thoroughly documented. Virginia, which uses a flexible agenda, requires that monitors prepare a narrative report describing the visit. In other States, such as Ohio and Massachusetts, monitors complete a field report after every visit. Like the written forms that subgrantees complete, these forms are specific to project type. Unlike those forms, however, they require monitors to provide written answers to detailed questions about program implementation. This detailed implementation information is then filed along with projects' own shorter responses regarding implementation, which they provide on quarterly monitoring reports.

Questions on various States' monitoring field reports include the following:

- What are the objective results of the project to date?
- What problems, if any, have arisen, and how were they resolved?
- Has the project team been organized in accordance with the grant award agreement?
- Characterize any working relationships that the project maintains with outside agencies.
- Is the project meeting its timetable?
- Have all aspects of the original program design been implemented? What can the State do to ensure or speed up implementation?
- Are the project's recordkeeping procedures adequate to support its quarterly progress reports? Are there any discrepancies?
- What followup is needed on the part of the State?

### **Integrating Site Visits With Other State Activities**

Another advantage of monitoring site visits is that they provide economies of scale. Monitoring can be combined with other State activities in the same visit. This can be done either by one staff member, as in Montana, or by teams composed of monitors and other staff members, as in Massachusetts.

Site monitoring visits can be particularly effective when combined with provision of technical assistance. In part, this is because subgrantees are more receptive to

monitoring when monitoring and assistance are part of a package. In addition, as we have noted, monitoring can often be used to help manage the delivery of technical assistance. In California and Massachusetts, for example, the "monitoring site form" also asks monitors to report on what types of technical assistance are needed by the project. This information is then used to coordinate the delivery of those services.

### **Cluster Meetings and Other Techniques**

States can supplement ordinary monitoring activities in a variety of other ways. One popular technique, in use in California, Missouri, and other States, is to conduct annual subgrantee meetings. These meetings may be for all subgrantees or for a particular subgroup (e.g., subgrantees from a particular region or for a particular set of purpose areas). Such meetings allow the State to provide feedback on earlier monitoring activities, to emphasize the importance of complying with monitoring provisions, to explain monitoring requirements, and to describe any changes in the requirements. It can also be valuable to provide time for subgrantees to discuss with one another techniques they have developed to fulfill monitoring—and other—requirements.

It is also important to emphasize informal contact, by telephone and other means, as a supplement to more formal monitoring techniques. Such contact allows monitors to develop a sense of subgrantees' progress between written reports and site visits. It also contributes to positive relationships between State and subgrant staff, which are important to the success of more formal monitoring efforts.

Many States view such contact as a key to the success of their monitoring systems. In Montana, a formal policy requires that there be some contact with each subgrantee—either by phone or in person—twice every quarter. While other States lack a formal policy, they maintain such contact regularly.

### **Summary**

Monitoring systems should employ multiple data collection systems. Subgrantees should be asked to complete written data collection instruments for both implementation and outcome data. States should take care to make sure that these forms are both clear and comprehensive. Forms should be supplemented by other techniques, such as site visits and cluster meetings, in order to gather data that aren't covered by the forms, and to help coordinate monitoring with other grants management functions.

States should take care to establish monitoring requirements in advance of project activities, preferably as part of individual subgrant agreements. While States should insist on compliance with monitoring requirements, it is preferable and probably more effective to create an environment where monitoring is viewed as a cooperative venture between States and subgrantees. This is best accomplished by

ensuring that the monitoring system is used to provide information and feedback to subgrantees as well as to the State and to BJA.

## **Notes**

1. At the same time, however, the codification of requirements makes it more difficult for States to impose additional monitoring requirements midway through the grant.
2. States should be particularly sensitive to this need, since the subgrantee role vis-à-vis monitoring is comparable to the State role vis-à-vis the Individual Project Reports (IPR's) that are submitted to BJA and the State strategy data collection forms. Many States have complained that they receive little in return for the considerable effort they invest in completing these forms (Dunworth and Saiger 1991). (In response to such concerns, BJA has undertaken a revision of the project reporting system that will include feedback to States.)



## 5. Using Monitoring Information

Ultimately, the value of a monitoring system lies in the extent to which the information it gathers is used to improve drug control activities. As noted, this makes it crucial to design monitoring efforts with the information needs of decisionmakers in mind. However, though consumer-based design is necessary for the success of monitoring, it is not sufficient. States must also facilitate the use of monitoring data by making them as accessible as possible to consumers. Typically, this requires States to create multiple presentations of their data, varying the format according to the needs of various audiences.

This section begins with a list of actions that monitors can take to promote the use of monitoring information. It is followed by a description of ways in which several States use their monitoring information to accomplish a wide variety of goals.

### Promoting the Use of Monitoring Information

#### Disseminate Information Appropriately

Just as different consumers of monitoring data need different types of information, they also look at the same information in different ways. Therefore, monitors need to present the same information differently to different people:

- *Grants managers* need regular reports on individual subgrantees, including both expenditure and outcome data.
- *Formula grant program administrators*, who often lack the time to review detailed reports, may be primarily interested in trends and in a small number of measures for individual projects. Often, administrators can specify the measures that they find most useful.
- *Other government agencies*, such as State “drug czars,” are usually primarily interested in programwide outcome measures, trends, and the regional distribution of effort, rather than in data for individual projects.
- *The public* is rarely interested in distinguishing activities by their source of funding; they are usually better served by reports that synthesize monitoring data with several other data sources to portray drug problems and drug control efforts statewide. Drug czars, Governors, and legislators are also likely to use such reports and sometimes sponsor their production.

#### Provide Information Quickly

Timeliness is crucial to effective use of monitoring data. The Anti-Drug Abuse Act of 1988 imposes a number of strict deadlines on crucial decisions: on the submission of the strategy, on responses to subgrant applications, and on the

release of funds. Moreover, formula funds are often used to address problems in urgent need of attention. Therefore, decisions cannot be postponed until monitoring information becomes available. Instead, monitors should report the information they receive as quickly as they can analyze it. Regularity and timeliness of these reports are essential; it is better to submit an early report with an analysis focused on only several areas than to wait until a full analysis can be completed.

### **Formalize Procedures for Responding to Monitoring Information**

In addition to appropriate and timely dissemination of information, States may want to create a system under which particular management actions—the provision of technical assistance, the initiation of an extra site visit, the refusal of continuation funding, or the cancellation of a grant—are triggered by particular types of monitoring information, like a certain percentage fall in arrests or failure to staff a subgrant completely within a specified period. This requires monitors to work with other State staff to determine what appropriate triggers might be, to develop mechanisms to inform staff when triggers are reached, and to monitor the results of any State action.

### **Solicit Feedback From Information Consumers**

Information needs are not static. If monitoring information is not being used, this may mean that priorities have changed since information needs were last defined. Monitors should solicit consumers' views of the utility of the information they receive and ask them to suggest changes they would find valuable.

This suggests that the entire monitoring design process—defining needs, creating a system, and assuring that information is used—must be undertaken on a periodic basis. States should not expect complete stability once a system is designed, and their work should reflect the likelihood the system will need to adapt to changing needs and conditions. Of course, precipitous changes should be avoided, but the goal of consistency should not be allowed to eclipse the need for responsiveness.

### **Monitoring as a Tool**

This section discusses the ways in which several States use monitoring as a tool for improving the quality of their activities. It discusses the use of monitoring data in four different areas:

- Day-to-day management of subgrants.
- Development of the State strategy.
- Evaluation.
- Communication between the States, the Bureau of Justice Assistance (BJA), and subgrantees.

## **Monitoring as a Tool for Grants Management**

The key to the effective use of monitoring information for the day-to-day management of grants is to ensure that relevant information reaches grants managers in a regular, timely fashion, and that grants managers are equipped to respond to it. States have approached this activity in a variety of ways.

California uses site visits to determine whether special conditions, unusual levels of supervision, or other actions should be taken. Site monitors are asked to indicate whether such actions are required or recommended and to discuss their reasons.

In Montana, quarterly reports from each subgrantee are circulated to all members of the Board of Crime Control staff. Each staff member is asked to comment on the report and then circulates it to the next member. This process results in a set of comments for each subgrant from a variety of perspectives: top management, information system managers, and experts on a wide variety of substantive program areas. The comment form is then returned to the grants manager for action. In addition, there are regular staff meetings in which any subgrants that have had particular needs, problems, concerns, or successes are discussed.

In Massachusetts, site visits are made by pairs of staff members. One, from the "evaluation unit," concerns herself with data collection; the other, from the "monitoring unit," focuses on the projects' needs for technical assistance. The "monitoring unit" then follows up the site visit report to make sure that the needed assistance is provided. Information from both units is filed in project files that are then available to both groups.

While Massachusetts uses the terms "evaluation" and "monitoring" in unique ways, States such as Virginia also route monitoring forms to individuals responsible for technical assistance (although Virginia does not provide monitoring and assistance services simultaneously). The integration of monitoring forms with grants management records is crucial in this regard because it allows both monitors and grants managers identical access to complete reports of data, the action taken, followup, and results on a project-by-project basis.

In Missouri, grants management is almost the exclusive focus of the monitoring program. Both monitoring forms and site visits focus on implementation rather than outcome measures and are geared toward quickly identifying and resolving any problems that arise regarding project implementation. Close attention is paid to expenditure data, and there is strong cooperation between fiscal and monitoring staff.

## **Monitoring as a Tool for Strategic Decisionmaking**

The development of the State strategy is a complex process, which varies widely from State to State and is influenced by a large number of factors (Dunworth and Saiger 1991). It is difficult to isolate the impact of monitoring data on that

process. However, some States have developed particular mechanisms by which monitoring data animate the strategy.

In the case of Massachusetts, these mechanisms resulted from the high level of involvement of the administrator of the program in developing a statement of information needs. Since Massachusetts funds a large number of multijurisdictional task forces, the administrator found that she needed a simple tool to compare their outputs and chose the ratio of personnel expenditures to task force arrests. As a result, monitoring data are used to produce quarterly reports that contain only a few data elements, this ratio among them. The administrator notes that these reports are useful both because they contain the measures that she needs and because they omit measures that are extraneous.

In Ohio, monitoring data are used as part of a formal scoring process to rank proposals for new and continuation funding. The qualitative portions of monitoring reports are also used to prepare comments that accompany the scores. Thus, monitoring data have a direct impact on State funding decisions.\*

### **Monitoring as a Tool for Evaluation**

The emphasis of the formula grant program on evaluation is relatively recent, and State approaches to evaluation are only beginning to mature. However, some States have begun to integrate their monitoring and evaluation activities.

Two of these States—Ohio and Massachusetts—have similar evaluation strategies. Rather than focusing evaluation efforts on only one or a few subgrants, they evaluate classes of projects. Ohio is evaluating all of its multijurisdictional task forces, prosecution programs, and crime labs as a group; Massachusetts' evaluation effort covers all of the projects it funds. This evaluation strategy is particularly suited to the use of monitoring data, which are maintained using similar data collection instruments for multiple projects.

In Massachusetts, these analyses form the basis of an annual report of the evaluation unit to the program director. The report presents basic data, both quantitative and qualitative, for all projects: goals, accomplishments, expenditures, and outcomes. The report is designed to allow easy comparison among projects; for instance, the percent of funds used for equipment can be found for all funded projects at a glance (see budget chart). These reports are now being generated on a retrospective basis for all program years since fiscal year 1987.

---

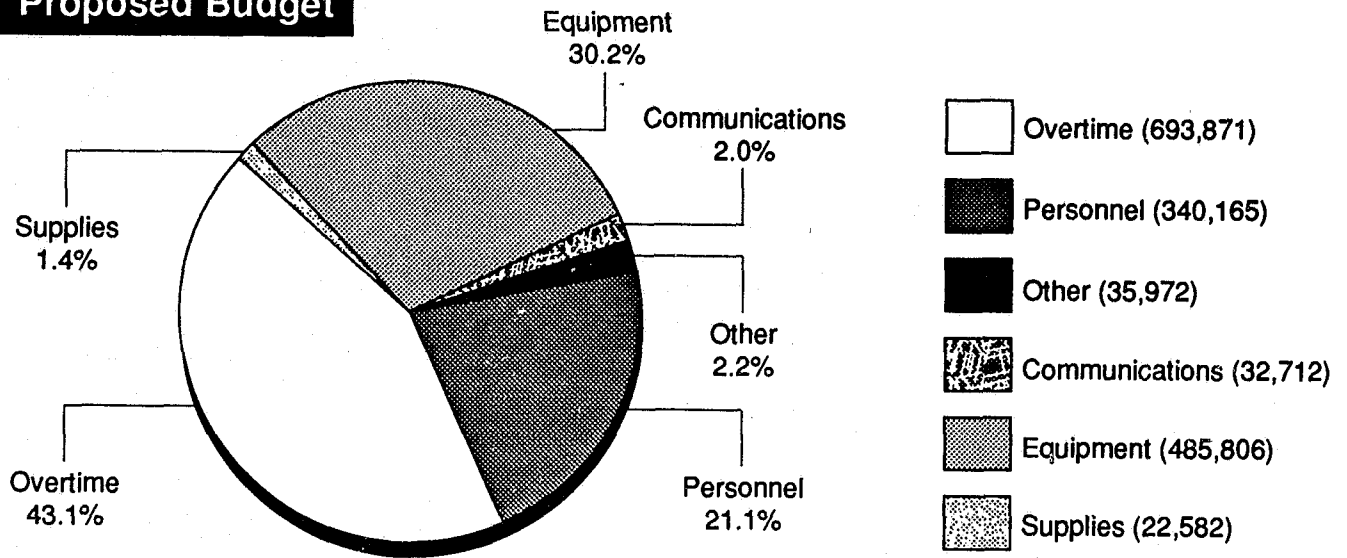
\* This impact occurs within the constraints imposed by Ohio's formula system for distributing subgrants. Total allocations to purpose areas and regions are set independently of monitoring data. However, within each area, scores are used to allocate funds.

# Proposed Budgets and Actual Spending

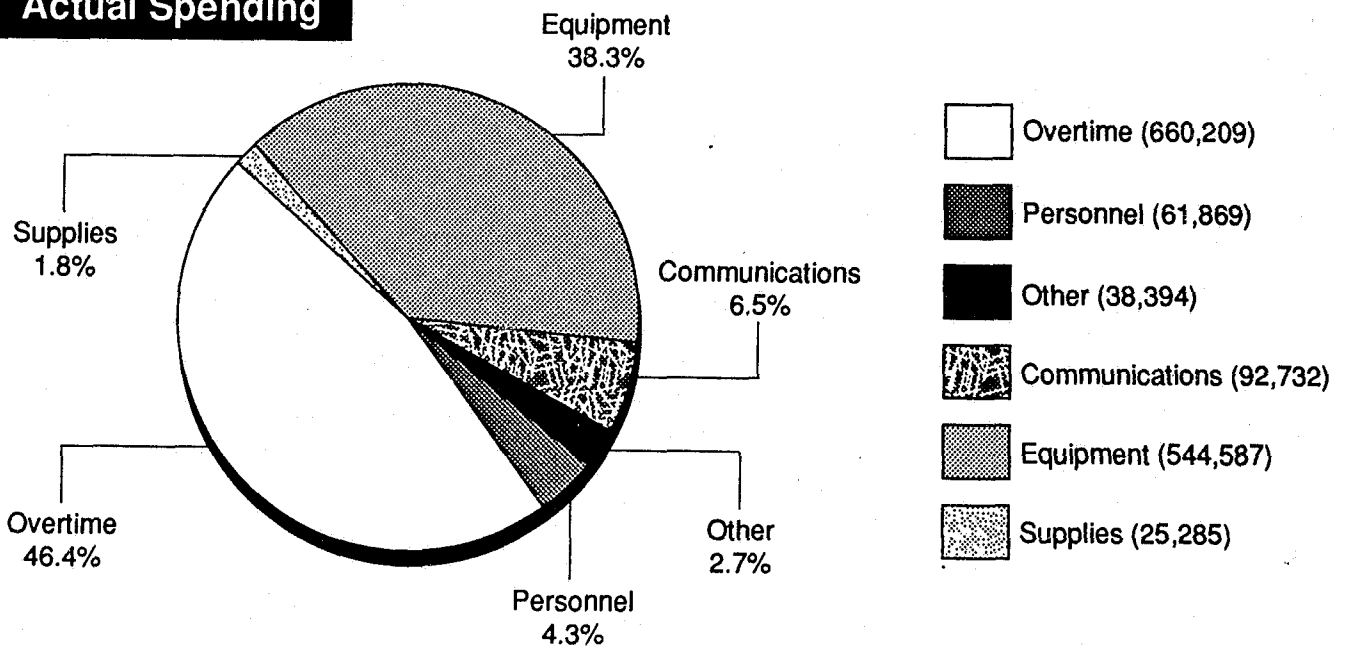
## First Year of Anti-Drug Abuse Act

### Task Forces and Target Cities (N=20)

#### Proposed Budget



#### Actual Spending



Narrower evaluation strategies generally rely less heavily on monitoring data. Monitoring is also important for such States, however. It provides baseline and retrospective data; assists in the development of data collection techniques; and can be used to interpret evaluation results by providing a basis for comparison among the evaluated project and other, similar efforts.

### **Monitoring as a Tool for Communication**

Finally, monitoring is a tool for communication. All States use monitoring data to meet the BJA reporting requirement. As we have noted, this function allows BJA to manage the program and makes an important contribution to congressional debates over program funding.

Several States also use monitoring data to provide written feedback to subgrantees. Massachusetts has found that subgrantees find it extraordinarily valuable to receive simple analyses and even restatements of their own project narratives. The State generates these analyses with very little effort, but this relatively trivial investment of effort has generated considerable goodwill among subgrantees. Perhaps more important, such reports often contribute to midcourse corrections in subgrant activities.

Similarly, Ohio provides the results of its monitoring/evaluation effort to subgrantees. In fact, a primary motivator of the Ohio evaluation strategy is the utility of such evaluations to individuals working at the subgrantee level.

Virginia and Ohio also use monitoring data, along with a wide variety of other data sources, to produce general reports on their States' drug and crime problems and on efforts to control them (Ohio Governor's Office of Criminal Justice Services 1989; Virginia Department of Criminal Justice Services 1991). These reports, meant both for internal use and for wide distribution both inside and outside of government, emphasize graphic presentation as a way of making the data as accessible as possible. The reports make no effort to distinguish among activities funded by the formula grant and those supported by other means. Instead, the goal is to generate greater understanding of State drug control efforts as a whole.

### **Summary**

The value of a monitoring system lies in the use of the data that it collects. Monitoring information is an effective tool for a wide variety of State functions: grants management, strategic planning, evaluation, and communication. A thorough monitoring plan that lists the ways monitoring information is to be used is necessary but insufficient; States must also act to ensure that information is actually used.

## **6. Automation and Monitoring**

The computerization of a monitoring system offers States very important advantages. However, these advantages should be measured against automation's potentially dramatic costs. Although the proliferation of microcomputer technology has made hardware quite affordable, the design and maintenance of the necessary software systems can be extremely expensive. Therefore, system designers should be especially careful when choosing whether and how to incorporate information technology into a monitoring system.

There are three principal models for integrating computers into monitoring systems:

- Fully automated systems in which both subgrant data reporting and State data management and analysis are integrated into a single computerized package.
- Mixed systems in which some functions—typically State-level data analysis—are fully computerized, but others, such as subgrantee reporting, are manual.
- Systems in which computers are used only to supplement standard manual procedures that of themselves constitute a complete information system.

Choosing among these models is a difficult process; each has important advantages and disadvantages. The final choice depends on the priorities, resources, and capabilities of the individual State. In making that choice, however, it is important to consider the costs of each model—in money, management time, and utility of monitoring data—as well as its benefits. The costs and benefits of each model are spelled out in more detail below.

### **Full Automation**

In a fully automated system, States use the computer as the principal tool for data storage, management, analysis, and reporting. Subgrants are required to report monitoring data in a computerized format compatible with the system.

Full automation provides States with several very useful capabilities:

- Data can be analyzed in a comprehensive fashion very quickly.
- Sophisticated statistical techniques can be used.
- “What-if” analyses can be conducted.
- Computerized reporting can check for internal and cross-project consistency and allow subgrantees to make any necessary revisions before reports are filed.

- Significant warning signs or changes in subgrant reports can be flagged automatically for immediate State action.
- Expenses associated with entering written data and managing written forms are eliminated.

These benefits are substantial and have led States such as Florida to adopt a fully automated approach. Full automation, however, also carries substantial costs. For example, Florida now includes in each of its subgrant awards funds for the purchase, maintenance, and use of a computer. While such hardware costs do not dramatically increase subgrantees' expenses, the cost can be significant in small States that make a relatively large number of grants to poor jurisdictions.

Far more substantial than hardware costs are the expenses associated with the development and manipulation of information management software. The nature of these costs largely depends on whether States choose to develop their own systems or to purchase commercial software packages.

Inhouse software development allows States to tailor software specifically to their own needs. Software development, however, is always expensive, nearly always time consuming, and often a frustrating process. Many States underestimate the amount of money, time, and effort that will be required, with the result that the initial effort falls short and must be repeated. This is especially true because the specifications for the desired software often become increasingly unwieldy over time as problems are identified or new capabilities are requested. When this occurs, the process balloons. Substantial expense and delay often follow and persist well into the period of initial implementation; even thorough testing cannot anticipate the problems that will arise when the system is actually used.

Buying commercial software avoids some of the costs and delays of writing and debugging programs. Commercial programs, however, must still be adapted for use as monitoring tools, and this adaptation effort has some of the features of full-blown software development. The development costs that are avoided, moreover, may be balanced by the fact that commercial programs often lack particular capabilities that would be useful or even necessary.

States contemplating a program of full automation should create a detailed statement of necessary and desired features of the computer system. They should also make a generous cost estimate. These plans should guide both the decision to proceed and the choices among commercial software packages and between commercial software and inhouse software development.

### **Automating Particular Monitoring Tasks**

States need not resort to full automation in order to enjoy some of the benefits of information technology. Many States, while retaining manual reporting and site visit forms and manual procedures for project management, use the computer to analyze the monitoring data they receive. This requires States to invest in data



entry costs—entering data into the computer and checking data once entered—and does not extend the benefits of computerization to subgrantee reporting or to grants management. However, data storage and analysis are the areas in which computers are most valuable, and restricting their use to these functions allows States to design sparser, more manageable, and less expensive computer systems.

States still must invest in developing a computer system; again, inhouse development offers more advantages but also more costs. However, States restricting the computer's functions to data base management and analysis will find a wider range of commercial software than those looking for a full-blown reporting, data base, and management system.

Several States that use computers in this way have opted to work with the consortium data management system (CDMS) software. CDMS has several advantages: the software was developed with the needs of the formula grant program in mind; it is compatible with many commercial statistical packages; it is compatible with the monitoring forms developed by the consortium; the costs of software development are borne by the consortium rather than the States; documentation and assistance are available from the consortium; and States can make suggestions for software improvement.

At the same time, because CDMS is restricted to several purpose areas, it does not meet *all* the monitoring needs of any State. Moreover, since CDMS now focuses on particular substantive areas, it may be unsuitable for many of the needs of a particular State. In such cases, States may choose not to use CDMS or may supplement it with other automated or manual procedures.

### **Supplementing a Manual System With Computers**

In the models discussed above, computers are an integral part of the monitoring system. Alternatively, States can design a monitoring system that is independent of computers—i.e., in which core subgrant reporting, data management, and analysis functions are done manually—but where computers can be employed to assist in these tasks at the discretion of subgrantees in the States. For example, subgrantees could choose to computerize their reports to the State, or State monitors could use a spreadsheet program to analyze a given set of monitoring data in a particular way.

This approach spares the States the costs of fully integrating information technology into the monitoring system. This is a substantial savings in the short run, because startup costs for computerization are high. Instead, States and subgrantees can use the computer on a task-specific basis, often with machines already in use for word processing and other applications.

However, this approach restricts the benefits that computerization offers. The cost of each marginal use of the computer is high; for example, data entered into the computer must still be maintained manually, and data used in different contexts

must often be keyed for each application. Analysis of data over time or cross-project analysis is often impossible.

As States and subgrantees begin to depend on computers more and more, these costs can become dramatic. This often leads States to contemplate a change in approach.

## References

- Arkansas Department of Finance and Administration, Office of Intergovernmental Services. N.d. *Arkansas Drug Law Enforcement Program: Project Monitoring and Evaluation*. Little Rock.
- Bureau of Justice Assistance. 1989. *Drug Control and System Improvement Formula Grant Program: Annual Project Report Forms*. Washington, D.C. October.
- \_\_\_\_\_. 1991. *The Edward Byrne Memorial State and Local Law Enforcement Assistance Programs: FY 1991 Formula Grant Program Guidance and Application Kit*. Washington, D.C. April.
- California Office of Criminal Justice Planning. 1990. *Anti-Drug Abuse Program Evaluation, January 1988-June 1989*. Sacramento.
- Dunworth, Terence, and Aaron Saiger. 1991. *State Strategic Planning Under the Drug Control and System Improvement Program*. Santa Monica, RAND, N-3339-NIJ.
- Florida Department of Community Affairs, Bureau of Public Safety Management. N.d. *Strategy Development and Application Preparation*. Tallahassee.
- General Accounting Office. 1984. *Better Monitoring and Recordkeeping Systems Needed To Accurately Account for Juvenile Justice Practices*. Washington, D.C. 9 July.
- Hatry, Harry, et al. 1973. *Practical Program Evaluation for State and Local Government Officials*. Washington, D.C., The Urban Institute.
- \_\_\_\_\_. 1976. *Program Analysis for State and Local Governments*. Washington, D.C., The Urban Institute.
- Mayors, Teresa, Pamela Lemoine, and Elizabeth Dillon. 1990. *Program Implementation: First Year of the 1986 State and Local Narcotics Control Assistance*. Boston, Massachusetts Committee on Criminal Justice. August.
- Mayors, Teresa, Pamela Lemoine, and Martha DeMaio. 1990. *Program Implementation: Second Year of the 1986 State and Local Narcotics Control Assistance*. Boston, Massachusetts Committee on Criminal Justice. December.
- National Institute of Justice. 1989. *Evaluating Drug Control and System Improvement Projects: Guidelines for Projects Supported by the Bureau of Justice Assistance*. Washington, D.C. August.
- National Institute of Justice and Bureau of Justice Assistance. 1990. *Evaluating Drug Control Initiatives: Conference Proceedings*. Washington, D.C. June.
- Office of Justice Programs. 1991. *Program Monitoring Desk Book for the Bureau of Justice Assistance, Office of Justice Programs*. Washington, D.C. April.
- Ohio Governor's Office of Criminal Justice Services. 1989. *Understanding the Enemy: An Informational Overview of Substance Abuse in Ohio*. Columbus. November.
- Public Technology, Inc. 1978. *Program Evaluation and Analysis: A Technical Guide for State and Local Governments*. Washington, D.C., U.S. Department of Housing and Urban Development.
- Siegel, Lawrence G., and Martin J. Molof. 1979. *A Handbook for Planning and Performing Criminal Justice Evaluation*. McLean, Virginia: MITRE Corporation, 1979.

Texas Office of the Governor, Criminal Justice Division. 1990. *Texas Narcotics Control Program: FY 1990 Application Kit*. Austin. January.

U.S. Department of Housing and Urban Development. 1987. *Practical Techniques and Uses of Evaluation in the State CDBG (Community Development Block Grant) Program*. Washington, D.C.

Virginia Department of Criminal Justice Services. 1991. *Drugs in Virginia: A Criminal Justice Perspective*. Richmond.

\_\_\_\_\_. 1991. *Program Guide: Grants for Narcotics Control Assistance and Criminal Justice System Improvements*. Richmond. January.

Waller, John D., et al. 1974. *Monitoring for Criminal Justice Planning Agencies*. Washington, D.C., Law Enforcement Assistance Administration.

For more information on the National Institute of Justice, please contact:

National Institute of Justice  
National Criminal Justice Reference Service  
Box 6000  
Rockville, MD 20850  
800-851-3420

The Assistant Attorney General, Office of Justice Programs, establishes the policies and priorities, and manages and coordinates the activities of the Bureau of Justice Assistance, Bureau of Justice Statistics, National Institute of Justice, Office of Juvenile Justice and Delinquency Prevention, and the Office for Victims of Crime.

**U.S. Department of Justice**  
Office of Justice Programs  
*National Institute of Justice*

*Washington, D.C. 20531*

Official Business  
Penalty for Private Use \$300

BULK RATE  
POSTAGE & FEES PAID  
DOJ/NIJ  
Permit No. G-91

**Guidelines for State Monitoring Under the Drug Control Formula Grant Program**

National Institute of Justice