



# Developing Public/ Private Partnerships

## An Option For Wastewater Financing



## PURPOSE OF THIS BROCHURE

Financing the construction and expansion of wastewater treatment facilities using private resources, specifically public/private partnerships (P3s), is a viable option for community decision makers. As an introductory document, this brochure presents some background on P3 financing, outlines the steps necessary to move toward P3 financing, and addresses some issues about structuring a successful partnership agreement.

On April 30, 1992, the option to use P3s was made easier when President Bush signed Executive Order 12803, encouraging the privatization of infrastructure assets by state and local governments, removing some prior obstacles. To implement the Executive Order, the U.S. Environmental Protection Agency (EPA) is reviewing its current policies and regulations. EPA intends to revise its programs as necessary to facilitate private investment in municipal wastewater treatment systems, consistent with the Executive Order. Decision makers should carefully consider the options discussed in this brochure not only as a method of financing wastewater treatment facility expansion and construction, but as a possible means of reducing the fiscal burden on their communities.

## WHO SHOULD READ THIS DOCUMENT

- Local government officials (e.g., mayors, town managers, town council members) in communities that are:
  - Experiencing wastewater capacity constraints
  - Projected to expand beyond current wastewater treatment capacity
  - Interested in selling public infrastructure assets
- Leaders in business, finance, banking, and industry who may wish to be partners in structuring and executing a P3 agreement with a community to finance, construct, and/or operate wastewater facilities
- Members of the general public with an interest in community wastewater programs and facilities



## BACKGROUND ON FINANCING WASTEWATER SYSTEMS

In the past few years, economic and labor conditions have combined to make public works construction and expansion projects increasingly expensive and difficult to finance. In 1987, Congress amended the Clean Water Act to include provisions that shifted the focus of responsibility for financing projects to the states. The amendments phased out the construction grants program and authorized the State Revolving Fund (SRF) loan program.

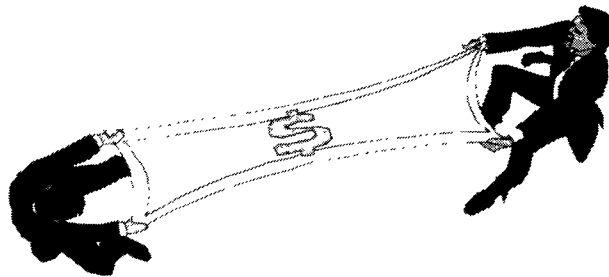
Since federal grant funds committed to public works have been subsequently reduced, state and local governments face expanded responsibilities while constrained by limited budgets. This situation has compelled many state and local governments to explore a variety of financing options that reduce reliance on federal assistance.

Several options exist for expanding treatment facilities without complete federal financing. Four of the options are described below:

*Public financing.* Public financing through municipal bonds is a time-tested method of funding public works construction and results in clear public ownership, unencumbered by federal government or private parties. However, complete public financing without some measure of federal assistance can be an expensive option. This option can significantly lower the community's debt capacity and potentially restrict the community's ability to move forward with other capital projects. Similarly, full public financing may lead to increased taxes, often a politically unpalatable option.

*State Revolving Fund (SRF) financing.* In Title VI of the Clean Water Act, as amended in 1987, Congress established the SRF capitalization grant program to provide a continuing source of financing for water quality programs. These capitalization grant funds may be used by the states to provide loans to municipalities for the construction and expansion of treatment facilities and other water quality management activities. Recipients of SRF funds must dedicate a source of revenue for repayment of the loan. As loans are repaid, funds are available to assist other communities.

*Private impact fee financing.* Private impact fees are imposed on users who create the need for expansion. This method is generally utilized to serve significant commercial/industrial expansion, but may, as a result, serve to discourage growth if fees are set too high.



*Public/private partnership financing.* This option allows the private sector to participate in the financing, construction, ownership, operation, and maintenance of the facility. A flexible solution to financing, P3s can benefit both the community and the private partner by providing capital to the community for expansion without necessarily lowering its debt capacity and by offering an equity stake in the facility to the private partner (privatizer). This option is the focus of this brochure.

## INTRODUCTION TO PUBLIC/PRIVATE PARTNERSHIPS

The general purpose of P3s is to provide a feasible, cost-effective means of financing and/or operating environmental services in a way that benefits both the community and the private partner. Any contract that defines the financing, construction, operations and maintenance, or ownership of the project and is acceptable to both the private party and the community can be a viable P3.

Like any service contract with a private party, questions of responsibility and risk must be resolved, such as: Who will own the physical structure? Who will provide the capital financing, and how will the parties share in the payment of capital outlay? Who will own the revenue stream? Who will provide the operating capital? Who will operate the facility? and Who will be responsible for environmental compliance? Different kinds of P3 financing agreements have varying implications for the financial and legal status and ownership of the expanded facility and should be thoroughly reviewed with tax, bond, and legal counsel.



The most basic question in structuring a P3 is ownership of the facility: Will it be privately or publicly owned or some combination thereof? The issue of ownership significantly affects the financial options, legal status, and assumption of risk for the facility. Although you may be able to answer the question of physical ownership quickly, state and local laws may influence the final answer. There are options and restrictions that accompany privatization.

## PARTNERSHIP ARRANGEMENTS

Although P3s are flexible in structure to the extent that the parties agree, five types of partnership arrangements are generally recognized:

- Contract services
- Turnkey facility construction
- Developer financing
- Privatization of ownership
- Merchant facility

Each model provides different services to a community. Only the last three, however, typically offer private financial assistance for facility construction and expansion. Your community may find that a hybrid of these serves best.

*Contract services:* This arrangement contracts out a specific public purpose function to a private firm. Municipal garbage collection, street cleaning, and snow removal are all common contract services. Less common are contract services for operating wastewater treatment facilities. The distinct feature is that the facilities remain publicly owned, and are not privately financed. Communities usually adopt contract service plans for either technical or budgetary reasons. Many communities have found that contracting with the private sector is cheaper than public provision of the same services.

*Turnkey facility construction:* In turnkey projects, a private partner designs, constructs, and may or may not operate a public facility. However, ownership of the facility remains with the public. While turnkeys may or may not include private financing, the public sector typically bears the responsibility of securing and providing financing for the facility through municipal bonds, which depend on user fees for repayment. Turnkey projects are relatively common for major community undertakings such as solid waste disposal and wastewater treatment.

*Developer financing:* Here, a private party finances the construction or expansion of a wastewater treatment facility in return for the right to develop the area. Actual facility ownership may be public. In accordance with the community's land development controls, the developer may turn over the completed infrastructure to the community in which the project is located. In other cases, the developer may establish a homeowner association or contract with a service firm. Developer financing is most commonly used in areas that are experiencing rapid expansion.

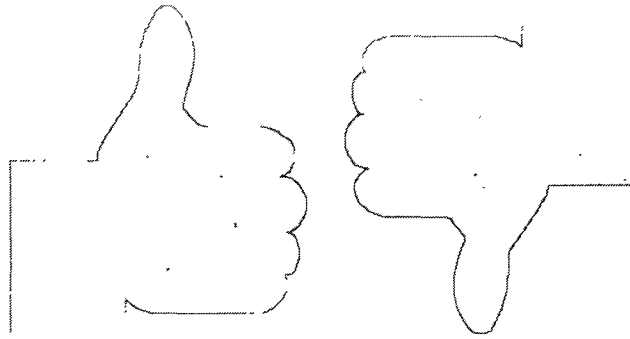
*Privatization of ownership:* In privatization, a private party owns, builds, and operates a facility and either partially or totally finances its construction or expansion. Privatization of environmental facilities had been more frequently considered as a financial mechanism prior to the Tax Reform Act of 1986. Since 1986 there has been little activity in privatization in the area of wastewater. Several communities however, have successfully privatized solid waste management and drinking water facilities.

*Merchant facilities:* In this arrangement a private party designs, builds, operates, and owns a facility with the expectation of making a profit from the services provided. In merchant facilities, the private firm owns and operates the facility, and controls the service, with little or no input from the local government. Local government still holds the ultimate responsibility for compliance with environmental requirements. This arrangement is generally associated with solid waste management activities such as landfill operation, composting, and recycling plants. Though this method has been used to a very limited degree, it has potential where major industrial and public wastewater treatment issues are closely associated.

## PROS AND CONS OF PUBLIC/PRIVATE PARTNERSHIPS

Like most municipal decisions affecting a community, the decision to form a public/private partnership carries significant benefits and, potentially, some counterbalancing concerns. The benefits of a P3 arrangement for a community typically may include:

- Decreased design and construction times
- Lower construction costs due to reduced construction times
- Increased flexibility and "fast track" processing when financing is required
- Efficient and cost-effective private company management and operation with local community ownership
- Exemption from regulatory requirements such as the Davis-Bacon Act



Executive Order 12803 provides communities greater flexibility for the sale of existing wastewater treatment facilities financed with federal funds. Privatization is now a more attractive financial incentive for communities.

Barriers that discourage the private sector from developing partnerships with local communities need to be considered, including liability under anti-trust legislation, restrictions on tax-exempt debt to finance wastewater treatment programs, and responsibility for regulatory compliance. As mentioned earlier, the development of P3 arrangements suffered a setback when the 1986 Tax Reform Act eliminated many of the tax incentives for private investment in municipal wastewater treatment. Without such tax savings, it is more difficult for private investors to earn a reasonable return on investment while charging fees competitive with those of public facilities. States may also play a part by imposing restrictions on the ability of communities to enter into contract arrangements and create debt. In addition, provisions of the SRF program restrict financing to publicly owned facilities, thereby limiting viable P3 options. For small communities, transaction costs for structuring a P3 (e.g., legal and consultant fees, contract costs) may also limit the feasibility of P3s.

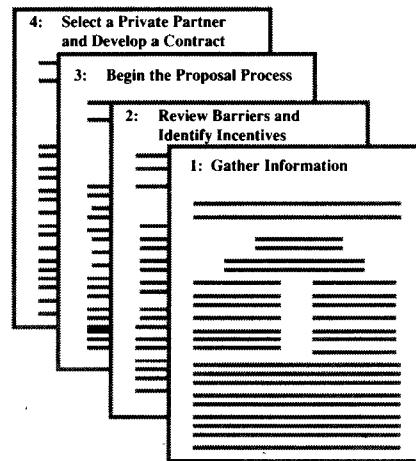
The potential disadvantages of working in partnership with a private firm lie in the risk to the community of relinquishing control over some of the facility design, financing construction, the O&M, and compliance with environmental requirements (e.g., NPDES permits). However, a carefully constructed contract can minimize this risk.

Certain situations lend themselves more readily to successful P3s. First, from the perspective of the private party, a rapid rate of population growth and demonstrated interest of new industry and additional development are good indicators that there will be sufficient revenue flowing from the facility to make the partnership attractive. Second, from the perspective of the community, problem situations in which speed of construction and financial assistance are critical make P3s more attractive, since the most common benefit of P3s is time saved from design to operation. Similarly, private participation may be the only way to raise the necessary capital for municipalities facing serious financial constraints.

The process involved in building consensus for a P3 and reaching agreement with a privatizer is as critical as the physical construction and operation of the facility. Above all, successful P3s require educated participation, especially regarding financial and time requirements and legal constraints. As with any other contractual arrangement, successful implementation of a P3 arrangement requires flexibility on the part of both parties.

## STEPS TO ARRANGING A PUBLIC/PRIVATE PARTNERSHIP

In order to decide whether a P3 makes sense in your community, you should educate yourself about the process. The four steps below should help you structure the decision and execute a contract that makes sense for your community.



### STEP 1: Gather Information

- Evaluate your community's physical needs. Is there a need to upgrade/expand facilities?
  - Consider short vs. long-term needs and the expected rate of industrial and population growth in the next few years
  - Determine whether the growth of your community is constrained by wastewater treatment capacity
  - Identify whether your community meets, and will continue to meet, federal water quality standards
- Estimate the potential cost of the project



- Explore the financing options – and the particular constraints or incentives for each option open to your community such as developer financing, SRF funding, general obligation bonds, revenue bonds, and tax-exempt leases
- Assemble a group of decision makers that includes the following local leaders:
  - *Finance director and elected community officials.* Review financing options and, if appropriate, generate support for privatization, identify local legal problems, and amend local ordinances.
  - *State officials.* State representation in your decision-making process will help identify any legal problems at the state level and may generate and focus interest on innovative financing techniques.
  - *Legal, tax, and bond counsel.* Since the contract itself is potentially complex, experienced counsel is necessary.
  - *Public works director.* In order to determine the required capacity of the new facility or expansion, the public works director must be consulted.
  - *Technical advisors (engineers).* Engineers familiar with wastewater treatment methods and technology will be necessary to aid in evaluating the interested parties' proposals.
- Review with the public works director and consulting engineers the physical characteristics of the treatment facility currently operating and any unique physical circumstances that may affect the cost involved with expansion or new construction
 

When planning a new facility, review the available land and siting options.
- Select the best available consultant/advisor knowledgeable and experienced in P3 arrangements
- Identify the range of technologies and approaches available to meet the physical needs of the facility to accommodate your community's growth
 

Before meeting with potential private partners, evaluate the advantages and disadvantages of each to increase your understanding of the options and relative capital and O&M costs of a variety of alternatives.
- Develop a public relations program to gain community support for the project
 

A public relations program should be an ongoing part of the entire process.

## **STEP 2: Review Barriers and Identify Incentives**

- Review federal regulations; contact EPA if necessary for prior approval
- Review state regulations governing your compliance responsibilities
  - As of 1992, 19 states have passed privatization statutes easing the process of developing P3s.
  - State regulations may influence and restrict the structure and financing of partnerships, how public services are delivered, procurement and bidding procedures, structure of charges, and more.
- Identify all tax advantages (federal, state, and local) available to private investors and the community
- Identify private sector organizations interested in investing resources into such a business venture
- Conduct an analysis of the public vs. private options in financing the project (bonds vs. loans vs. sale to private investor)
- Identify all legal issues and barriers that would affect the private investor's efforts
- Prepare a formal estimate of the costs of upgrading or constructing the wastewater treatment facility

## **STEP 3: Begin the Proposal Process**

- Develop a Request for Proposal (RFP) for a P3
  - While sealed bidding is an efficient method of evaluating proposals on a close parity basis, this method requires that your community has a very precise and clear vision of the plant and the contract before beginning the process.
  - RFPs allow for a more participatory negotiating process, providing you and the interested bidders a more open-ended view of each party's needs, requirements, and capabilities.
- Evaluate the P3 proposals using specific criteria such as:
  - Strength of private investor
  - Technical capabilities
  - Financial packaging presented
  - Related experience
  - Ability or willingness to assume all or to share the risks involved in the project
- Negotiate with the private investor on topics such as:
  - Significant cost savings
  - Responsibility for meeting regulatory compliance

- Responsibility for meeting operating requirements
- User charge structure
- Make the decision as to whether or not to use the P3 arrangement to upgrade or construct the wastewater treatment facility

#### **STEP 4: Select a Private Partner and Develop a Contract**

- Once all the bids are in, select a contractor, your private partner
- Construct a contract that spells out the roles of both parties and addresses as many contingencies as possible

The development of a contract should be a collaborative process. A list of general questions and issues to be addressed is included at the end of this brochure.

- Consider the following issues to ensure that the risks and responsibilities are properly understood and completely explained by both your community and the privatizer in the contract:
  - *Capital.* Who will provide it and how?
  - *Construction.* How much control does the community have at this stage?
  - *Operations and maintenance.* Does the service contract adequately describe the division of responsibilities?
  - *Administration.* What kind of oversight is appropriate?
  - *Compliance.* Whose responsibility is this, and can the community limit the potential risk through the contract?
  - *Financial risk.* Who has control over rates?
  - *Legislative risk.* What is the impact of new requirements?
- Ensure that community control and oversight of the project will remain with the community

## QUESTIONS TO ADDRESS WHEN CONSIDERING P3 FINANCING

The following is a list of background and contract-related questions you should address as you move through the privatization decision and begin to structure a contract. The list is divided into subject area groupings.



### Legal

- How do federal regulations and statutes affect private ownership of a public service facility?
- Do state laws allow private ownership of a public service facility?
- Do state laws provide for turnkey construction contracts (e.g., design-build)?
- Are long-term operation/service contracts allowed?
- Can your community use privatization to expand an existing wastewater treatment facility that has been constructed with public funds?
- Are state and local procurement laws applicable to P3 facilities in my locality? If so, do they limit P3 arrangements?
- Are there local laws that need to be altered or changed?
- Are there any restrictions on selling facilities that have been partially or wholly constructed with state funds?

### Financing

- Will the privatizer provide the financing through private sources?
- Should the community consider issuing general obligation (GO) bonds or revenue bonds to finance the project?
- Can "private facility bonds" be issued or will the state cap prohibit this type of financing? What is the interest cost in comparison to GO or revenue bonds? To private financing?

- Should taxable bonds be considered? How does the interest cost compare?
- Who is responsible for making debt service payments?
- Who will provide the temporary financing during the construction period?
- Does the community have sufficient revenues to support the debt issued?
- What is the most advantageous means of financing?

### **Construction**

- Who has control over design?
- Who has control over construction? Who monitors and inspects construction quality and progress?
- Can the community review plans?
- Can the community require changes to be made to the plans of the project?
- Will these changes alter the construction contract agreement?
- How are major delays in construction handled?
- How are major change orders in construction handled?
- If the community has a problem with the project meeting specifications, what remedies does the community have and how should they be written into the contract?

### **Operations**

- How are disputes settled that arise between the community and the privatizer?
- Are there limits on rates (i.e., approved by Public Utilities Commission)?
- What if the privatizer wants to substantially raise its price for service?
- What provisions are included to present or resolve noise or odor problems?
- What if effluent limits are exceeded (in terms of reporting, compliance, fines)?
- How are major repairs handled?
- Are there provisions for repairs to the wastewater treatment facility and are they sufficient to cover incurred repairs?
- If the facility is not being operated satisfactorily, what remedies does the community have?

## **Responsibility for Meeting Discharge Permit Requirements**

- Who has the responsibility for making sure water quality standards are being met?
- Who has the responsibility for assuring compliance with industrial pretreatment requirements?
- Does the community have oversight provisions regarding the discharge permit?
- What remedies does the community have if the privatizer continually violates the discharge permit?
- Should the community require the privatizer to post a performance bond?

## **Administrative**

- What may happen if the community at some future time wants to acquire the privatized facility? Does the community have the right to purchase the facility back from the contractor at the end of the service contract period?
- Is the community obligated to purchase the facility? How would the purchase price be determined?
- What happens if the privatizer goes bankrupt?
- What happens to public employees at an existing facility?
- Are existing labor laws being followed?

## **Questions for Interested Private Parties**

- Has the privatizer completed other P3 projects?
- How was the privatizer's performance in meeting schedules?
- Did the projects stay within cost estimates, and were the projects completed on time?
- What additional information can the privatizer provide on P3s?

## SUMMARY

A public/ private partnership is a viable method of financing facility expansions or new construction. Clearly, P3s are a potentially complex option and are not appropriate for every community. But P3s have proven themselves as effective alternatives for financing construction, especially for communities facing compliance deadlines and real financial constraints, or for communities exploring alternatives in light of Executive Order 12803.

After following the steps and addressing the questions identified here, you may or may not find that P3s are appropriate for your community. The community that structures a successful P3 program, however, may be able to reduce costs of construction and the operation and maintenance of the facility. With a properly designed agreement, the P3 experience can be a rewarding one for all parties involved, easing financial pressure on communities, opening a formerly public asset to private participation, and, at the same time, safeguarding the environment.

### **Additional Publications Available from EPA**

The following is a list of additional materials available from EPA that explore in greater depth the process of P3 financing. For more information and to request documents, call the EPA Public Information Center at (202) 260-2080.

*A Preliminary Analysis of the Public Costs of Environmental Protection: 1981-2000* (EPA/OARM Publication May 1990)

*Financing Models for Environmental Protection: Helping Communities Meet Their Environmental Goals* (EPA Document 202-B-92-0008)

*Paying for Progress: Perspectives on Financing Environmental Protection* (EPA Document 20M-2004)

*Public/Private Partnerships Case Studies: Profiles of Success in Providing Environmental Services* (EPA Document 20M-2005)

*Public/Private Partnerships for Environmental Facilities: A Self-Help Guide for Local Governments* (EPA Document 20M-20003)

*Public/Private Partnerships Save Cities Millions* (EPA Brochure August 1990)

*Solid Waste Contracting: Questions and Answers* (EPA Document 220-B-92-005)

*Solid Waste Contract Negotiation Handbook* (EPA Document 220-B-92-004)