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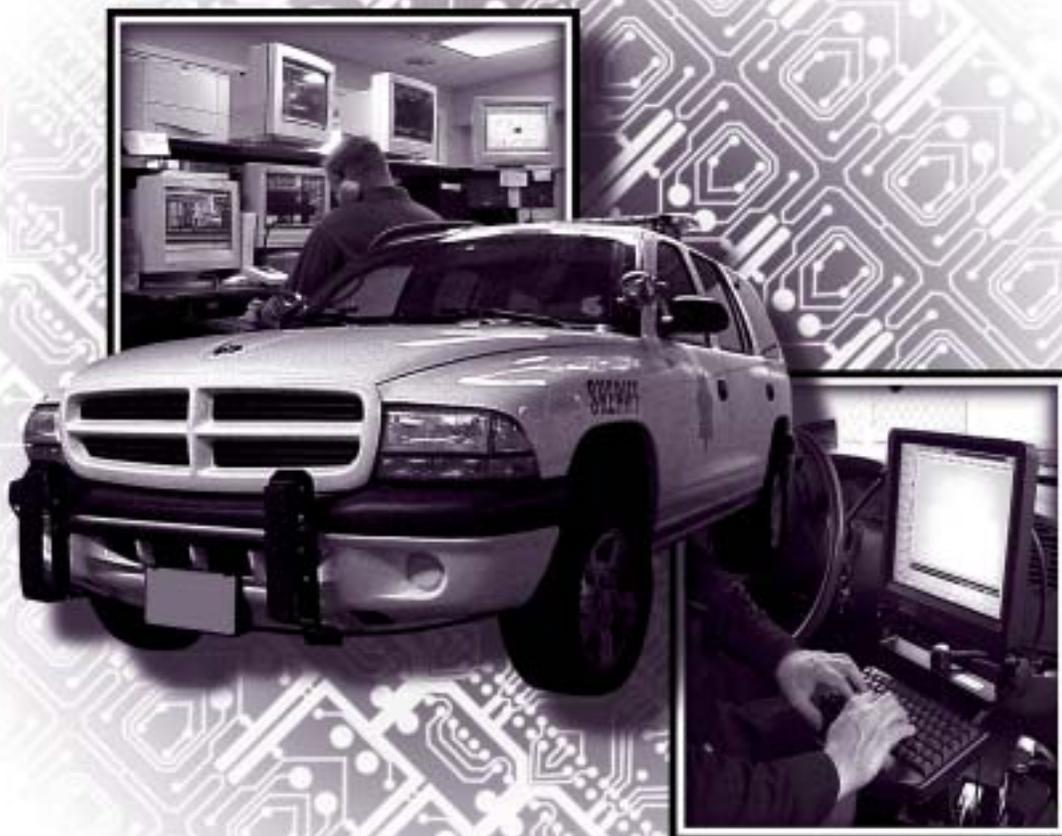
COMMUNITY ORIENTED POLICING SERVICES
U.S. DEPARTMENT OF JUSTICE

LAW ENFORCEMENT

Tech Guide

How to plan, purchase and manage technology (successfully!)

A Guide for Executives, Managers and Technologists



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U.S. Department of Justice
Office of Community Oriented Policing Services

Law Enforcement Tech Guide

How to plan, purchase and manage technology (successfully!)

A Guide for Executives, Managers and Technologists

By Kelly J. Harris and William H. Romesburg

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U.S. Department of Justice

Office of Community Oriented Policing Services

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Dear Colleague,

Technology has long been a two-edged sword for law enforcement. While the benefits of implementing technology are obvious, the obstacles to getting the most from that technology often are not. In a time when growing responsibilities greatly increase the duties of local law enforcement agencies, a natural response is to turn to technology as a force multiplier. The COPS Office presents this guide in an effort to make the process of fully leveraging new technologies as seamless as possible.

Technology can help law enforcement agencies better serve their communities by automating time-consuming tasks, dispatching personnel more efficiently, and improving an agency's ability to collect and analyze data as well as disseminate it to both internal and external audiences.

Implementing technology can be a long and difficult process. Before new technology can be implemented, the organization's needs must be determined, its relevant business processes analyzed, and its full range of options evaluated. Many law enforcement agencies have difficulty dedicating personnel, expertise, and funds for such a project. COPS grants help support agencies in their efforts to embrace new technologies.

This guide is designed to help law enforcement agencies implement new technologies. It contains step-by-step analyses of the technology planning, acquisition, implementation, and integration processes that focus clearly on supporting public safety and community policing objectives.

This guide is designed to help you reduce crime and disorder through the successful utilization of information technology. I wish you the best of luck in harnessing technology to better serve your communities. Now more than ever, community policing keeps America safe.

Sincerely,

A handwritten signature in black ink that reads "Carl R. Peed".

Carl R. Peed
Director

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About Us

SEARCH, The National Consortium for Justice Information and Statistics, is a nonprofit organization of the States dedicated to improving the criminal justice system and the quality of justice through better information management, the effective application of information and identification technology, and responsible law and policy.

We serve the Nation's justice agencies — police and sheriffs' departments, courts, prosecution and public defense, juvenile justice, corrections/jails, probation/parole and criminal history record repositories — through a broad array of activities, resources and products. Our focus is on criminal history systems, integrated justice information systems, information technology (planning, purchasing, managing) and cybercrime investigation. Our services include in-house and onsite technical assistance and training, resource development (Websites, publications, white papers, conferences, workshops), public policy assistance and model development (model legislation, standards and procedures, best practices) in these focus areas. SEARCH online resources provide information on law enforcement IT, integrated justice, justice software solutions and IT acquisition at www.search.org.

About the Authors

Kelly J. Harris is Director of Justice IT Services for SEARCH, where she develops and directs activities and manages staff under three programs: the National Technical Assistance Program, the National Clearinghouse for Criminal Justice Information Systems, and the Community Oriented Policing Services Making Officer Redeployment Effective (COPS MORE) Technical Assistance program, all funded by bureaus and agencies of the U.S. DOJ. Kelly has organized numerous national symposia on justice integration, conferences on justice, e-government and the Internet, and workshops on justice IT issues. She also has written many articles, technical bulletins and reports for publication by SEARCH or the U.S. DOJ on justice system automation and integration. Kelly has a bachelor's degree in Political Science and Communications from the University of California, Davis.

William H. Romesburg is a SEARCH Consultant, as well as a Public Safety Consultant for Cit Com. Inc., where he manages programs to ensure that planned and developed methods and procedures are in place for successful implementations of public safety technology. Bill has served as consultant to dozens of law enforcement agencies throughout the United States on public safety and automation projects, including agencies in Alaska, California, Texas and Ohio. He has also held several law enforcement positions, including police and fire dispatcher for 3 years and sworn police officer for 6 years. Bill has a master's degree in Public Administration from California State University, Fullerton, and earned a Level 2 certification from the Project Management Institute.

During 2001, Kelly and Bill presented a series of five national technical assistance workshops on "Law Enforcement Technology IT Planning and Implementation" to the COPS MORE Top 100 grantees (those grantees with the largest dollar amount in grants and, therefore, the most full-time officers to redeploy). The regional workshops, funded by a COPS Office grant, provided tools and resources to help those agencies overcome obstacles to technology implementation. Kelly's and Bill's efforts focused on mobile computing issues and technologies, as well as computer-aided dispatch and records management systems (CAD/RMS), procurement processes and other issues.

Kelly and Bill have provided technical assistance to dozens of State, local and regional law enforcement agencies that addresses their IT needs. This assistance includes technology planning, development, improvement, acquisition, management and integration of justice information systems, including CAD/RMS, mobile computing, field reporting, jail management and crime analysis technologies. Their background in IT project management, combined with the onsite work they have conducted nationwide and the valuable lessons they learned from the COPS MORE workshops, means they have seen what works and what doesn't. Their experience has shown that employing tools to improve information management — such as decisionmaking structures, strategic plans,

project management best practices and policies and standards — are critical to the success of law enforcement IT acquisition. They have compiled best practices, procedures and strategies for successfully undertaking complex law enforcement IT initiatives, and are ready to share their knowledge and expertise.

Law Enforcement Tech Guide Review Committee

SEARCH extends its deepest thanks and appreciation to the following members of the Law Enforcement Tech Guide Review Committee, who participated in an advisory capacity during the preparation of this Guide. These individuals have direct experience in law enforcement IT planning, procurement, implementation and management and generously contributed their time and expertise over a period of many months, providing critical review and comments on early drafts of the Guide, as well as insights on law enforcement IT projects that were incorporated throughout this document. Their contributions to the successful completion of this Guide cannot be overstated.

Piper Charles

Major, Charlotte-Mecklenburg (NC) Police Department

Ronald Glensor

Deputy Chief, Reno (NV) Police Department

William Telkamp

Commander, Altamonte Springs (FL) Police Department

Gordon Wasserman

Chief of Staff, Philadelphia (PA) Police Department

**About
the
Guide**

About the Guide

Your agency needs a new computer-aided dispatch, records management, automated vehicle location, evidence management, fingerprint identification, crime analysis and/or some other automated information system. So where do you start?

Sure, there's lots of literature out there on project planning and management, information technology (IT), strategic planning and the like (and we encourage you to read it, so please see Appendix 3 of this Guide for references to publications we recommend). But there are some special challenges that government agencies and law enforcement, in particular, must contend with when they plan, buy, install and use new technologies. Unfortunately, as many of you who have already experienced purchasing and implementing new technologies know, the process is simply not as easy as buying a product, plugging it in and flipping a switch. **Whether you buy an off-the-shelf solution or build a custom system in-house, it is essential that certain steps be taken to ensure that the project has the proper user support, is clearly defined, stays on track and within budget, is designed to meet specific business needs or solve a particular problem, and can operate within the constraints of a new or existing technical environment.**

This Guide presents accepted and standard project management principles and strategies, but it has been adapted to and designed for the unique needs, limitations, challenges and opportunities faced by the law enforcement community. It details how an agency can plan for, purchase, implement and use computer-aided dispatch, records management, jail management and mobile data systems, to name a few. Regardless of the technology your agency would like to pursue, these are standard processes that you should follow in planning, purchasing and implementing a solution.

This Guide is particularly beneficial because much of the material and information has been shaped by the successes, failures and lessons learned by law enforcement agencies across the country as they navigated through these difficult projects.

HOW TO USE THIS GUIDE

The Law Enforcement Tech Guide is intended to provide strategies, best practices, recommendations and ideas for successful IT planning and implementation. This Guide should not be construed as specific legal advice for any specific factual situation. This publication is meant to serve as a guideline for situations generally encountered in IT planning and implementation environments. It does not replace or supersede any policies, procedures, rules and ordinances applicable to your jurisdiction's procurement and contract negotiations. This Guide is not legal counsel and should not be interpreted as a legal service.

Assumptions...

...About You

To prepare this Guide, we had to make some assumptions about you, the reader. We think you could be one of many different people within your agency, and perhaps a combination of several. Perhaps you are the Chief or Sheriff who must lead this effort. Boy are we proud of you for picking up this book — keep reading, you are critical to this effort! Or you may be a supervisor, manager, records clerk, dispatcher or detective. In any case, you were imprudent enough to volunteer to shepherd this effort, or you inherited this project unwittingly (or unknowingly), but certainly not by choice. Your knowledge of the agency's operations, the movement of and need for information to accomplish your daily business needs, and your talent for making critical law enforcement decisions is integral to this project's success.

You may be the person in your agency responsible for technical support (and that does not exclude you from also being one of the other types of readers as well!). If so, you will be called upon to analyze existing and new technologies and help determine the best technical solutions to meet the business needs of your agency.

Finally, you may be a project manager who possesses useful project management skills, yet who has little experience with law enforcement. Or, you may not have any project management skills, but you've been assigned to manage this task nonetheless. Either way, your role of project manager is pivotal to this effort. You're the "go-to" person for project information and coordination. You have the unenviable responsibility of keeping the project on track and within budget while adhering to the established timeframes.

In most law enforcement agencies, both sworn and civilian personnel must wear many different hats; very few agencies have the resources for a fully staffed IT support department or to hire a dedicated project manager. We assume many of our readers will fall into one or more of the categories above. If so, this Guide is for each of you.

...About Your Project

This Guide makes the assumption that your project has already been funded, and/or a decision has been made to move forward with the project. It does not assume, however, that funding has been set aside for project management because all too often we find that is not the case.

How this Guide is Organized

This Guide is organized into six Parts that reflect key elements of the IT planning, buying and implementation process:

Part I	Build the Foundation
Part II	Conduct a Needs Analysis
Part III	Create a Project Plan
Part IV	Acquire the Technology
Part V	Implement the Technology
Part VI	Maintain the Technology

If your project is already underway, you could easily skip right to the “Part” that best reflects where you are in your current project. However, because each Part builds upon the preceding, we encourage you to read *all* parts and chapters, regardless of your project’s current status. You may, for example, be at the point of purchasing your technology, so Part IV would be most suited to your immediate information needs. In this case, we suggest that you also review the previous chapters, as they provide key guidance on strategies to make the purchasing process easier and ensure that you buy the right solution for your agency (for example, how to garner end-user involvement and support for the solutions selected, precisely identify the operational requirements for the system, establish risk management plans and formulate a solid budget, among other tasks).

This Guide is also packed with a variety of tools. In the margins and throughout the pages of the Guide, you will find tips, checklists, suggested techniques, definitions and other helpful how-to information. Each chapter, for example, begins with a section that answers the four “W”s about the topic: **What** is it, **Why** do it, **Who** is involved and **When** to do it. At the end of each Part is an Assignments Table, where we provide specific action items for key members of the project team for a “quick and easy” reference to major tasks and responsibilities relevant to that Part. We have included appendices with references to resources, sample documents, checklists and other tools to assist you during your project planning, purchasing and implementation process. Icons used throughout the Guide will direct your attention to specific issues or topics.

Definition of Icons

Throughout this Guide, icons are used to draw your attention to important concepts, ideas and, in some cases, warnings. We also use icons to highlight sections that certain personnel within your agency should pay particular attention to. Below are the icons and what they represent.



Executive Sponsor

The Executive Sponsor (defined on page 24) is the project spokesperson, decisionmaker and leader. Executive Sponsors, primarily the Chief or Sheriff or other high-ranking decisionmaker within an agency, will find recommendations and advice just for them when they see this icon in the margins.



Operational Experts

Operational Experts are the end users of the technology and those intimately involved with the business processes of the law enforcement agency, and can include patrol officers, records clerks, dispatchers, detectives, crime analysts, community-oriented policing experts, etc. Words of advice for Operational Experts will accompany this icon.



Technical Experts

Technical support staff will be busy not only analyzing the existing technological environment, but also evaluating technical solutions. These Technical Experts will benefit from recommendations indicated by this icon.



Project Manager

The Project Manager has a lot to juggle when it comes to overseeing the planning, purchasing and implementation of IT. This icon will alert Project Managers to activities, issues and concepts they must be careful not to overlook during each of these phases.



Stop Sign

Remember what we said: Lots of IT projects fail. When you see a stop sign icon, pay particular attention, as it will indicate where others have encountered trouble in their projects. The stop sign indicates pitfalls to avoid.



Grant Requirements

Be accountable to your grants. This icon will alert you when grant requirements may come into play.



Regional

More and more IT efforts involve more than one agency and jurisdiction. This icon symbolizes multijurisdictional and regional efforts. When you see it, it will provide special advice for dealing with the unique nature of regional IT projects.



Tips

If we've heard or know of shortcuts or have useful ideas on how to tackle a particular issue, we'll use this icon to let you know.



Checklists

Checklists are always handy tools for making sure all the bases and steps are covered. We'll use this icon when we can provide a handy list of ideas or to-dos for your project.

Where to Go from Here

So, how does your law enforcement agency navigate this minefield of IT projects and planning? How do you set up an appropriate chain of command to provide leadership and decisionmaking on these projects? What are the critical elements that shape a successful plan for IT purchase and implementation? What do you need to be aware of when you buy technology? How do you appropriately manage risk associated with these projects? How do you manage change and ensure user support for the solution your agency purchases? If you are asking these questions, congratulations! You have made the first steps toward a rational and strategic approach to your IT initiative. Keep up the questioning and follow the strategies in this Guide, and you'll be doing your best to ensure IT success within your agency.

Law Enforcement IT Projects: A Roadmap to the Guide

