



Public Private Partnerships for Environmental Facilities

A Self-Help Guide For Local Governments



Purpose of this Guide

The guide is primarily designed to give local officials the key information necessary to establish public-private partnerships. Specifically, the guide provides:

- A primer on what public-private partnerships are and the benefits that can be gained by working with the private sector;
- An action checklist, explaining how to build a partnership;
- A review of financing, procurement, and the service agreement that binds public and private interests; and
- A list of potential contacts and information related to municipal services, finance, and public-private partnerships.

Who Should Read this Document

- Local governmental officials (e.g., mayors, city managers, department heads, and city council members) who are interested in developing public-private partnerships;
 - State governmental officials who need information on how to put together a partnership to use in working with local government officials; and
 - Leaders in business, finance, banking, and industry who need to understand the constraints under which local officials must operate in implementing a public-private partnership.
-

Public Private Partnerships for Environmental Facilities

A Self-Help Guide For Local Governments



Table of Contents

Section	Page
Foreword - A Message from the Assistant Administrator	<i>i</i>
Executive Summary	<i>iii</i>
Part I Public-Private Partnerships: What and Why	1
<i>What is a Public-Private Partnership?</i>	<i>3</i>
<i>What Types of Activities Do the Partners Perform?</i>	<i>3</i>
<i>What are the Different Types of Partnerships?</i>	<i>3</i>
<i>Why Undertake a Public-Private Partnership?</i>	<i>4</i>
<i>Conclusion</i>	<i>6</i>
Part II Building a Public-Private Partnership: An Action Checklist	7
<i>Partnership Checklist</i>	<i>9</i>
<i>Conclusion</i>	<i>14</i>
Part III Finance, Procurement, and The Service Agreement	15
<i>How to Evaluate Financing Options?</i>	<i>17</i>
<i>Implementing Your Choice: The Process</i>	<i>20</i>
<i>What are the Major Elements of a Service Agreement?</i>	<i>23</i>
<i>Conclusion</i>	<i>26</i>
Conclusion	27
Part IV Appendix - Resources for Assistance on Public-Private Partnerships	29
<i>Associations/Organizations</i>	<i>32</i>
<i>Publications</i>	<i>34</i>
<i>Case Study Contacts</i>	<i>37</i>
<i>EPA Contacts</i>	<i>38</i>

List of Exhibits

<i>Exhibit 1</i>	Types of Public-Private Partnerships	3
<i>Exhibit 2</i>	Characteristics of Public-Private Partnerships	4
<i>Exhibit 3</i>	Privatization - A Look at State Laws	13
<i>Exhibit 4</i>	Evaluating Your Financing Options	18
<i>Exhibit 5</i>	Comparison of Procurement Methods	21

Case Studies

Cost Effective Construction <i>Mt. Vernon, Illinois</i>	5
Flexible Private Financing <i>Millbury, Massachusetts</i>	6
Creative Financing <i>Scottsdale, Arizona</i>	11
Regionalization <i>Downingtown, Pennsylvania</i>	14
Competitive Negotiation <i>Kerrville, Texas</i>	22
Two-Step Advertised Procurement <i>Western Carolina Sewer Authority</i>	23

Foreword

A Message from the Assistant Administrator

*This guide is designed to help local officials. Together,
we will find new ways to finance environmental protection.*

Concern for the environment has grown in recent years. Never has the demand for environmental protection been so great. We're asked to provide clean and healthy drinking water, secure ways to handle solid waste, and attain pollution-free waterways. Yet, these activities also require a financial commitment to get the job done.

Over the last two years, I have had the opportunity to meet with many community leaders committed to the environment. They are very concerned about where the money will come from to build needed facilities and provide environmental services. At EPA, we recognize the need to develop innovative financing approaches. We see one solution in what we call public-private partnerships.

Although partnerships can be an effective approach to providing environmental services, the arrangements can be fairly complex. In talking to local officials around the country, it became clear that there was a need for basic information on how to put together a deal. This guide is designed to fill that need. In preparing the guide, we have made an effort to be concise and provide general information on a wide variety of topics. As you pursue the partnership option, you will need more in-depth information on specific topics. The final section of the guide provides a list of publications and resources to assist you.

This guide, like the previously-published *Public-Private Partnership Case Studies: Profiles of Success*, is designed to provide state and local officials with a greater understanding of partnerships and their related issues. The two books can be used in tandem. While this guide reviews the types of issues every community must consider in the partnership process, the case studies describe 23 successful examples of how communities have addressed their situations by establishing partnerships.

We'd like to hear from you — your reactions to the guide, your experiences as you explore the partnership approach, and views on how to improve public-private partnerships in the future. We will feature your ideas in our quarterly newsletter. In the final part of the guide, you'll find the name and phone number of a lead contact in your regional EPA office. These people are there to listen, provide support, and help you in any way they can.

Together, we can find innovative ways to assure a clean environment and preserve community well-being. We think you'll agree that the private sector must become a part of the partnership as well.

Charles L. Grizzle
Assistant Administrator

Executive Summary

Public-Private Partnerships: What and Why *Building a Public-Private Partnership: An Action Checklist* *Financing, Procurement, and the Service Agreement*

As a community leader, you face the prospect of building or upgrading facilities to meet environmental needs. You already may be feeling the squeeze of growing environmental protection needs and expectations coupled with decreased funding for infrastructure projects. As the pressure to minimize rate shock for facility users grows, local community leaders, like yourself, must find new ways for their communities to hold down costs and build public support for necessary additional expenses. Public-private partnerships offer one solution.

The Self-Help Guide for Local Governments has been written to acquaint local officials with the concept of public-private partnerships, their benefits, and the steps a community must take to build relationships with the private sector. This information will be conveyed in the following sections:

Public-Private Partnerships: What and Why

A public-private partnership is a contractual relationship between a public and private partner that commits both to providing an environmental service. The private sector can be involved in a variety of ways, from the initial design of a facility to its daily operation and maintenance.

Although each arrangement is unique, most public-private partnerships fall into one of five categories. These types are: contract services, turnkey facility, developer financing, privatization and merchant facility. There are different benefits associated with each of these types.

Communities enter into partnerships for various reasons. These include: access to more sophisticated technology; cost-effective design, construction and/or operation; flexible financing; delegation of responsibility and risk; and guaranteed cost.

Building a Public-Private Partnership: An Action Checklist

No two communities build a partnership in exactly the same way, but all must take roughly the same steps. This document presents an action checklist of these steps that will help a community make many of the decisions necessary to enter into a contract with a private firm.

A community initiates the public-private partnership process by evaluating its service needs, reviewing available technology and identifying resources that may be able to assist in the development of the contract. It is also important for community leaders to generate public support, while they are evaluating financing prospects and studying laws and regulations.

Reviewing a potential private partner's track record is also an important part of the process. Another option a municipality may consider is regionalizing services with surrounding communities. Eventually, local officials must narrow partnership options, select and conduct its procurement process and finally, develop the service agreement.

Financing, Procurement, and the Service Agreement

Three of the most difficult steps in building a public-private partnership are financing, procurement, and the service agreement.

In choosing a financing method, a community should estimate the capital required and identify various financing options. These financing strategies should then be assessed against the financial condition of the municipality, the project's costs and any risks. The community must select the option which is most appropriate by comparing benefits and costs.

A local government starts to implement its choice by initiating the procurement process. The three types of procurement most communities select are advertised procurement, competitive negotiation, and two-step advertising. While advertised procurement allows the community to dictate the terms of the solicitation, competitive negotiation offers greater flexibility. Two-step advertising is a mixture of the other two.

Finally, a partnership arrangement must be defined in a service agreement. Each contract must include a number of elements. The contract must define: the project and performance criteria; compensation method and timing; changing situations and risk allocations; and contract termination and step-in rights. Insurance and bonding should also be considered, since they may affect the terms of the contract.

Part I

Public-Private Partnerships: *What and Why*



Part I

Public-Private Partnerships: *What and Why*

What is a Public-Private Partnership?
What Types of Activities Do the Partners Perform?
What are the Different Types of Partnerships?
Why Undertake a Public-Private Partnership?

Part I addresses the fundamentals of public-private partnerships. It introduces you to the concepts, terms, and benefits of working with the private sector.

What is a Public-Private Partnership?

A public-private partnership is a contractual relationship between a locality and a private company that commits both parties to providing an environmental service.

What Types of Activities do the Partners Perform?

The partnership approach means sharing responsibility and risk for any one of the following activities:

- Deciding to provide an environmental service in a community;
- Financing the project using public and/or private funds;
- Designing and/or constructing the facility; and
- Operating and maintaining (O & M) the facility or service.

What are the Different Types of Partnerships?

Within this broad definition, each public-private partnership is unique, with transactions designed to

meet particular needs of different communities. Despite these differences, five types of partnership arrangements are generally recognized. They are listed in Exhibit 1.

Exhibit 1

Types of Public-Private Partnerships

Least Private Involvement



Contract Services

Turnkey Facility

Developer Financing

Privatization

Merchant Facility

Most Private Involvement

Contract Services: The private sector is contracted to provide a specific municipal service, such as garbage collection, or to maintain and operate a facility such as a waste treatment plant. The facility is owned by the public sector.

Turnkey Facility: The private sector designs, constructs, and operates an environmental facility that is owned by the public sector. While the public sector generally assumes the financing risk, the performance risk for minimum levels of service and/or compliance usually is assumed by the private partner.

Developer Financing: In this type of arrangement, the private sector (usually private developers) finances the construction or expansion of an environmental facility in return for the right to build houses, stores or industrial facilities.

Privatization: In privatization, the private sector owns, builds and operates a facility. They also partially or totally finance the facility.

Merchant Facility: In this type of arrangement, not only does the private sector own and operate the facility, as in privatization deals, but they also make

the decision to provide an environmental service to a community. It is similar in concept to a fast food franchise except that it involves environmental services.

The five types of public-private partnerships can be characterized by the roles played by both public and private partners. Exhibit 2 illustrates these roles as they relate to partnership activities.

Why Undertake a Public-Private Partnership?

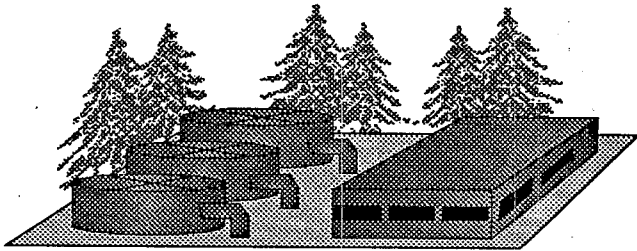
There are five basic reasons for you to enter into a public-private partnership:

- Access to more sophisticated technology;
- Cost-effective design, construction and/or operation;
- Flexible financing, including the use of private capital;
- Delegation of responsibility and risk; and
- Guaranteed cost.

Exhibit 2
Characteristics of Public-Private Partnerships

	Contract Services	Turnkey Facility	Developer Financing	Privatization	Merchant Facility
Decision to Provide Services	<i>Public</i>	<i>Public</i>	<i>Public</i>	<i>Public</i>	Private
Design	<i>Public</i>	Private	Either	Private	Private
Financing	<i>Public</i>	<i>Public</i>	Private	Private	Private
Construction	<i>Public</i>	Private	Either	Private	Private
Ownership	<i>Public</i>	<i>Public</i>	Either	Private	Private
Operation & Maintenance	Private	Private	Either	Private	Private

Cost Effective Construction: *Mt. Vernon, Illinois*



Facing high costs of traditional wastewater treatment and pressure to develop new capacity for attracting industrial development, the Mayor of Mt. Vernon, Illinois, sought assistance from a local private firm. The company designed, built, and now operates an upgraded and expanded wastewater treatment plant for the city. The facility was operating two years prior to estimates for the public alternative at a 40 percent cost savings. The timeliness of the project also was extremely important since Mt. Vernon needed to increase its capacity quickly in order to attract and accommodate a new automobile factory. Because of private participation, Mt. Vernon was able to secure the factory and now benefits from the jobs and tax revenue the plant generates.

More Sophisticated Technology

Private partners often have greater technical and design expertise that enables them to assess opportunities for using more advanced technologies and make knowledgeable predictions of cost and performance benefits. For this reason, they may be more willing to undertake the risk of new technologies. It may be harder for you, as a local official more directly influenced by political pressures, to take these risks.

Cost-Effective Design, Construction and/or Operation: Cost Savings

A public-private partnership arrangement can lead to cost savings in several ways. First, since a private partner often operates similar facilities within the same geographical area, costs for operation and maintenance can be reduced, because the private

partner can buy supplies in bulk and centralize administration. In many cases, the private partner also has a larger pool of employees. This allows the private partner to perform a greater number of repairs and maintenance procedures by moving highly trained staff from site to site. The results is cost savings through reduced labor and repair costs.

Turnkey arrangements provide communities with a second option for saving money. By consolidating responsibility for designing, constructing and operating a facility into one contractual agreement rather than two or three, many of the delays associated with the procurement process can be avoided. As a result, you can reduce interest costs and achieve compliance goals more quickly. Your community's costs also are more predictable when one private partner is responsible for all phases of construction and operation.

Finally, public-private arrangements that increase the use of the facility or serve a larger population may also offer cost savings. For example, facilities that make money from the sale of by-products or serve more than one jurisdiction may result in savings to the public partner.

Flexible Financing

Some partnerships, such as developer financing, bring private funding to public facilities. In developer financing, a private developer may contribute the initial capital and operate the leased facility under the city's overview. The developer contributes funds in exchange for rights to use the new facility and/or receive future income from user fees. The advantages of these arrangements, such as the sale of sewer and water access rights, is the contribution to capital by the developer and new residents who need the increased capacity and a corresponding shift in burden away from users already in the system. The weakness in developer financing as well as other types of private investment financing is that the public sector takes the risk of the developer possibly withdrawing or altering development decisions.

Other financing arrangements such as contract services offer limited private funding. Privatization and merchant facilities generally rely on private funding to

a great extent, eliminating the need to encumber local government debt ceilings or scheduling of referendums. Depending on the project, tax-exempt financing may be feasible, and the private partner may be willing to undertake a longer amortization term (reducing annual costs) than the public sector can.

Delegation of Responsibility and Risk

You may not want the day-to-day burden of managing technologically complex facilities, lack the contacts and experience to raise capital through the bond markets, or wish to avoid managing a complex procurement process. If so, the partnership approach offers a means to carry out your responsibilities without making you manage the service.

The risks involved in providing environmental services can make or break an investment decision. Risks

include design and construction delays, plant performance and environmental compliance, financial liabilities, tax liability, labor stability, and long-term demand for services. In the continuum from traditional public service delivery to full private delivery, these risks shift from public to private sectors.

In developing a partnership arrangement you can transfer certain risks to, and elicit guarantees from, the private sector. However, the private sector, if willing to assume those risks, may adjust its prices accordingly.

Guaranteed Cost

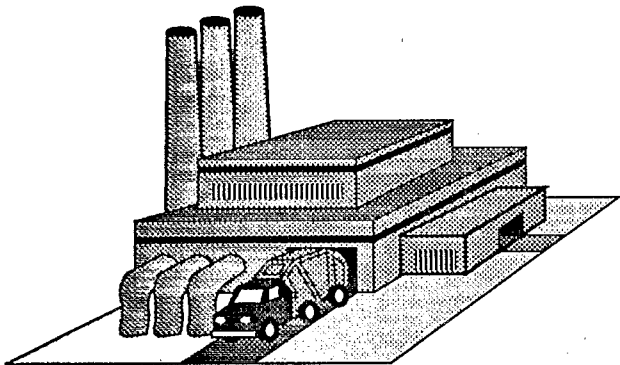
A public-private partnership provides certain benefits to a community through guaranteed costs. A guaranteed cost permits the community to accurately budget for an environmental service over a set period of time. This simplifies the budget process since the community will no longer need to make adjustments to provide for contingencies during the budget year.

Conclusion

Public-private partnerships can offer real benefits to some communities. Find out whether your community could benefit from a partnership by conducting an assessment of the partnership approach in terms of your specific needs. This assessment is the topic of Part II.

Flexible Private Financing

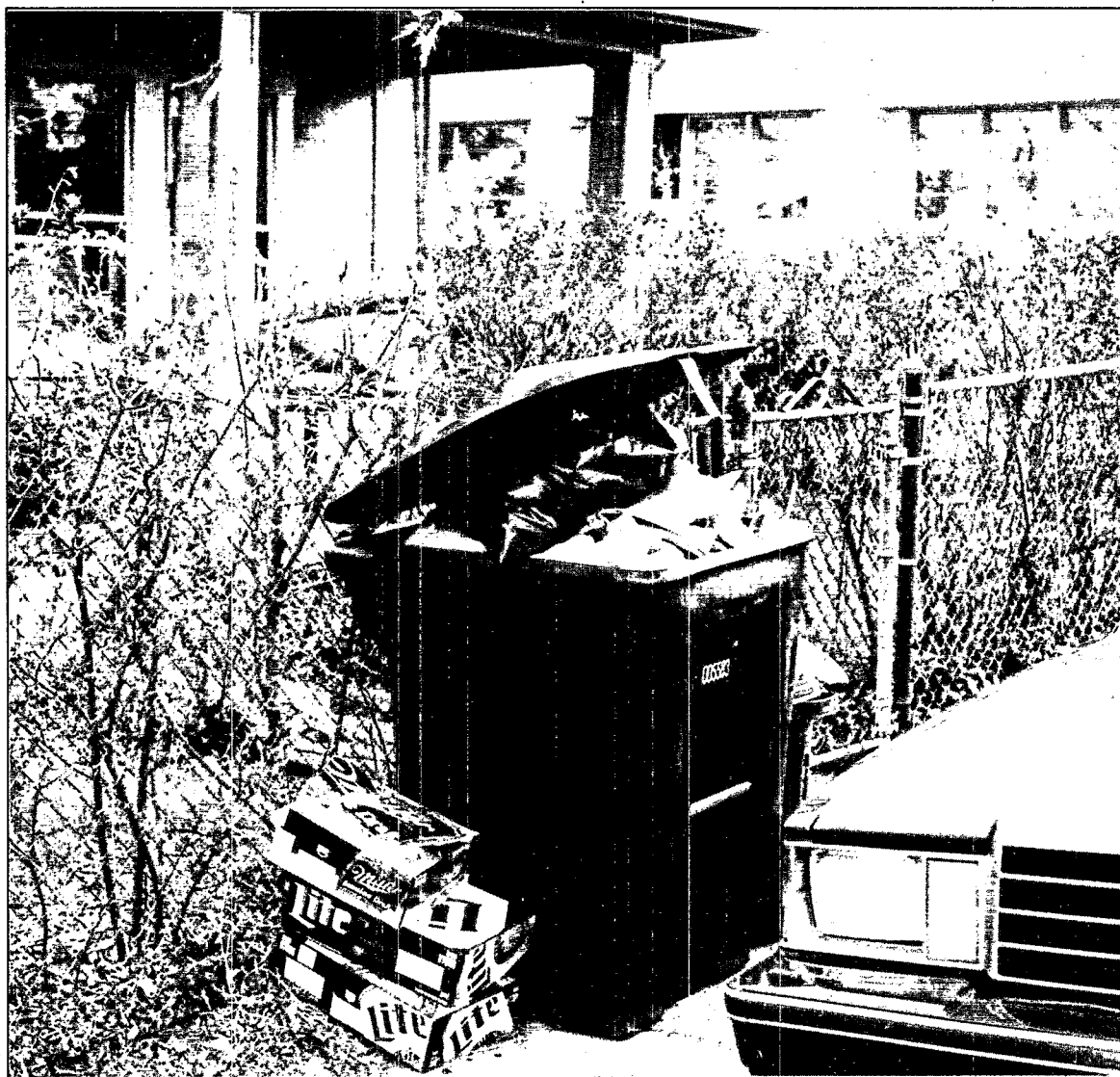
Millbury, Massachusetts



In 1985, the Town of Millbury, Massachusetts, was under a state order to close its landfill. A feasibility study showed that the town could not afford a new facility. Instead, they accepted a vendor's proposal to build and operate a privately-owned waste-to-energy merchant facility. The town allowed the facility to locate within its boundaries, leased land to the vendor, and is enjoying free tipping for 20 years for most solid wastes. In addition, Millbury benefits from a "host community fee" for waste bought from other communities. The town receives approximately \$30,000 to \$40,000 per month from the 33 other communities using the facility.

Part II

Building a Public-Private Partnership: *An Action Checklist*



Part II

Building a Public-Private Partnership: An Action Checklist

Partnership Checklist

- ✓ Evaluate Service Needs
- ✓ Review Available Technologies
- ✓ Identify Expert Resources
- ✓ Evaluate Financing Prospects
- ✓ Identify Community Resources and Generate Support
- ✓ Study Laws and Regulations
- ✓ Evaluate Business Interest and Track Record
- ✓ Consider Regional Options
- ✓ Narrow Partnership Types
- ✓ Select and Conduct Procurement Process
- ✓ Develop Service Agreement

Although no two communities build a partnership in exactly the same way, each roughly follows the same steps. You will take many of these steps to build your facility, regardless of whether or not a partnership is being considered. These steps may come in any sequence and may coincide with one another. The sequence listed here is typical, but you can customize it to meet your needs.

✓ Evaluate Service Needs

Any community considering a public-private partnership should first determine its needs, based on an assessment of current, short and long-term requirements. If you have not already done so, you might want to obtain outside expertise to assist you with this

planning process. Several of the associations and information sources listed in Part IV of this document may be able to help you.

✓ Review Available Technologies

You probably have a reasonably clear idea of the types of technologies available to meet your community's needs. An evaluation of the advantages and disadvantages of each may help you select those which will be most appropriate. For example, some facilities may be less costly to construct, but more expensive to operate over the long term. Some may not yet be proven over time, which increases the incentive to share risk with the private sector. A partnership may create new options for you to con-

sider. The private sector can be, in many cases, more experienced using sophisticated machinery, and can often make better use of emerging technologies.

In fact, you could take advantage of private participation by giving the private sector a role in the technology review. This can be done by specifying the project objective while leaving the choice of technology open for your private partner. This is particularly effective if you expect strong performance guarantees from your private partner. For further information on technologies, see Part IV of this guide.

✓ **Identify Expert Resources**

You may need assistance from other professionals to form and manage a partnership. Because you will rely on them at an early stage, you need to determine the cost of the service in advance.

Three areas in which you may need assistance are:

- Planning the project, including analysis of regulatory requirements, capabilities of the current system, needed improvements, and available technologies; and determining whether the partnership and the proposal are legally permissible.
- Evaluating financial options, including prevailing market conditions, amortization and structural options, security and credit aspects, and the tax consequences of different partnership arrangements.
- Evaluating private proposals for their ability to meet your needs, the private partner's qualifications, the degree of control to be retained by the community, the sharing of risk, and the desirability of particular provisions.

Sources of expertise range from voluntarily provided information to professional services. They may include your peers in other communities, as well as people in state agencies, universities, federal agencies, and professional and trade associations. For a list of sources on this subject, see Part IV of this guide.

Expert Resources

Technical Advisor - helps assemble project specifications; may assist procurement and solicitation processes; may oversee construction.

Financial Advisor - recommends and helps evaluate financial options; helps structure and obtain financing.

Investment Banker - underwrites financing; may provide financial advisory services.

Bond Counsel - assures that financing complies with state/federal regulations; may assist in procurement.

Legal Counsel - prepares and assists in negotiating O&M or service agreement.

✓ **Evaluate Financing Prospects**

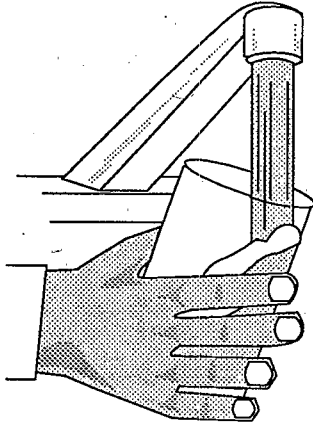
You will have to identify available financing alternatives. Once this is done, you and your advisors will conduct a study to compare the costs of the partnership approach to other available financing methods. Part III explores how to evaluate the financing terms in greater detail.

✓ **Identify Community Resources and Generate Support**

Successful partnerships usually have a local champion - someone who keeps the process moving and the key players involved. This can be the mayor, city/town manager, finance officer or public works director.

The type of partnership helps determine who will take the lead at different times. To contract out operation and maintenance, for example, the public works director will probably have a central role throughout the process, with early input from elected officials (if authorization is necessary) and legal counsel during procurement and service contract negotiation. In contrast, to complete a turnkey program, the finance director and investment banker also will play key roles, especially during the financing process.

Creative Financing: Scottsdale, Arizona



A drinking water project in Scottsdale, Arizona, in late 1985, demonstrates how one city selected its financing method. Initially, the private developer expected to use industrial development bonds (IDB) to finance the project. However, as planning progressed, IDBs were not available. After careful review and analysis by the city and its bond counsel, a local economic development authority issued revenue bonds secured by revenues from the developer and further supported by the full faith and credit of the city.

Four Steps *to Generate Public Support for a Public-Private Partnership*

- 1** *Form a citizens' committee to help oversee the partnership process and express community concerns.*
- 2** *Use the media to build a positive image of your private partner.*
- 3** *Offer job guarantees to current public employees.*
- 4** *Share profits with the host community.*

Internal Resources

Local Elected Officials - may have to authorize partnership, usually approves method of financing.

Public Works Director - evaluates and approves type of environmental system, generally involved in selection of private partner.

Chief Executive Officer (Mayor, Town Manager, Township Trustees) - may participate in selection of private partner; may have ultimate decision-making authority; may interact with state, county, or investment banker, if there is one.

Finance Director - evaluates and recommends method of financing; may handle procurement; works with private partners and investment banker to complete financing.

Legal Counsel - assists the procurement; may work with legislature on authorization; reviews financing for legal compliance, and negotiates agreements.

Your community at large should also be involved at an early stage. Communication with the public and the media will help your community understand the benefits of a public-private partnerships while curbing any resistance. Citizen support and interest can often change or improve the terms of the partnership. For instance, you could activate the public by forming a citizens' task force to site the facility.

It is also crucial to obtain a clear-eyed view of the political situation at the outset. If the community expresses concern over a private company owning a vital public facility, for example, privatization and merchant facilities may not be realistic options for you to consider.

If your municipality has employees, you may want to take steps to ensure that their jobs or benefits will not be taken away. Some private partners, for example, have provided job guarantees to overcome this problem. Other communities have had success using special placement programs for dislocated workers.

✓ **Study Laws and Regulations**

You should consider federal and state laws and regulations when making your decisions. You may need to hire a lawyer to assist you in this review. At the federal level, your lawyer should review environmental compliance requirements and responsibilities. Being familiar with compliance standards may help you make better long-term decisions concerning your facility.

In addition, you and your lawyer should consider the tax laws which may affect the financing of your project. Another area which warrants your attention if you are planning a wastewater treatment facility is the revolving loan program within your state. Finally, take a look at the conditions associated with any state or federal grants used to construct existing facilities. These conditions may affect the way you finance renovations and modifications to these facilities.

State laws, regulations, and programs also are important. They influence:

- How and by whom public services are delivered;
- The structure of partnerships;
- How advisory and technical services are obtained;
- How partnerships are financed;
- Limits on charging for services;
- Funding program requirements;
- Environmental compliance requirements; and
- What procurement laws and bidding procedures must be used.

In addition to regulating how you enter into business agreements, some state laws regulate private companies through public utility commissions. Others exempt private partners from utility regulation in specific fields, such as the operation of wastewater treatment facilities. In these cases, the private partner promises non-discrimination among users and compliance with health and safety requirements, in exchange for freedom from public utility restrictions.

State Laws

In recent years, as states have realized the benefits of the partnership approach, many have adapted their laws accordingly. As of 1986, 19 states, including many of those with large population concentrations, have passed comprehensive privatization statutes (see Exhibit 3). These laws generally make it easier for communities to enter into public-private partnerships. Among these statutes are provisions that:

- Allow local governments to enter into long-term service contracts with private firms;
- Streamline the procurement process and permit negotiated contracts;
- Provide exemptions from local taxes or licensing and recording fees;
- Provide authorization to enter into take-or-pay agreements;
- Grant powers for the creation of special authorities to issue debt secured by project revenue or enter into lease and sell agreements;
- Authorize private parties to collect service charges; and
- Create private investment tax credits.

✓ **Evaluate Business Interest and Track Record**

Before investing a lot of time and money, you should weigh private sector interest in your project. You can generate interest through pre-solicitation activities to publicize their needs for environmental services and alert vendors to future opportunities. Frequently, the release of draft specifications or solicitations will obtain the necessary visibility and publicity. Expressions of interest in certain types of partnerships may result in constructive suggestions from the private sector about how you should proceed and narrow your partnership choices.

Legend:

- No Laws Favoring Partnerships
- Laws Favoring Partnerships

States with Laws Favoring Partnerships (shaded gray): Washington, California, Arizona, Nevada, New Mexico, Texas, Louisiana, Mississippi, Alabama, Georgia, South Carolina, North Carolina, Virginia, West Virginia, Maryland, Delaware, Pennsylvania, New Jersey, New York, Connecticut, Rhode Island, Massachusetts, Vermont, New Hampshire, Maine, New Brunswick, Prince Edward Island, Nova Scotia, and Newfoundland.

States with No Laws Favoring Partnerships (white): Oregon, Idaho, Utah, Wyoming, Colorado, Kansas, Nebraska, Oklahoma, Missouri, Arkansas, Kentucky, Tennessee, Indiana, Michigan, Wisconsin, Illinois, Indiana, Ohio, Pennsylvania, New York, Connecticut, Rhode Island, Massachusetts, Vermont, New Hampshire, Maine, New Brunswick, Prince Edward Island, Nova Scotia, and Newfoundland.

Many communities avoid delays later in the project by evaluating prospective partners' financial and performance standings at the beginning. One way is to examine your partner's recent track record. Another is to review your partner's balance sheet. At a minimum, you should carefully check both bank and client references.

environmental standards. In addition, try to evaluate whether the facility will accommodate your requirements not only now but also in the future.

You can join other communities in public-private partnerships to take advantage of economies of scale. These regional options can be undertaken through contractual arrangements between participating communities or, more traditionally, through formal authorities or districts.

In addition to reducing operating costs, governments that participate in regionalized facilities share the risks associated with financing. Governments can also use combined expertise to monitor the project and negotiate with private partners.

Regional arrangements can attract private partners. In evaluating the viability of owning and operating a facility, the private partner may determine that the only feasible alternative is to service more than one community. For more information on regionalization, please refer to Part IV of this guide.

Regionalization:

Downingtown, Pennsylvania



The Borough of Downingtown, Pennsylvania, owned a wastewater treatment plant that needed upgrading and expansion. The borough was surrounded by several younger, growing communities that created increasing pressures for additional facilities. To avoid political friction and facilitate area-wide growth in an orderly fashion, the borough and townships agreed to form a new authority with the power to enter into a public-private partnership.

✓ **Narrow Partnership Types**

Your review of the previous steps may have eliminated some partnership types. For example, if your community requires financing assistance, contract operation and maintenance will not help. If your state law restricts impact fees, some types of developer financing may not be available. If private vendors are not interested, privatization is not an option. Once you have weeded out the unlikely and the impossible, the realistic partnership options remain.

✓ **Select and Conduct Procurement Process**

Different states impose different procurement requirements on local governments. The procurement steps in selecting a private partner will be easier if you can use a flexible procurement process. Part III of this guide explores three different types of procurement processes in greater detail.

✓ **Develop Service Agreement**

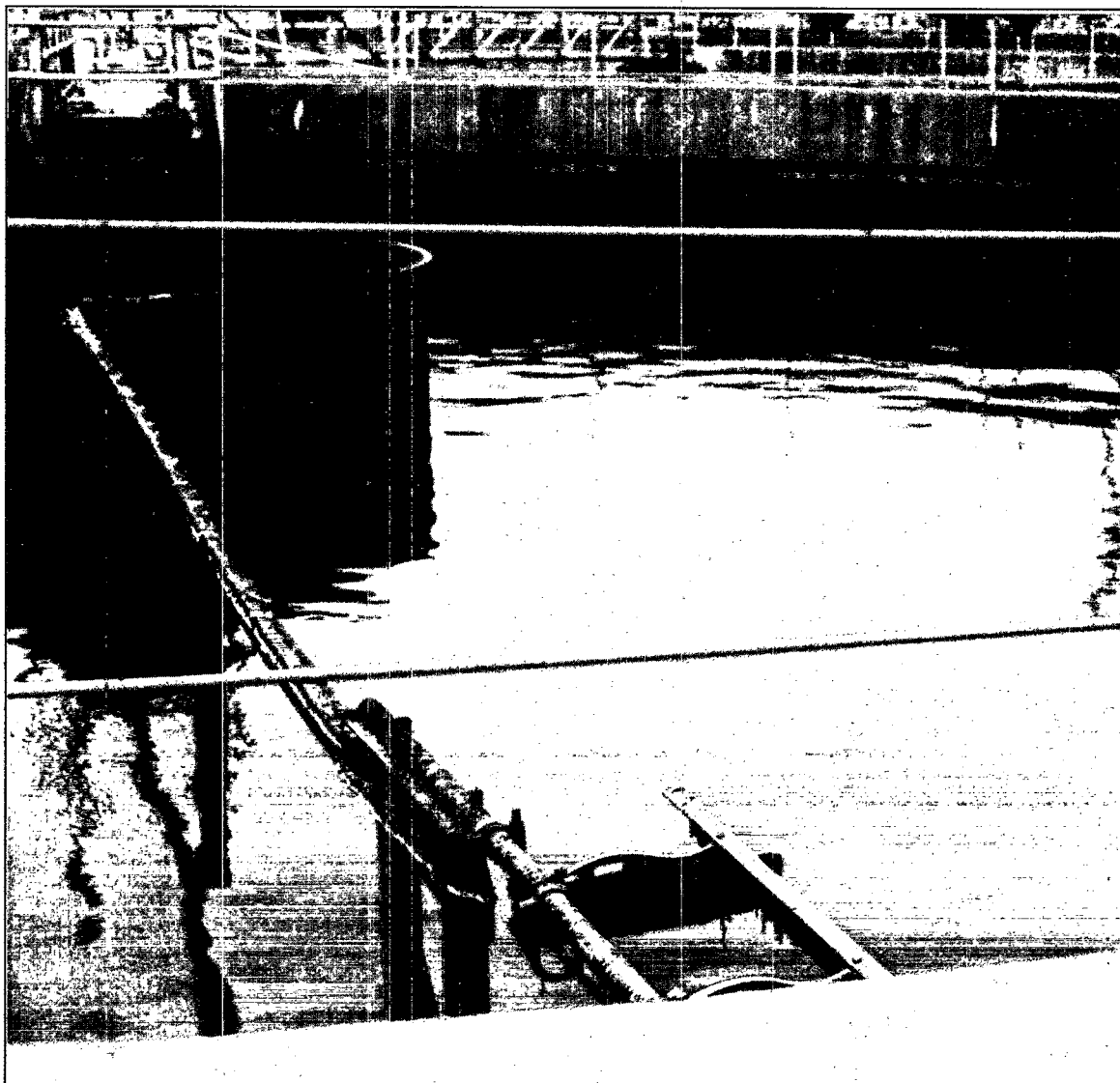
The service contract is a legal agreement between you and the private partner to provide the service in question. The agreement should be designed to protect the interests of both by including representation and guarantees, risk allocations, business terms and conditions for each party. Part III of this guide also provides information on the issues to be covered in a service agreement.

Conclusion

The process of exploring a partnership with the private sector involves many of the same steps that you must take regardless of who owns, finances, or operates your facility. It is an orderly process with well-defined analyses of needs, available technologies, human resources, legal requirements, and procurement options. Yet, involving a private partner may also require special skills and experience that you do not have. While there is no substitute for expert advice, the next part of this guide reviews in more detail three of the most important steps in forming public-private partnerships: financing, procurement, and the service agreement.

Part III

Financing, Procurement, and The Service Agreement



Part III

Financing, Procurement, and The Service Agreement

How to Evaluate Financing Options? Implementing Your Choice: The Process What are the Major Elements of a Service Agreement?

Most of the steps outlined in the previous section are relatively straightforward. Three of the steps, however, are more complicated. They may require you to follow different procedures when a public-private partnership is involved (as opposed to a purely public transaction). This section provides more detailed information on these three steps - financing, procurement, and drafting a service agreement.

How to Evaluate Financing Options?

To determine if a public-private partnership makes sense and meets your government's needs, you should evaluate available financing options and their feasibility. If you don't know which financing option best suits your needs, you may need to obtain outside assistance. For sources of information on financing options, see Part IV of this guide. The steps that you and your advisors can follow are outlined in Exhibit 4. The steps are broad and may apply to one or more types of public-private partnerships. Likewise, they also apply to traditional publicly owned and financed environmental facilities. This section discusses key steps in more detail.

Estimate Capital Required

Even though you know your community needs a new or improved environmental facility, you should not

choose a partnership until you have an idea of how much it will cost. At this early state, rough cost estimates are adequate. As the project progresses, you must refine your figures to reflect more accurate costs.

Identify Financing Options

There are many ways to finance a public-private partnership. Many partnership arrangements include more than one method of financing. Since financing is greatly influenced by those who own the facility, the discussion of financing options is divided into those associated with public and private ownership.

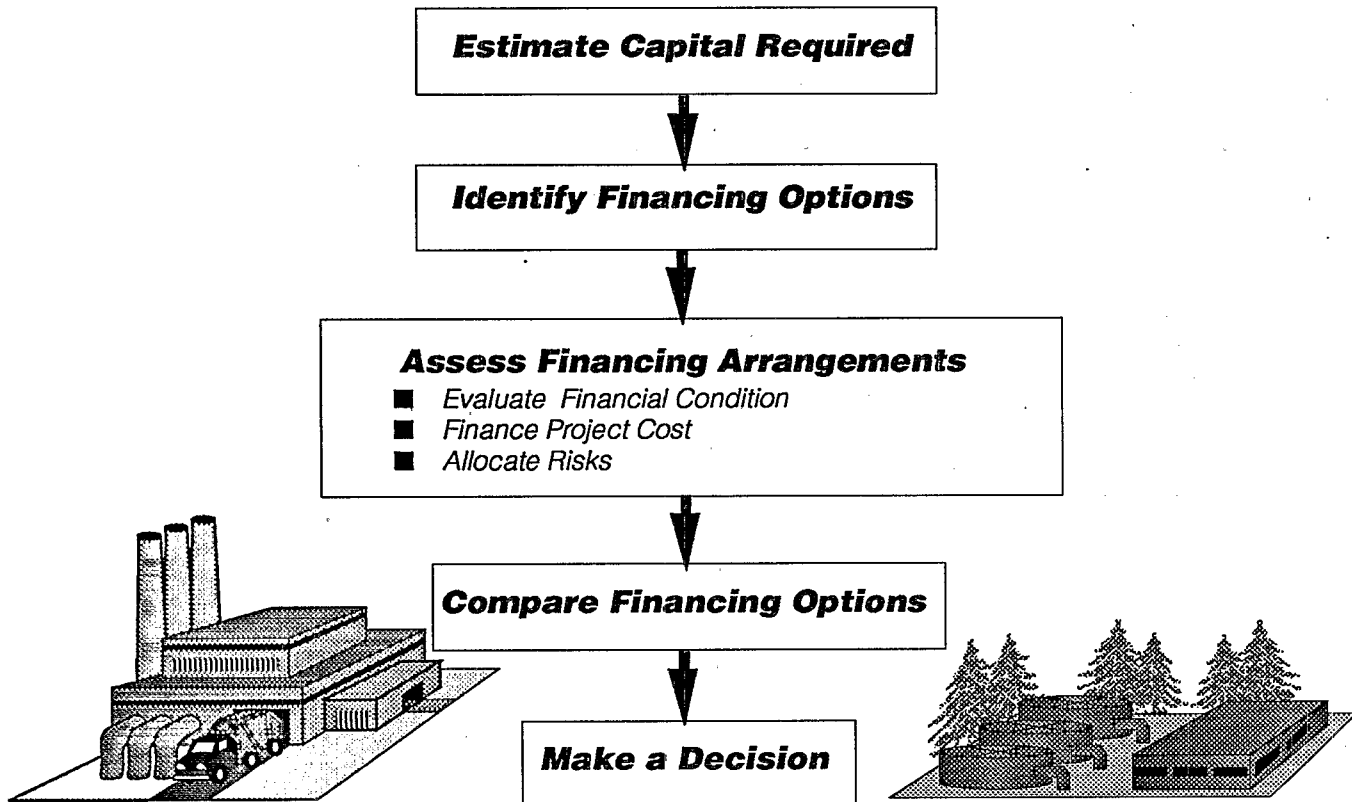
Public ownership - Local governments might use one or all of the following financing arrangements:

Direct cash payment from private parties - Selling the rights for future environmental services as part of a developer financing program is one example of a direct payment.

Grants, loans and loan guarantees from the federal or state governments - These could include federally funded grants for wastewater treatment and state revolving funds.

General obligation bonds (G.O.) - Probably the best-

Exhibit 4
Evaluating Your Financing Options



known type of public borrowing, a G.O. bond is backed by a government's full taxing authority.

Revenue bonds - Revenue bonds are secured by the revenue generated by the facility being financed. None of the taxing authority of the government is involved.

Tax-exempt leases - Tax-exempt leases are not considered debt in most states; therefore, restrictions on the issuance of debt (bond referenda, debt ceilings, etc.) do not apply. The lease is secured by a government's annual promise to pay; no revenues or taxing authority are pledged.

Private contributions - In some instances, developers will build a facility and donate it to the government or contribute funds for its construction.

Private ownership - If public ownership is not desired or required, private ownership options such as privati-

zation or merchant facilities may provide an alternative. Financing methods associated with private ownership include:

Direct cash payment from public partners - Public partners may make direct contributions in the form of staff and consultants during negotiations for privately owned facilities.

Grants, loans and loan guarantees from state governments - Some state programs, such as revolving loan programs for wastewater treatment facilities, assist private partners.

Private-Activity Bonds - These tax-exempt bonds, including industrial development bonds (IDBs), are issued to private persons or corporations but are subject to a number of restrictions to ensure the public-purpose nature of their use. Because of these limitations, some private partners use

taxable industrial bonds to finance all or part of their participation.

Self-Supporting - These cash investments are usually based upon return on equity expectations in the form of both revenue flows and tax benefits as well as negotiation. The inclusion of private equity in a project requires careful structuring in order to comply with federal tax law provisions.

Assess Financing Arrangements

A financial feasibility study will help you evaluate whether your government can afford a project. The study will:

- Evaluate your government's present financial condition; and
- Use cash flow analysis to estimate the proposed project's impact on the community's future financial condition.

Because of the complexity and the variety of decisions that must be made, many governments create internal committees and/or hire consultants to conduct the feasibility studies and make final recommendations. Among the types of consultants to call on are:

- Financial advisors (either independent firms or advisors affiliated with investment or commercial banks);
- Bond counsel that can provide input relative to legally acceptable financing structures;
- Engineering consultants who have financial analysis capabilities;
- Accounting firms (both their consulting and audit staffs);
- Other providers of technical assistance such as colleges, universities, or national and state associations of municipal officials; and
- Environmental engineers and lawyers from state or federal government.

While hiring consultants may mean more costs, some governments find that private firms will conduct substantial portions of their analyses free of charge to secure a significant role in the project, such as providing the financing.

Evaluate Financial Condition

As part of the feasibility study you will measure the financial condition of your community and the financial burden the proposed project places on households. Many communities evaluate their credit capacity to take on a major capital project by examining finance indicators such as:

- The real property tax collection rate;
- Overall outstanding debt in proportion to various growth characteristics; and
- Annual population changes.

Finance Project Costs

Another part of the study is a review of the project costs. It includes design and construction costs as well as other factors for each financing approach. Typically, such a review incorporates the effects of different technical and economic conditions on your community's future financial position.

You may want to consider at least two scenarios for each financing option - best and worst cases. Each uses assumptions for financing costs, projected revenues, and the time involved for construction.

Allocate Risks

Another important aspect of the evaluation is the risk analysis. This is, in itself, a problem as local government does not routinely assess risks when planning capital intensive projects. Local governments must remember that municipal ownership means assuming all the risks involved in development, finance and ownership. Under a public-private partnership, risks can be allocated to the private sector. This additional benefit of risk avoidance must be addressed by local government when evaluating options.

Compare Financing Options

Although communities frequently seek the lowest cost alternative, they may have other reasons for selecting one type of financing over another. For instance:

- You need voter approval to sell general obligation

bonds, which may be difficult to obtain or take too long;

- Your government has too much debt outstanding (as defined by state-imposed debt ceilings or by bond market acceptance) and either cannot sell bonds or interest on the bonds would be too high; and
- Federal restrictions on the facility's ownership and use jeopardize a bond's tax-exempt status.

Make a Decision

Having followed the preceding steps, you and other community leaders have the information you need to make an informed decision. However, the final decision should not be made until the money essential to your project and the technical issues also have been addressed. You may find the process so dynamic that the results of your analyses change frequently. By delaying the final financing decision until funds are necessary, you maintain maximum flexibility.

As this discussion demonstrates, you may be faced with a multitude of financing decisions before you select the approach that meets your objectives. The proposals for consideration may provide a number of different financing and ownership options. We will now review some of the things you may want to consider regarding the selection of your private partner.

Implementing Your Choice: The Process

First, you have to decide how to decide. The process you use to implement your decision and select your partner is one of the most important decisions you will make. You might want to use the American Bar Association's (ABA) Model Procurement Code, which gives you guidelines for revising your government's codes and ordinances to make it easier to find a suitable partner. To obtain a copy of the ABA code, contact:

American Bar Association
Model Procurement Code
750 North Lakeshore Drive
Chicago, IL 60611
(312)988-5555

To initiate your selection, you will engage in a solicitation process to let potential partners know you are looking for help. Most communities use one of three fairly well-defined methods to accomplish this:

- Solicit for competitive, sealed bids from potential partners through advertisements and then select a vendor based on the lowest price and ability to meet specified performance requirements;
- Issue a request for proposal (RFP) to potential partners, and then negotiate for the most advantageous deal; or
- Use a two-step process which requires selection first on the basis of the technical merits, and subsequently on the basis of lowest bid (Exhibit 5 summarizes the advantages and disadvantages of each process).

Advertised Procurement






















Competitive, sealed bidding, known as advertised procurement, makes it relatively easy for you to evaluate bids and select a winner based on the lowest price. The first step is to issue an Invitation for Bid (IFB).




In your IFB, you should describe all specifications including:

- *Technological approach*
- *Quantity and quality of goods and services*
- *Delivery dates, and place and method of delivery*
- *Insurance and bonding requirements*
- *Subcontractor management*
- *Responsibility for financing*
- *Responsibility for obtaining and complying with permits*
- *Length of the contract*
- *Inspections and audit requirements*
- *Warranties*
- *Service agreement terms and conditions*
- *Risk allocation and remedies*

Once bids are received, they are evaluated, in terms of their responsiveness to the IFB and whether the bidder is capable of doing the job. Once unacceptable bids are weeded out, the contract is awarded to the lowest bidder.

Exhibit 5
Comparison of Procurement Methods

	Advertised	Competitive Negotiation	Two-Step
Simplicity			
Speed			
Flexibility			
Administrative Ease			
Specifications: Easy to Draft			
Free from Protests			
Expense			

 **Most Desirable**
 **Average**
 **Least Desirable**

It should be noted that as the degree of private sector involvement increases, it becomes more difficult to structure sealed bid procurement. Intensive private sector participation necessitates the negotiation of key terms and conditions, particularly regarding financing and risk aspects. Sealed bid requirements preclude negotiations. Other conditions, such as the timing of implementation and prevailing financial market conditions will affect bid pricing. It may be difficult for bidders to specify these without qualifications.

Competitive Negotiation

Before deciding on a competitive negotiation process, you must know whether your community has the legal authority to engage in it. If your community has a procurement system based on the American Bar Association's Model Procurement Code or Ordinance, it usually has this authority unless the planned transaction is specifically excluded.

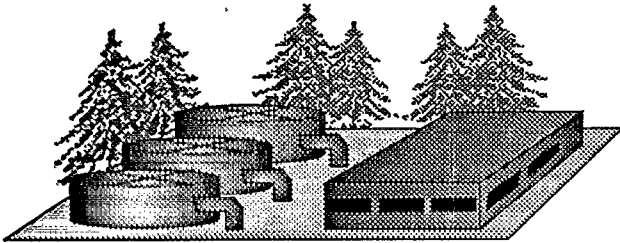
Requests for Proposals. Competitive negotiation begins when a Request for Proposal (RFP) is publicized and issued as required by state or local law. To

maximize competition and to minimize obstacles, many governments circulate a draft RFP to potential proposers and invite them to point out items that should be clarified, deleted or added.

Receive Offers. Your RFP should define in general terms the goods or services being sought, the evaluation criteria and their relative importance, as well as provisions, such as insurance, that will be required. Offerors are required to submit proposals by a stated closing date. The proposals will usually consist of a technical proposal containing the offeror's approach to the work and a description of the technology, resumes of key personnel, qualifications based on previous experience in the area, and a business/cost proposal containing the offeror's prices and organizational structure.

Evaluate Offers. After you receive initial offers, review the proposals and rank them in accordance with the stated evaluation criteria. Many governments develop an evaluation checklist and score proposals on how well they address certain key issues.

Competitive Negotiation: Kerrville, Texas



The City of Kerrville, Texas needed to expand and upgrade its wastewater treatment works but was unsure of the available technological and financial alternatives. Kerrville hired an independent advisor to structure the procurement process to attract a wide array of technical and financial approaches. The city entertained offers using competitive negotiation that allowed it to compare the costs of using general obligation bonds, revenue bonds, leasing and full privatization. Ultimately, Kerrville selected an innovative technology and chose to finance the project using revenue bonds because the technological savings were sufficiently high for the city to request a conservative financial plan.

Negotiate with Offerors. Once proposals are evaluated, and the competitive range established, negotiations are conducted with one or more offerors within the competitive range, and a date is set for the submission of best and final offers.

Award Contract. If, after these discussions, you change the RFP to use a particularly innovative approach, you will probably have to reissue it and call for new proposals that serve as best and final offers. Bidders are then free to alter their own approaches consistent with your new statement of work. Contract award need not be made to the lowest priced bid. Instead, it is made to the offeror who submits the best overall proposal as measured by the evaluation criteria.

Two-Step Advertising

Request for Technical Proposals. The two-step process begins with the issuance of a Request for Technical Proposals (RFTP). Like an Invitation for Bid or Request for Proposals, the RFTP should be broadly publicized. This process calls for technical proposals to be submitted first, without pricing information, so that initial evaluation is based solely on technical merits. As with the other approaches, your RFTP must contain criteria that indicate how proposals will be evaluated. Your RFTP should also include technical and performance terms and conditions (including guarantees) and the technical/managerial/operational qualifications of the offerors.

Evaluate Proposals. When proposals are received, the first step is to eliminate all unacceptable proposals. However, if as a result of this initial elimination process, you find that you have too few competitors, you can try to qualify those firms eliminated in the first round by seeking additional information. In the second step, a formal IFB is issued to competitors who have submitted acceptable technical proposals. Each bidder can bid only on the technical approach found acceptable under the first step. The lowest bidder is the winner.

Comparing the Approaches

Advertised Procurement. In advertised procurement, the community must prepare a very specific invitation for bid and the bidders cannot alter or amend its material terms. Therefore, this type of procurement works best when a community knows precisely what it wants to buy and how the project is to be financed.

Competitive Negotiation. Competitive negotiation is a more flexible process, allowing you to be less specific about the project and its financing. It offers the opportunity to define your needs generally (i.e., to identify performance needs rather than a particular technical or financial approach). Technical and financial needs are defined to allow for the maximum number of practical approaches as long as they meet your minimum needs. It also presents the opportunity

to negotiate with one or more offerors at the competitive range. One advantage of this process is that you can learn about new and attractive technological or financing approaches during your discussions.

Two-Step Advertising. Two-step advertising procurement is really a mixture of the other two processes. Since it provides more flexibility than advertised procurement, it can be used to obtain flexibility when competitive negotiation is not permitted.

What are the Major Elements of a Service Agreement?

Checklist of General Contract Provisions

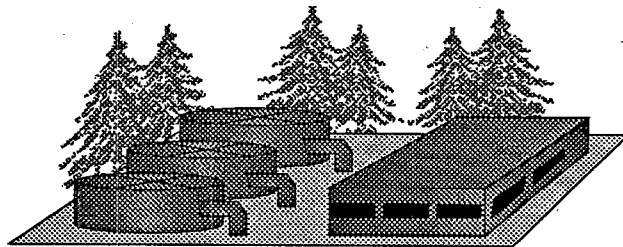
- ✓ Contract Term
 - ✓ Project Description and Performance Criteria
 - ✓ Compensation Method & Timing
 - ✓ Changing Situations and Risk Allocation
 - ✓ Contract Termination and Step-in Rights
 - ✓ Insurance and Bonding
-

Even though each community's projects are unique, there are a number of common contractual issues to consider before going forward with the procurement process. This section summarizes common issues and flags key considerations of each.

✓ Contract Term

Virtually every pricing decision and many tax consequences hinge on the term of the basic partnership contract. State and local law may restrict the community's flexibility and, therefore, counsel should be consulted before a community commits to multi-year contracting.

Two-Step Advertised Procurement: Western Carolina Sewer Authority



The Western Carolina Sewer Authority wanted to conduct a competitive procurement for the construction and operation of a new wastewater treatment facility. South Carolina law did not allow competitive negotiation, and the Authority was hesitant to use the sealed bidding process for such a sophisticated project. Instead, the Authority used the two-step advertised bidding method and conducted sufficient technical discussions with the offerors to overcome the inherent limitations of the sealed bidding process.

Single-year contracting yields the highest degree of price flexibility and ability to adjust performance criteria and standards. However, single-year contracting also has limitations:

- Procurement costs are incurred annually;
- Initial or start-up costs may be amortized only over one year; and
- Private sector interest is substantially reduced because tax-driven service and lease-purchase contracts work poorly in this environment.

Short duration contracts are most appropriate when you expect a lot of bidders; when they won't need to put up a lot of money, and when the job is relatively simple.

In contrast, multi-year contracts are more suitable where service continuity is desired and all costs can be amortized over a longer time period. Financing institutions find longer-term contracts more attractive

than shorter contracts because of the certainty of the long-term cash flow.

✓ **Project Description and Performance Criteria**

A community is best advised to establish clear standards of performance in a "Statement of Work," which should be part of each contract you write. The standards should address such basic matters as quality of performance, quantity of goods and services to be finished, and delivery/performance dates or milestones. In addition, specific performance standards should be tailored to ensure that the community and contractor agree at the outset about who is to do what for how much.

Contracts are frequently structured using incentive and penalty provisions. Typically, they cover:

- On-time performance;
- Quality of performance;
- Safety;
- Cost control;
- Community relations; and
- Compliance.

For example, where a contract is appropriately structured, a contractor that meets an established performance criterion is entitled to an incentive fee and may be entitled to an additional award fee.

Conversely, if performance falls below an established criterion, a penalty or liquidated damaged provision may apply. You should avoid drafting solicitations that contain excessive penalties because contractors will add contingency pricing to their bids or offers, resulting in higher prices to the community that may be unnecessary if the contingent event never occurs.

✓ **Compensation Method and Timing**

The basic formula for contractor payment may be established either in the solicitation documents or during the negotiation process. Typically, payment categories include certain initial costs such as construction, initial capitalization, start-up costs and costs for actual operations.

Initial Costs

Initial costs vary, depending on the nature of the project, but generally include hiring and training personnel, inspecting new equipment, installing necessary support equipment including utilities, marketing activities to draw a customer base if appropriate, purchasing and installing major equipment, constructing the facility and testing the system. These initial payments may be made in a lump sum, on a calendar basis (e.g., monthly), by milestones or tasks or through periodic service payments amortized over the life of the agreement.

Payments for operations or services are typically structured three ways:

- Fixed price for a specific term;
- Cost-plus-fixed-fee; and
- Fixed unit price.

A fixed price contract is appropriate when the service is stable and changes are unlikely to occur. If the contract term exceeds one year, the contractor is exposed to substantial risk in forecasting prices. Therefore, contractors tend to add a contingency to their prices. To protect against such padding, communities should include an economic price adjustment clause into the contract aligned with an appropriate cost index. Typically, costs for fuel, certain materials or chemicals, and insurance are the most volatile and are best passed through for direct payment by communities. This will encourage contractors to contain costs even in times of extreme price fluctuations.

If you plan to install a new or unproven technology, you should consider a cost-plus-fixed-fee contract type. This method calls for a fixed monthly fee to be paid to the contractor with all other costs handled by the community directly or as pass-throughs. Because this contract method places little pressure on the contractor to control costs, it is advisable to place a cap on overall costs. Contractors usually favor this type of contract because it eliminates most risks even though potential profits are kept to a lower, guaranteed level.

Fixed price unit contracting is a third type of contract payment. This method ties compensation to variable

units of performance and establishes a certain minimum level of service. In a service agreement for solid waste disposal, for example, as long as the public partner delivers garbage within a range of expected volumes each day, the private partner receives a fixed price per ton. If delivery is above or below that volume prices will be adjusted to account for changes in the private partner's cost. Ranges in price and performance can be established either in the solicitation or during negotiation. Some governments, particularly those engaging in source reduction programs, will not want to engage in contracts requiring minimum volume levels.

Although many cities prefer this approach, it requires more sophisticated contract administration. However, it offers better protection to both parties and allows for easier adjustments compared to fixed prices.

✓ **Changing Situations and Risk Allocations**

One key decision is how the parties in the partnership will handle changes during financing, construction, or operation. The partnership agreement should address at least the following kinds of changes:

- Changes in tax law, either before or after closing on the project financing;
- Increased construction costs;
- Resolution of conditions which reasonably cannot be anticipated nor controlled;
- Differing site conditions;
- Increased operation and maintenance costs;
- Increased costs due to a change in the character, strength or volume of the waste stream being treated;
- Warranty obligations not originally contemplated;
- Changes in environmental compliance requirements; and
- Changes in ownership.

Although the allocation of these and similar risks may be included in the solicitations, the parties may decide during negotiation to allocate the risks differently than originally anticipated. This will generally be permis-

sible if the solicitation clearly states that such a negotiation may occur.

One of the community's main benefits from public-private partnerships is that most of the risk for satisfactory performance can be shifted to the private partner (i.e., the private partner holds the permits). This means, for example, that the private partner must determine what existing and new laws and regulations must be met. Thus, the community can hold the contractor liable for permit or regulatory violations. The private partner, in turn, can protect itself somewhat through insurance or subcontracting. Both partners assume responsibility for ensuring compliance.

✓ **Contract Termination and Step-in Rights**

The circumstances under which your community can intervene and take over performance is a critical contractual issue, commonly referred to as "step-in" rights. The area is complex because of the number of parties involved, the timing of intervention, and the concerns of investors and others with a financial interest in a project.

One key contractual element defines when the owners "accept" the construction as being complete. The term "acceptable" has specific contractual and legal meaning, and triggers important tax consequences. All parties to the transaction must clearly understand when acceptance occurs, under what circumstances it may be delayed, and who bears the expense of a delay.

Another "step-in" rights issue is the termination clause. A public contract frequently allows for termination for convenience and termination for default or cause. If a termination occurs, construction or operation must continue. Therefore, the contract must clearly specify who has the responsibility for "stepping in" as well as the procedures and standards for reaching financial settlements.

Typically, the surety who backs a performance bond will want that opportunity. However, this contract element is negotiable and any of the financiers, insurers, subcontractors, parent companies, or the

community itself may want to have this senior position.

Finally, the contract must specify when "step-in" rights can be exercised. Therefore, the contract must unequivocally define such terms as "non-performance," "poor performance" and "breach of contract." Confusion in this area can only lead to expensive disputes and an increased danger that the facility will suffer serious performance difficulties.

✓ **Insurance and Bonding**

The contract should specify both the insurance coverages and bonding required and which party is responsible for obtaining them. Particular types of coverage that should be considered are:

- Property damage;
- Business interruption;
- Liability;
- Cost overruns on unforeseen events or conditions;
- Systems performance;
- Bond;
- Professional liability; and
- Environmental impairment.

Because insurance and bonding control risk, they are usually handled in conjunction with the risk allocation issues considered earlier. Unlike standard insurances, coverages such as systems performance and environmental impairment are subject to market availability. Depending upon insurance market conditions and insurance carrier preferences, they may not be available at all times, and even existing policies may not be automatically renewed.

✓ **Other Issues**

This guide cannot discuss each contract provision. You should make sure your service agreement addresses other provisions included in almost all public-private partnership agreements, including:

- Oversight and reporting (including audits);
- Dispute resolution;
- Subcontracting;

- Warranties; and
- Handling of residuals.

Conclusion

In essence, public-private partnership agreements are designed to allocate risks among the parties in proportion to their abilities to bear risks, and to control factors associated with those risks. Because numerous parties are involved and the issues concerned cover construction, operation, technologies, and finance, these agreements inherently become large and complicated. A community is well advised to seek professional help in structuring such as agreement in order to be satisfied that its interests are well protected.

Conclusion

*We have Designed this Guide to Help You Get Started -
We Hope You Find it Useful*

This guide introduces the concept of public-private partnerships for environmental services. It explores their merits relative to traditional public provision of services and presents an action checklist of typical steps in forming a partnership. Some of the more complicated steps were given special attention. As the field matures and conventions change, you should update the information in this guide by contacting the associations and institutions listed in Part IV which follows. Reviewing public works journals will also help you keep up-to-date.

We at EPA are committed to implementing environmental programs required by Congress. We recognize that one way or another, citizens must pay for these programs. Financing or otherwise providing these services in conjunction with the private sector can be effective in reducing the price we all pay for a cleaner environment while ensuring that our environmental goals are met.

Public-private partnerships may sound new and perhaps even unconventional, but many communities have found them beneficial for a wide variety of services. We think you will too, either now or in the future. As a representative of your community and a trustee for the environment, you can fulfill your obligation to explore all the alternatives for environmental services by giving public-private partnerships a careful evaluation. We have designed this guide to help you get started - we hope you find it useful.

Part IV

Appendix

Resources for Assistance on Public-Private Partnerships



Part IV

Appendix

Resources for Assistance on Public-Private Partnerships

Associations/Organizations

Public-Private Partnerships

General Public Finance

Regionalization

Technology

Case Study Contacts

Public-Private Partnerships Contacts

Resources for Assistance on Public-Private Partnerships

The list that follows is divided into several parts. The first cites several national associations that provide technical assistance (through consulting or publications) on various aspects of public-private partnerships. The members of these associations are either state and local officials or private firms involved in financing partnerships. There may be similar statewide organizations that may be able to assist you.

In addition to your state's environmental agency, additional information and assistance may be available through the state treasurer's or finance office. Other state agencies such as those for economic and community development, small business, and transportation may also be able to offer advice or provide assistance to particular aspects of your project. An additional resource may be found through state and local colleges and universities that offer technical assistance.

The second part of this list directs you to publications that provide general information on financing, conducting feasibility studies and determining your government's financial condition. A limited list of sources for technology information follows. Finally, we have included contacts for all the case studies detailed in this document.

These lists are not all inclusive. The authors welcome your suggestions for additional associations and publications that could be added.

ASSOCIATIONS/ORGANIZATIONS

Associations

American Bar Association
750 North Lakeshore Drive
Chicago, IL 60611
312/988-5555

Association for Governmental Leasing & Finance
1101 Connecticut Avenue, NW
Suite 700
Washington, DC 20036
202/429-5135.

Government Finance Officers Association
180 N. Michigan Avenue
8th floor
Chicago, IL 60601
312/977-9700.

Government Finance Research Center of the GFOA
1750 K Street, NW
Suite 200
Washington, DC 20006
202/429-2750.

International City Management Association
777 North Capitol Street, NE
Suite 500
Washington, DC 20002
202/289-4262

National Association of Towns and Townships
Suite 730
1522 K Street, NW
Washington, DC 20005
202/737-5200.

National Association of Water Companies
Suite 1212
1725 K Street NW
Washington, DC 20006
202/833-8383

National League of Cities
1301 Pennsylvania Avenue, NW
Washington, DC 20004
202/626-3000.

Privatization Council
1101 Connecticut Avenue, NW
Washington, DC 20036
202/857-1142.

Public Securities Association
40 Broad Street
12th floor
New York, NY 10004
212/809-7000.

Water Pollution Control Federation
601 Wythe Street
Alexandria, VA 22314
703/684-2400.

National Conference of State Legislatures
1050 17th Street
Suite 2100
Denver, CO 80265
303/623-7800.

U.S. Conference of Mayors
1620 I Street, NW
Washington, DC 20006
202/293-7330.

National Rural Water Association
2715 M Street, NW
Suite 300
Washington, DC 20007
202/333-8830.

National Association of Counties
440 First Street, NW
Washington, DC 20001
202/393-6226.

National Governors' Association
Hall of the States
444 North Capital, NW
Washington, DC 20001
202/624-5300.

Association of State and Interstate Water Pollution
Control Administrators
Hall of the States
444 North Capital, NW
Washington, DC 20001
202/624-7782

Government Refuse Collection and
Disposal Association
P.O. Box 7219
Silver Spring, MD 20910
301/585-2898

National Solid Waste
Management Association
1730 Rhode Island Avenue, NW
Suite 1000
Washington, DC 20036
202/659-4613

Organizations

Colleges and Universities
(including Schools of Government)

For information contact:
National Association of Schools of
Public Affairs and Administration
1120 G Street, N.E.
Suite 520
Washington, DC 20005
202/628-8965

For information on state agencies, consult:

National Directory of State Agencies
Published by Cambridge Information
Group Directories, Inc.
JoAnne Duche, Managing Editor
7200 Wisconsin Avenue
Bethesda, MD 20814
800/227-3052

PUBLICATIONS

Public-Private Partnerships

Public-Private Partnerships Case Studies: Profiles of Success in Providing Environmental Services. Washington, DC: Office of Administration and Resources Management, U.S. Environmental Protection Agency, 1989.

Public-Private Partnerships (P³) Strategy. Washington, DC: Office of Administration and Resources Management, U.S. Environmental Protection Agency, 1989.

General Proceedings and Action Agendas from the U.S. Environmental Protection Agency's National Leadership Conference on Building Public-Private Partnerships. Washington, DC: Office of Administration and Resources Management, U.S. Environmental Protection Agency, 1988.

Public-Private Partnerships Bulletin. Washington, DC: Office of Administration and Resources Management, U.S. Environmental Protection Agency, Nos. 1 - 5, 1988 - 1989.

Alternative Financing for Solid Waste: General Proceedings Region 4 Conference on Public-Private Partnerships. Washington, DC: Office of the Comptroller, U.S. Environmental Protection Agency, 1988.

Public-Private Partnerships for Environmental Services: Region 3 Conference Proceedings. Washington, DC: Office of the Comptroller, U.S. Environmental Protection Agency, 1988.

Funding Our Environmental Future: General Proceedings Region 1 Conference on Public-Private Partnerships and Alternative Financing Mechanisms. Washington, DC: Office of the Comptroller, U.S. Environmental Protection Agency, 1989.

Financing Infrastructure Innovations at the Local Level. Washington, DC: National League of Cities, 1987.

Public-Private Partnerships for Environmental Services: Anatomy, Incentives, and Impediments. Washington, DC: Office of the Comptroller, U.S. Environmental Protection Agency, 1988.

Contract Operation and Maintenance: The Answer for Your Town? Washington, DC: Office of Municipal Pollution Control, 1987.

Cook, Michael, *Public-Private Partnerships: The Small Water System Challenge.* Washington, DC: Office of Drinking Water, U.S. Environmental Protection Agency, 1988.

Edwards, Howard W., *Successful Approach to Privatization.* Washington, DC: Center for Privatization, 1987.

Finley, Lawrence. *An Entrepreneurial Process for Privatizing at the Local Level,* The Privatization Review. The Privatization Council, New York, NY, Winter 1987.

Hayes, Harry P. et al., *How Effective are Your Community Services? Procedures for Monitoring the Effectiveness of Municipal Services.* Washington, DC: The Urban Institute, 1977.

Impact of the Tax Reform Act of 1986 on Privatization. Washington, DC: National Council on Public Works Improvement, 1986.

Olstein, Myron, "Selecting a Privatizer", *The Privatization Review*, The Privatization Council, New York, NY, Spring 1986.

Scully, Larry and Cole, Lisa, "Privatization: Making the Decision", *The Privatization Review*, The Privatization Council, New York, NY, Spring 1986.

Valente, Maureen Godsey, "Local Government Capital Financing: Options and Decisions", *The Municipal Year Book*, 1986. Washington, DC: International City Management Association, 1986.

General Public Finance

Groves, Sanford M. and W. Godsey, Maureen. *Evaluating Financial Condition*, 2nd ed. Washington, DC: International City Management Association, 1986.

Moak, Lennox, *Municipal Bonds: Planning, Sale and Administration*. Chicago, IL: Municipal Finance Officers Association, 1982.

Rosenberg, Philip and Stallings, C. Wayne, *Is Your City Heading for Financial Difficulty? A Guidebook for Smaller Cities and Other Governmental Units*. Chicago, IL: Municipal Finance Officers Association, 1978.

Standard & Poor's Corporation, *Debt Ratings Criteria: Municipal Overview*. New York, NY: Standard & Poor's Corporation, 1986.

Financial Capability Guidebook. Washington, DC: Office of Water, U.S. Environmental Protection Agency, 1984.

Touching All the Bases: A Financial Management Handbook for Your Wastewater Treatment Project (EPA/430-9-86-001). Office of Municipal Pollution Control, Municipal Facilities Division, U.S. Environmental Protection Agency, 1986.

Reference Guide on State Financial Assistance Programs. Washington, DC: Office of Water, U.S. Environmental Protection Agency, 1988.

Vogt, A. John, et al., *A Guide to Municipal Leasing*. Chicago, IL: Government Finance Officers Association, 1985.

Raftelis, George A., *The Arthur Young Guide to Water and Wastewater Finance and Pricing*. Chelsea, MI: Lewis Publishers, Inc., 1989.

Local Financing for Wellhead Protection (EPA/440-6-89-001). Washington, DC: Office of Water, U.S. Environmental Protection Agency, 1989.

Building Support for Increasing User Fees (EPA/430-09-89-006). Washington, DC: Office of Water, U.S. Environmental Protection Agency, 1989.

Regionalization

Giachino, John and Ferguson, Carol, "Regionalization Concepts Aids Wastewater Systems", *American City and County*, September 1986, V. 101, No. 9, p. 82.

Regionalization Options for Small Water Systems (EPA 570/9-83-008). Washington, DC: U.S. Environmental Protection Agency, June 1983.

Humphrey, Nancy and Walker, Christopher, *Innovative State Approaches to Community Water Supply Problems*. Washington, DC: The Urban Institute, December 1985.

Technology

Wastewater

Effectiveness of the Innovative and Alternative Wastewater Treatment Technology Program: Report to Congress (EPA/430-09-89-009). Washington, DC: Office of Water, U.S. Environmental Protection Agency, 1989.

Proceedings of the U.S. EPA Municipal Wastewater Treatment Technology Forum 1989. Office of Water, U.S. Environmental Protection Agency, 1989.

It's Your Choice: A Guidebook for Local Officials on Small Community Wastewater Management Options (EPA/430-09-87-006). Washington, DC: Office of Water, Office of Municipal Pollution Control, U.S. Environmental Protection Agency, 1987.

Treat It Right: A Local Officials Guide to Small Town Wastewater Treatment. Washington, DC: National Association of Towns and Townships, 1989.

Small Wastewater Systems: Alternative Systems for Small Communities and Rural Areas. Washington, DC: Office of Water, Program Operations, U.S. Environmental Protection Agency, 1987.

For a variety of readings on wastewater treatment technology contact:

National Small Flows Clearinghouse
West Virginia University
P.O. Box 6064
Morgantown, WV 26506-6064
800/624-8301

Solid Waste

Decision Makers Guide to Solid Waste Management (Guide: EPA/530-SW-89-072 & Brochure: EPA/530-SW-89-073). Washington, DC: Office of Solid Waste, U.S. Environmental Protection Agency, 1990.

Yard Waste Composting: A Study of Eight Programs (EPA/530-SW-89-038). Washington, DC: Office of Solid Waste and Emergency Response and the Office of Policy, Planning and Evaluation, U.S. Environmental Protection Agency, 1989.

Recycling Works! State and Local Solutions to Solid Waste Management Problems (EPA/530-SW-89-014). Washington, DC: U.S. Environmental Protection Agency, 1989.

Bibliography of Municipal Solid Waste Management Alternatives (EPA/530-SW-89-055). Washington, DC: Office of Solid Waste, U.S. Environmental Protection Agency, 1989.

The Solid Waste Dilemma: An Agenda for Action (EPA/530-SW-89-019). Washington, DC: Office of Solid Waste, U.S. Environmental Protection Agency, 1989.

Local Officials Guide - Municipal Incinerators: 50 Questions Every Local Government Should Ask. Washington, DC: National League of Cities, 1988.

Drinking Water

The Nation's Public Works: Report on Water Supply, Categories of Public Works Series. Washington, DC: National Council on Public Works Improvement, 1987.

Nyer, Evan K., *Groundwater Treatment Technology.* New York: Van Nostrand Reinhold Company, 1985.

Gumerman, Robert C. et al., *Small Water System Treatment Costs.* Park Ridge, New Jersey: Noyes Data Corporation, 1986.

Technology Transfer Environmental Protection Control Alternatives: Drinking Water Treatment in Small Communities. Washington, DC: Office of Water, Technical Support Division (Cincinnati, OH), U.S. Environmental Protection Agency, Scheduled 1990.

Case Study Contacts

Mount Vernon, IL
James Bassett
City Manager
City Hall
1100 Main Street
Mt. Vernon, IL 62864
618/242-5000

Millbury, MA
Earl W. Chase, Jr.
Administrator
Town Hall
127 Elm Street
Millbury, MA 01527
508/865-4710

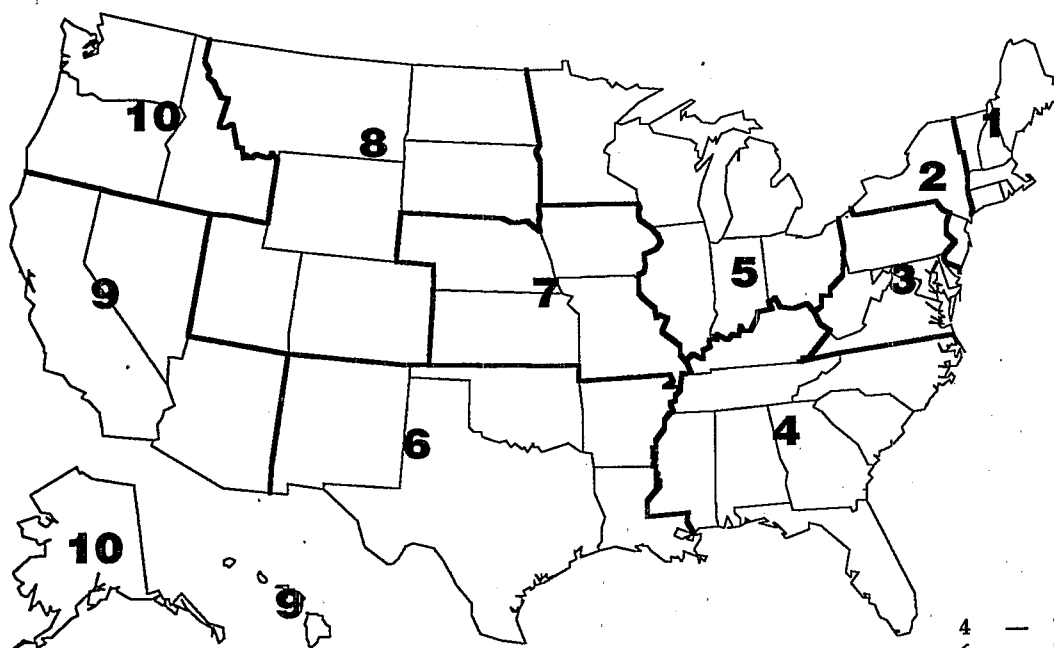
Scottsdale, AZ
Jim Nelson
Water Quality & Conservation Manager
9191 East San Salvador Drive
2nd Floor - New Corporation
Scottsdale, AZ 85258
602/391-5681

Downingtown, PA
Donald Greenleaf
Borough Manager
4 West Lancaster Avenue
Downingtown, PA 19335
215/269-0344

Kerrville, TX
Bart Hines
Public Works Director
800 Junction Highway
Kerrville, TX 78028
512/257-8000

Western Carolina Sewer Authority
Charles Douglas
Director
Mulden Road
P.O. Box 5242
Greenville, SC 29606

EPA Contacts



4 — Alabama
10 — Alaska
9 — Arizona
6 — Arkansas
9 — California
8 — Colorado
1 — Connecticut
3 — Delaware
4 — Florida
4 — Georgia
9 — Hawaii
10 — Idaho
5 — Illinois
5 — Indiana

7 — Iowa
7 — Kansas
4 — Kentucky
6 — Louisiana
1 — Maine
3 — Maryland
1 — Massachusetts
5 — Michigan
5 — Minnesota
4 — Mississippi
7 — Missouri
8 — Montana
7 — Nebraska
9 — Nevada

1 — New Hampshire
2 — New Jersey
6 — New Mexico
2 — New York
4 — North Carolina
8 — North Dakota
5 — Ohio
6 — Oklahoma
10 — Oregon
3 — Pennsylvania
1 — Rhode Island
4 — South Carolina
8 — South Dakota

4 — Tennessee
6 — Texas
8 — Utah
1 — Vermont
3 — Virginia
10 — Washington
3 — West Virginia
5 — Wisconsin
8 — Wyoming
9 — American Samoa
3 — District of Columbia
9 — Guam
9 — Northern Mariana
9 — Pacific Trust Territories
2 — Puerto Rico
2 — Virgin Islands

Public-Private Partnerships Regional Coordinators

George Mollineaux
EPA - Region 1
John F. Kennedy Federal
Building
Boston, MA 02203
(617) 565-9442

Alice Jenik
EPA - Region 2
26 Federal Plaza
New York, NY 10278
(212) 264-9860

Cathy Mastropieri
EPA - Region 3
841 Chestnut Street
Philadelphia, PA 19107
(215) 597-4149

Tom Nessmith
EPA - Region 4
345 Courtland Street, N.E.
Atlanta, GA 30365
(404) 347-7109

Rosalie Day
EPA - Region 5
230 South Dearborn Street
Chicago, IL 60604
(312) 353-6324

Bob Carson
EPA - Region 6
1445 Ross Avenue
Dallas, TX 75202-2733
(214) 655-6530

Ray Hurley
EPA - Region 7
726 Minnesota Avenue
Kansas City, KS 66101
(913) 551-7045

David Wann
EPA - Region 8
Suite 500
999 18th Street
Denver, CO 80202-2405
(303) 293-1621

Marsha Harris
EPA - Region 9
75 Hawthorne Street
San Francisco, CA 94103
(415) 744-1635

Matt Coco
EPA - Region 10
1200 Sixth Avenue
Seattle, WA 98101
(206) 442-0705

Public-Private Partnerships Headquarters Staff

Charles L. Grizzle
Assistant Administrator
Office of Administration and
Resources Management
202/382-4600

David P. Ryan
Comptroller
202/475-9674

John J. Sandy
Director
Resource Management Division
202/382-4425

David Osterman
Chief
Resource Planning and Analysis Branch
202/245-4020

Staff: Joanne Lynch
Leonard Bechtel
Margaret Binney
Ellen Fahey
Kim Lewis
Timothy McProuty
Eugene Pontillo

For more information write:

Public-Private Partnerships Initiative
U.S. Environmental Protection Agency
401 M Street, S.W.
(H3304)
Washington, DC 20460

