

# LONG-TERM PARTNERSHIPS IN WATER AND SEWER UTILITIES: ECONOMIC, POLITICAL, AND POLICY IMPLICATIONS

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## ABSTRACT

The single most defining event in water and wastewater privatization this decade is the advent of long-term contracts. It has changed the economics, politics, and policy of privatization in many fundamental ways. This paper sketches out some of the most important changes that we have observed so far, and derives some research needed to better understand the full impact of long-term privatizations.

## INTRODUCTION

Privatization of water and wastewater facilities in the United States is not a new phenomenon. Converting government-owned facilities to private ownership or management goes back at least three decades (Beecher, et al., 1995). In the 1990s this has emerged as one of the fastest growing areas of privatization at the local government level. Hundreds of communities have hired private firms to run all or part of their water or wastewater systems each year for the last several years (*Public Works Financing*, 1998). And according to a recent survey by the U.S. Conference of Mayors, four out of ten cities are actively considering privatization in order to reduce costs and attract private capital investment<sup>1</sup> (Larson, 1999).

Several clear trends emerged over these decades.<sup>2</sup> First, until recently, privatization of these facilities was a small-town phenomenon. Only in the last few years have large cities moved in this direction – culminating in 1998s privatization of the water system in Atlanta. Second, with few exceptions, privatization of water and wastewater facilities has not meant asset sales or leases – almost all privatizations are contracts for operation and maintenance (O&M) of facilities. Now and then some small systems are sold or leased – for example Fairbanks, Alaska, sold both utilities in 1997. With contract O&M, the government still owns the facility, and a private firm

operates, manages, and maintains it. Many contracts also require the private firm to upgrade or expand facilities and handle customer and other related services. Finally, a review of contracts signed in the last few years shows that almost without exception they are long-term agreements<sup>3</sup> (*Public Works Financing*, 1998). This trend towards long-term privatization contracts is the main thrust of this paper – but before we explore its implications, we have to examine why it is.

## WHY PRIVATIZATION?

A 1998 survey by R.W. Beck (1998) found that public official's greatest operational concern is meeting environmental regulations. The picture the survey paints of capital investment concerns is more complex. Public officials report that capital improvements are driven by:

Growth	40%
Age	30%
Regulations	27%
Other	3%

Coping with economic growth and with aging facilities is currently the greatest concern. But that may change. Over the last two decades, through the Clean Water Act and the Safe Drinking Water Act and their subsequent amendments, standards governing the quality of drinking water and cleanliness of effluent discharged into waterways have become ever more stringent. To meet these increasing standards, many local water and wastewater systems require improved technologies and upgraded infrastructure. The Environmental Protection Agency (EPA), Association of Metropolitan Sewerage Agencies (AMSA), Water Environment Foundation (WEF), and others now estimate that \$400 to \$500 billion in capital investments are needed to bring all water and sewer systems into compliance (U.S. Environmental

Protection Agency, 1997; AMSA/WEF, 1999). Planned federal and state funding will likely amount to less than half of the need (Cook and Rosseel, 1997).

Local governments who own these water and sewer systems are having great difficulty financing these improvements through conventional means of bonded debt or increased user fees. Caps on borrowing or voter resistance have made bond issues less viable and less attractive to policy makers.<sup>4</sup> And it is the prospect of increased fees that has increasingly made privatization an attractive option. Atlanta is a dramatic illustration.

The city water system was significantly out of compliance with environmental standards, leading to fines levied by the federal EPA. The water utility's own estimate of the cost to upgrade the system and achieve compliance called for a more than 100 percent increase in water rates. After a hotly contested competition among private firms, the final arrangement cuts the cost of upgrading and operating the utility by 44 percent, and means water rates need increase less than 30 percent to pay for the upgrades (Moore, 1999a).

Privatization in order to improve environmental compliance indicates that it is not cost savings alone, but a strong element of quality concerns that drive privatization decisions. Milwaukee provides a perfect example. In early 1998 the city signed an agreement with a private firm to operate the city wastewater treatment system for 10 years (Larson, 1999). The agreement cut the city's annual operating costs by 30 percent, for projected total savings of over \$148 million. The contract also contained many innovative provisions guaranteeing employee jobs, benefits, and representation, and a series of quality-based performance measures and bonuses. The city in June 1999 announced that after one year, cost savings allowed the city to cut user fees 15.5 percent, and the private operator had exceeded most performance goals, including:

- Injuries fell 160 percent, grievances fell 33 percent, and sick days fell 20 percent;
- Minority participation was 22 percent (exceeding the contract's 13 percent goal); and
- Compliance exceeded the DNR permits by 50 percent (earning the firm a \$50,000 bonus).

## **IMPLICATIONS OF LONG-TERM PRIVATIZATION CONTRACTS**

I don't pretend to be able to point out all of the implications of long-term O&M contracts. My goal is to cover those that are most clearly emerging or those that

I think may have the most repercussions. Also, I am not in a position to gather the data necessary to empirically examine the issues I raise. My hope is that these observations will encourage other to pursue such empirical work.

### Economic

Perhaps the most important economic implication of long-term contracts is also the simplest. A short term O&M contract usually does not offer large enough total dollar savings to cover capital investment needs. The kind of operating and capital changes required to generate 20 percent and greater operating cost savings take time to implement. Long-term contracts allow both sides to share and spread risks most appropriately and efficiently, and implement a broader range of cost saving measures.

Surveys of public officials and casual observation show that the leading opponents of privatizations are the public employee unions.<sup>5</sup> That is not likely to change. However, long-term contracts have dramatically changed the terms available to public employees. It is increasingly common for long-term O&M contracts to require that all employees be hired by the winning bidder (save those who cannot pass a drug test), and that the firm agree not to lay off any of those employees for a set period (usually at least one year) (Moore, 1999b). Again, Atlanta is a good illustration – the city required full hiring, with no layoffs for one year, and the winning bidder offered no layoffs for the length of the contract (Moore, 1999a).

Public employees make use of this trend, and if they fail to stop a privatization from occurring in the first place, their next demand is often for a full-hire provision. Even more interestingly, private operating firms are not opposing the idea, and even foster it, as in Atlanta. They argue that it helps to reduce ill-will and makes transitions much smoother, and that, in fact they have always on average hired over half of existing employees for their intimate knowledge of the local system (Moore, 1999b). But, it is the long-term aspect of these new contracts that allows full-hire provisions. Private operating firms tend to operate water and sewer utilities with about two-thirds the personnel that government does (*Wall Street Transcript*, 1999). The natural turnover rate of employees combined with some transfers of employees within the firm can bring the total number of employees down to the desired level (i.e. where the firm makes a profit at the contract price they bid) in around 3-5 years. So, for short-term contracts, full-hire provisions would often mean no profits, and so are rarely seen. With long-term contracts they are becoming the norm.

Another labor issue is that of benefits after privatization. Recent years have seen many private firms offer wages that are converging on those employees earned from local government, but benefit packages lagged. Notably, private sector defined contribution pension plans were viewed as inferior to public-sector defined benefit pension plans. With the splendid performance of the stock market in recent times, defined contribution plans have begun to look more attractive. Also, private pension plans often have much shorter vesting periods, and many governments are converting to defined contribution pensions, even the federal government. In instances where pension remains a bone of contention, a new possibility has emerged. When Milwaukee privatized its sewer system in a 10-year agreement in late 1997, the deal included a provision keeping the employees in the city pension system after they transferred to the private operator (Moore, 1999a). This required approval of a waiver by the Internal Revenue Service (IRS), which was secured, and now the firm makes pension payments to the city on behalf of those employees. Many in industry expect this provision to appear in some future contracts. These developments have to some extent closed the gap between private and government benefits packages.

A darker development arising from long-term contracts raises the question of inter-generational equity. Some contracts included large concession fees, paid by the contractor to the local government, that represent some portion of the present-discounted value of future operating cost savings. Another way to describe them is as the discounted present value of future user fee increases (or lack of decrease made possible by future operating efficiencies). However stated, the practice means that future ratepayers will pay higher rates than they might otherwise have to as a result of current policy-maker's desire for a pot of unencumbered dollars to spend as they will. Even if that money is used in an actuarially wise fashion such as for infrastructure, there may be considerable deadweight loss during the transfer.

Finally, the advent of long-term contracts appears to be causing changes within the operator industry. While most of the market was small towns and short-term contracts, investment in the U.S. market by the large international water firms, especially the French firms, remained somnolent. But recent years have seen them enter the U.S. with much fanfare and lots of capital. At the same time, there has been some consolidation within existing firms, and entry by a number of new firms – mostly subsidiaries of investor-owned water utilities or electric power firms, such as Enron and Duquesne Energy.

The changes in the industry, and the direct effect of long-term arrangements, have made bidding for contracts more vigorous than ever. Long-term arrangements, without the prospect of costly re-bids every few years, are much more attractive to the industry. And local governments strive to squeeze from the bidding process for a 20-year contract at least all of the cost savings that would be expected from 20 years of a periodically competitive contract. Casual empiricism to date indicates that average annual cost savings from long-term contracts are greater than average savings from short-term ones. This probably reflects a combination of the savings from competition being realized on a larger scale for longer contracts, and the industry's contention that more efficiency can be realized over a longer period.

### Political

The politics of long-term privatization are largely a function of the economics. On one hand, public officials often cite concerns about loss of control behind their resistance to privatization. Long-term privatization only exacerbates that concern.<sup>6</sup> On the other hand, there is a growing realization that the higher user fees caused by extensive capital improvements have very regressive effects on local residents. This is starting to cause the politics of privatization to deviate from conventional thought. As Atlanta's liberal mayor showed, conservatives do not own privatization as a policy. His core constituency, the urban poor, stood to lose the most from the expected 100 percent increase in rates if the public works department continued to operate the water system. Of course, these issues are most salient in larger cities. The total dollar figures in smaller cities, while perhaps representing as significant a share of the local government budget, do not incite the passions that the nine-digit figures of big cities do.

The change in options for employees has also changed the politics of privatization. Fiscally responsible democrats and public employees are more likely to compromise with privatization proposals that protect their security to a greater degree than in the past (Gillen and Johnson, 1999).

Finally, some of the recent long-term contracts in bigger cities, again notably Atlanta, have been laden with unrelated "community benefit" requirements. Contracts have long included minority participation requirements, but stratagems as diverse as corporate office relocations and school programs have begun to appear in bid proposals. The firms including such provisions argue that they give the elected officials involved some concrete

benefits to offer those who are not persuaded by the economics of the privatization itself. But some observers remain concerned about the politicization of economic decisions and a loss of focus on the core performance elements of the contract, which, with a long-term agreement, could have serious repercussions.

### Policy

Given the economic and political attractions of long-term privatization, there is little doubt that some local governments who chose long-term O&M contracts would choose an asset lease or sale if it were not for perverse tax rules. Under current rules, if a local government sells or leases its water utility to a private party, the debt on the facility is no longer tax exempt, raising the cost of capital by about four percent. This despite the fact that the utility will continue to serve the same public purpose, serve the same customers, still have government regulation of its rates, and will begin to pay income, property, and sales taxes from which it was previously exempt. That four percent differential makes contract O&M the more attractive option in most cases, even if leaving it aside would mean a sale or lease was more efficient and desirable. There is an argument to be made that there would be net fiscal and efficiency gains from changing the tax rules so that entities serving a well-defined public purpose, and not just publicly-owned entities, have access to tax-exempt debt (Gillen and Johnson, 1999).

Long-term privatizations also challenge the fundamentals of a growing policy practice – managed competitions. A managed competition is one in which the in-house employees are allowed to bid against private firms for the contract. (U.S. Environmental Protection Agency 1997) Since a significant share of the cost savings from long-term privatization come from shifting risks to the private operators, it is very difficult for an in-house team to offer competitive bids. To date, no long-term contracts have been bid as managed competitions. This may turn out to be a non-problem, since much of the reason for managed competitions is to assuage public employee unions objections to privatization, and long-term contracts offer full-hire provisions in its place.

By stirring increased interest in privatization, long-term contracts are increasing attention to legal barriers to privatization of utilities. Many states have their own laws that restrict long-term privatization or require them to be approved on a case-by-case basis. And the EPA has administratively decided that E.O. 12803 requires it to closely examine all long-term privatizations. Local governments are mobilizing to secure state and federal legislation to alleviate these barriers.<sup>7</sup>

## CONCLUSION AND RESEARCH NEEDS

The single most defining event in water and wastewater privatization this decade is the advent of long-term contracts. It has changed the economics, politics, and policy of privatization in many fundamental ways. And it is still only two years old, so much remains to be learned – we really don't know the full extent of the changes it has wrought and is yet to bring. This paper sketched out some of the most important changes that we have observed so far, and hinted at some to come. If nothing else, the much larger dollar size of long-term contracts, made even larger in the case of large cities attracted to privatization by the prospect of long-term arrangements, changes the economic impact of privatization considerably. From that follows political changes in labor impacts and policy changes in contracting practices. It is hard to doubt that we will see more change as long-term privatization practices mature.

But already we can identify some key research needs. To name but a few:

- Does the prior assumption of industry and policy makers that private firms can effectively operate utilities with roughly two-thirds the number of employees hold up in the long run? How do “equilibrium” manning levels compare after 10 or 15 years? Ultimately, what percentage of the total cost savings of privatization derive from these labor productivity gains, and how much from capital improvements?
- Are the cost savings and quality improvements agreed to in long-term contracts sustained, eroded, or increased over the length of the contract? Does the principal-agent problem overwhelm competition for longer-term contracts?
- Do long-term contracts increase the rents created by privatization relative to short-term contracts? Do they decrease their transaction costs? Both hypotheses seem plausible but the questions are complex in detail.
- As long-term contracts become more prevalent, will competition for them increase, continue, or decrease? How will the industry change?
- Are there measurable net economic effects good or bad, from the dominance of contract O&M over asset sales and leases?

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## ENDNOTES:

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<sup>1</sup>During its 1998 annual meeting, the U.S. Conference of Mayors endorsed a resolution supporting the use of public/private partnerships. In part, the resolution reads, "The U.S. Conference of Mayors continues to support the use of public/private partnerships as one option for a) improving efficiency in operation and maintenance of public water and wastewater infrastructure, b) bringing existing facilities into compliance with environmental regulations, c) stabilizing rates, d) attracting private capital investment for improving, expanding, and developing clean water and drinking water infrastructure, and e) assisting in meeting existing and future federal and state environmental mandates." See <[www.usmayors.org/USCM/home.html](http://www.usmayors.org/USCM/home.html)>.

<sup>2</sup>One of the frustrating problems in studying privatization in the United States is the dearth of good data. Our decentralized system of government means local governments need not report to anyone but their own residents how they choose to deliver public services. And National League of Cities and International City/County Management Association data are incomplete and too aggregated to extract specific trends about water and wastewater facilities. So, my observations on trends are based on 13 years of Reason Foundation reporting on developments and trends in privatization, which aggregates anecdotal data from industry reports, news reports, and a network of industry experts.

<sup>3</sup> I define long-term as 10 years or more. Arguably one could consider any contract over 5 years as long term, since before 1997 IRS rules discouraged contracts longer than that, and the almost complete change to 10-year and longer contracts promptly followed the relaxation of those rules. (See discussion below). Of a database of 94 water and wastewater privatization contracts completed or in

negotiation in the last few years, 67 are long-term contracts proposed since January 1997.

<sup>4</sup>The financial picture is only going to get more complex. In June 1999 the Government Accounting Standards Board issued a new financial reporting model for all state and local government entities. The new model requires full accrual accounting, among many other changes, and will deeply effect most cities' budgets over the next 4 years. The new standards require government financial statements to reflect the value of all assets and liabilities. Likely effects of the changes are operating deficits for many cities, coupled with greater difficulty in deferring maintenance, and a realization of the value of publicly-owned facilities, such as water and wastewater utilities. There may well be increased drive towards privatization to either reduce operating costs or to converts assets into cash for other operating expenses.

See

<[www.rutgers.edu/Accounting/raw/gasb/repmode/state&localgov.html](http://www.rutgers.edu/Accounting/raw/gasb/repmode/state&localgov.html)>.

<sup>5</sup>This in spite of the consistent data showing that only a small minority of public employees get laid off due to privatization (Larson 1999).

<sup>6</sup>Interestingly, one of the benefits of privatization most cited by public officials after privatization is peace-of-mind from no longer having to worry about day-to-day issues at the utility or managing the significant environmental risks of operating them. See, for example, National Commission on Employment Policy (1989) and Johnson and Walzer (1998).

<sup>7</sup>Local government efforts are manifest in several initiatives by the U.S. Conference of Mayors and by recent work on model legislation by the American Legislative Exchange Council.