

Public safety agencies routinely cite funding as the single biggest obstacle they face in modernizing their push-to-talk radio systems. Insufficient funding precludes many agencies from implementing needed capabilities and addressing certain requirements, such as interoperability. Initiatives to replace or significantly upgrade public safety communications systems can be costly and often face competition for funding from other worthy public projects. Elected officials and government budget experts face difficult choices when setting public investment priorities, yet they are not always armed with the facts they need to justify high priority for public safety communications projects.

These and other considerations make the funding environment for public safety communications complex. In an effort to raise awareness about these issues and to suggest some possible solutions, the PSWN program has developed this guide. I recommend it to you in hopes that it can be a catalyst for resolving the dilemma faced by many public safety agencies due to funding shortfalls. I would also like to thank those colleagues of mine on the PSWN Executive Committee who contributed to the development of this guide and endorsed its contents. Special thanks go to the members of the Executive Committee's Funding Working Group who gave additional time and effort to complete this guide.

Sincerely,

Mr. Steven Proctor

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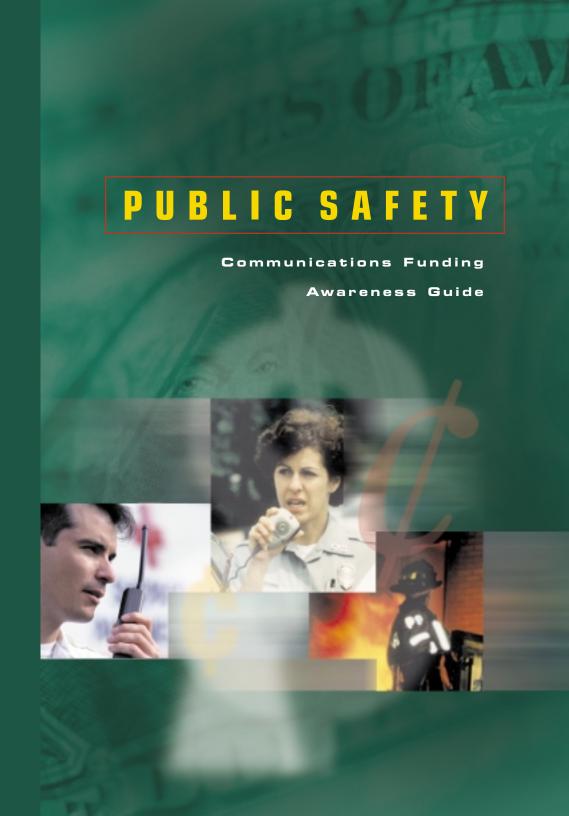
Executive Vice-Chair, PSWN Executive Committee, and Executive Director, Utah Communications Agency Network

#### About The PSWN Executive Committee

The PSWN Executive Committee is comprised of senior-level executives from local, state, and federal public safety agencies from across the country. Members have proven expertise or accomplishments in the field of law enforcement, fire and rescue, emergency medical services, public safety communications and information technology. The objectives of the committee are to raise awareness on the communications difficulties encountered by public safety personnel and to provide program guidance to the PSWN program as it works to achieve interoperable public safety communications.



This guide was prepared by the Public Safety Wireless Network (PSWN) program. This program is a joint initiative of the Department of Justice and the Department of the Treasury. For more information, visit the web site at www.pswn.gov or call 800.565.PSWN.



hen families are in danger because of medical emergencies, natural disasters, or crime, response time is measured in lives, not seconds. When a police officer needs backup, or when a firefighter is trapped in a burning building, the ability to receive help immediately can make the difference between life and death. Public safety operations require clear, timely, and secure communications among fire, emergency medical, and law enforcement personnel.

Despite this critical need for effective communications, public safety agencies throughout the Nation often struggle to finance their radio systems. Frequently, covering basic maintenance costs is a challenge. Obtaining funds for a major upgrade, or for a complete system replacement, is nearly impossible.

As government officials make decisions that define policy and fund government services, they are faced with hundreds of competing needs. Of these, perhaps none is more visible or vital than public safety. However, public safety personnel rely on an extensive communications infrastructure that remains under-funded. Public safety communications projects often do not receive high priority, in large part because elected officials and budget directors are not provided with sufficient information to justify the needed expenditure. This situation needs to be rectified—public safety

communications systems must be funded adequately and prioritized to ensure public safety agencies can fulfill their mission of protecting life and property.

Santee takes out loan for radio system

January 29, 1999

The city [of Santee] is taking out a \$1.2 million loan to pay for its share of a regional emergency communications system...The funds will help finance the \$83 million, 800 megahertz systems, a countywide effort enabling fire and law enforcement agencies to communicate on the same frequencies. The money will be used to buy radios and other equipment for Santee fire and sheriff's personnel...Santee's portion will be financed under a 10-year "lease-purchase" agreement...

#### What Is The Problem?

Funding is the primary obstacle for implementing and maintaining effective public safety communications systems for a number of reasons. Recognizing and addressing these reasons is essential to obtaining the communications systems that public safety officials need.

#### **Funding Levels and Mechanisms**

The replacement of public safety radio systems poses a significant fiscal challenge that cannot generally be accommodated within normal operating appropriations. Few jurisdictions have dedicated revenue sources for public safety radio communications. Funding for system upgrades or replacements is in short supply and the means, or mechanisms, for delivering available funds toward public safety communications are quite limited and often not well understood. Many public safety agencies are therefore unable to secure the funds necessary for radio system development.

#### Low Priority

Authorization and funding for these systems is in direct competition with other worthwhile projects. At the local level, radio system projects are traded against other major capital investments, such as new school construction. At the state level, highway improvement initiatives and statewide radio communications systems often vie for the same funds. Federal agencies weigh their radio communications needs against other high-priority information tech-

nology programs. The completeness of funding proposals and spend plans submitted by public safety agencies can greatly influence priority. The extent to which decisionmakers and the public are educated about these proposals and plans, and the degree they are connected to lifesaving public safety services as the end result, are also important determinants of priority.

### Mayor's veto aside, Minneapolis needs regional radio system February 20, 1999

...800-megahertz regional radio system [was] recently vetoed by Minneapolis Mayor Sharon Sayles Belton ... Sayles Belton claims that the low priority, the cost, and the lack of a finance plan for the system prompted her veto...

#### Nature of the Problem

The Washington pos One of the factors frustrating the funding problem is that its specific nature is not well known.

This creates confusion and a high degree of uncertainty for decisionmakers who try to address the problem. For example, the scope of the problem, whether measured in terms of dollars or the number of available mechanisms, has proven difficult to gauge and bound. In addition, public safety communications systems are capital-intensive propositions. Lease options, such as monthly fee-for-use arrangements, are not generally available or are not deemed suitable for mission-critical communications.

# Board Seeks Bond Vote; Emergency Radio System Among Pending Requests

September 3, 1998

The Loudoun County Board of Supervisors agreed yesterday to ask voters whether to spend \$13.6 million on a new emergency radio system for police and fire communications to replace the existing system, which they said is in desperate need of replacement because it does not always work.... County sheriff's officials said the radio system worked when Loudoun had a fraction of its current population. But now, the system is failing in a number of ways. The most significant problem...is that the radios...do not work in many parts of the county.... "The system we've got is too dangerous," said Lt. Greg Stocks... "The longer we go without [a new system], the more chance we have that a citizen is going to get hurt or an officer is going to get hurt or killed."

#### **Knowledge of Existing Mechanisms**

Even though they are inadequate, existing funding mechanisms do provide some resources for sustaining or incrementally improving public safety radio systems. However, the availability, terms, and conditions of these mechanisms are often unknown to many public safety agencies. This significantly limits the ability of these agencies to leverage existing funding sources.

### Cost-Reduction Strategies

Controlling costs of government projects is an everpresent challenge and radio systems projects are no exception. However, traditional approaches to these projects, such as stand-alone systems built to serve one agency or one jurisdiction, preclude more cost effective approaches.

#### **Successful Funding Strategies**

In the past, public safety radio systems have not been routinely replaced. Many suffer from technological obsolescence and are well over 20 years old. Funding strategies for sustaining these systems over their lifetimes have been focused on maintenance, and not on the full lifecycle of system development, which includes replacement. As a result, typical single-year, single-agency funding processes can be incompatible with how today's systems are designed, procured, and maintained.

#### What Has Been Done?

In recent years, some progress has been made to partially resolve elements of the funding problem:

#### **Funding Levels and Mechanisms**

Vice-President Gore's National Partnership for Reinventing Government (NPRG) included the idea of additional funding for public safety wireless systems in its reports on more efficient and costeffective government services. An action item contained in the NPRG report Access

### State Cuts \$100 Million From Radio-tower Leases

April 12, 1999

The system, in the planning stages for four years, was originally estimated to cost \$175 million. The 800megahertz voice and data communications system is designed to cover 97.5 percent of the state, linking the State Highway Patrol and 11 other agencies. The network will replace a hodgepodge of 50-year-old radio systems plagued by dead spots, static, and interference. Gov. Bob Taft, who inherited the project when he took office in January, has been briefed on the revamped plans, according to Brian K. Hicks, his chief of staff. "The project is going forward," Hicks said. "But we expressed some concerns about the overall cost of the Project and time line. We do feel it's a necessary project. Our communications systems is antiquated."

America recommended that an interagency working group led by the Attorney General develop an alternate funding mechanism for this purpose. As a result of this group's efforts, the President's Fiscal Year 2000 budget submittal included \$80 million for planning and demonstration grants to assist in the development of statewide systems. In addition to these federal initiatives, certain states and localities

have established more dedicated sources of funding. These include service surcharges, trust funds, general obligations, and lease revenue. These sources of revenue are specifically applied to public safety communications projects. Also, certain agencies have taken steps to manage expenditure levels to avoid large spikes in capital requirements (e.g., through lease/purchase agreements).

#### Low Priority

While changes in funding priorities have been slow in coming, other developments suggest that the issue of public safety radio communications is becoming a priority concern at all levels of government. Local legislative and executive bodies are more frequently considering the merits of system replacements. New state organizations have been established to plan and manage radio system projects. Public safety systems have been deemed national critical infrastructures at the federal level.

#### Nature of the Problem

Recently completed analyses have shed some light on the extent of the funding problem. The Public Safety Wireless Network (PSWN) program, which traces its origins to the NPRG, has established that the cost for replacing public safety radio equipment throughout the Nation is at least \$18.3 billion. This estimate assumes one-for-one replacement of subscriber units and privately owned network infrastructure. It does not include lease costs. operations and maintenance, or personnel. The program has also validated that existing funding mechanisms are insufficient. Through recent survey efforts, the National Institute of Justice (NIJ) and the PSWN program have determined that inadequate funding is the number one obstacle to essential radio system improvements, such as interoperability.



#### **Knowledge of Existing Mechanisms**

Increased interest in existing and proposed federal grant programs on the part of state and local public safety agencies is one sign that awareness regarding these alternatives is increasing. Grant programs administered by the Departments of Commerce and Justice are more frequently looked to as a source of funding. In addition, education regarding other funding mechanisms is taking place during community conferences and through general reports that highlight the availability of alternatives.

#### **Cost-Reduction Strategies**

Several public safety agencies throughout the Nation have begun implementing schemes to control and distribute the costs of their radio communications systems. These schemes include public/private partnerships, shared infrastructures, and cooperative procurement processes. Regional public safety radio systems are being developed and funded in a fashion similar to other regional services, such as mass transit and waste water treatment.

#### Successful Funding Strategies.

Recent analyses and government directives have prompted the initial development of more comprehensive and successful funding strategies for public safety communications. The PSWN program has provided the community with a primer on lifecycle approaches to systems funding. At the federal level, the Office of Management and Budget is requiring federal agencies follow more formalized capital asset and technology management approaches for their radio projects. The proposed grant program in the President's FY 2000 budget will require a comprehensive funding strategy as a condition for award.

#### What Remains To Be Done?

Additional steps need to be taken to alleviate funding shortfalls that are impeding improvements to public safety communications:

## Increase Funding Levels and Establish New Mechanisms

Funding levels need to be significantly increased if the scope of the public safety radio communications problem is to be addressed successfully throughout the Nation. More funding sources need to be made available to public safety agencies so that access to a variety of funding mechanisms can be leveraged throughout the lifecycle of radio systems projects.

#### Training, Education, and Outreach Programs

Training and education programs should be developed and targeted to help make the best use of existing funding mechanisms and to assist with development of funding proposals and spending

plans. Public safety officials can become more knowledgeable of available funding sources and of how to appropriately engage the processes and organizations that influence and control funding decisions. Outreach initiatives, such as PSWN program symposiums and NIJ education campaigns, should continue to highlight this issue to raise the level of priority for funding public safety communications systems.

Emergency-Management Plan is Weighed;
Officials' Participation, Federal Funding
for Radios Spark

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September 7, 1998

The Black Jack City Council last week debated whether municipal funds should be involved in handling emergencies... To receive federal money for the radios, Black Jack needs to have a certified emergency management program, including a certified director... If Black Jack cannot submit a valid request in the next month, it would have to wait a year before trying again for federal money.

#### **On-Site Funding Assistance**

On-site technical support needs to be available to public safety agencies to help establish system lifecycle funding strategies that take advantage of proven cost-reduction methods. Subject matter experts could help agencies take maximum advantage of existing funding sources and grant programs. They could facilitate the development of public/private partnerships, shared infrastructures, and cooperative procurement processes, which are proven methods of reducing costs to individual public safety agencies.

#### Why Does It Matter?

The funding of public safety radio systems must be a national priority. Approximately half of the Nation's public safety agencies plan to replace their existing radio systems within the next five years. If funding impediments are not addressed, public safety agencies will become ill-equipped to handle current and future public safety communication requirements. This, in turn, could severely frustrate public safety mission operations. With sufficient and sustained funding, effective public safety radio communications would be assured, which could mean the immediate difference between life and death – both for citizens in need and the public safety officials responding to those needs.

#### For Additional Information

#### Funding Strategies for Public Safety Radio Communications

This report serves as a primer for developing funding strategies to replace or upgrade public safety radio communications systems. The report highlights the importance of developing funding strategies that consider the cost of a public safety communications system over its complete life cycle.

#### Funding Mechanisms for Public Safety Radio Communications

This report provides a framework for understanding the various funding mechanisms that may be of use to public safety officials as they attempt to finance radio communications projects.

#### Land Mobile Radio (LMR) Replacement Cost Study Report

This cost study was performed to estimate the replacement value of the Nation's public safety LMR equipment and infrastructure. The study represents the first known comprehensive effort to estimate the replacement value of the LMR communications infrastructure currently installed and used by public safety agencies of local, state, and federal governments.

#### **Cost Study Data Characterization Report**

This report assesses the data collected during the Land Mobile Radio Replacement Cost Study and is intended to reflect equipment and infrastructure trends in the responses of those who completed the cost survey.

#### Public Safety Wireless Communications Systems: Priority Investment for America's Future Safety

This report, targeted at state and local government officials, provides an overview of issues associated with replacing the Nation's aging public safety wireless radio systems. It highlights the importance of improved public safety wireless communications and interoperability, and advocates the need for increased funding, improved planning, and regional cooperation.

These and other publications are available from the PSWN Program by visiting the web site at <a href="http://www.pswn.gov">http://www.pswn.gov</a> or calling 800-565-PSWN.