

Managing Markets for Public Service: The Role of Mixed Public/Private Delivery of City Services

Mildred E. Warner and Amir Hefetz¹

Forthcoming *Public Administration Review*, 2007

This is a preprint of an Article accepted for publication in *Public Administration Review* © 2005 the American Society for Public Administration

Abstract

The privatization experience of U.S. municipalities shows declining use of complete contracts and a dramatic rise in mixed public/private delivery (joint contracting) of city services. Our analysis shows city managers have recognized the need to move beyond a simple dichotomy between market delivery and public planning to an approach that balances concerns with efficiency, market management and citizen satisfaction. New public management stresses the importance of competition and efficiency, transaction costs economics emphasizes the challenges of contract management, and new public service gives primary concern to citizen engagement; but city managers see the need to balance all three. We use probit and generalized estimation models to analyze International City County Management Association (ICMA) data for 1992, 1997 and 2002, and show the evolution of a middle position where city managers integrate markets with public delivery and give greater attention to citizen satisfaction in the service delivery process.

¹ Mildred Warner is an Associate Professor in the Department of City and Regional Planning at Cornell University in Ithaca, NY. Amir Hefetz is a researcher at the Technion in Haifa, Israel. Funding for this research was provided in part by the U.S. Dept. of Agriculture National Research Initiative Grant # NYC-121524. We would like to thank Francoise Vermeulen for help with statistical analysis.

Managing Markets and Citizen Voice: Understanding Mixed Public/Private Delivery of City Services

Introduction

The major shift in privatization trends between 1997 and 2002 is the dramatic increase in mixed public/private service delivery among U.S. local governments (Warner & Hefetz, 2004). Stein (1990) and Miranda and Lerner (1995) used the first 1982 International City County Management Association survey on alternative local service delivery to explain the appearance of mixed delivery as one approach to contracting out. They called it joint contracting, but we use mixed delivery because it better reflects the continuing position of the public sector in the delivery process. Miranda and Lerner compared Niskanen's (1971) notion of internal bureaucratic competition with Landau's (1969) notion of redundancy and determined that the redundancy of mixed delivery, as benchmarking, could be cost effective. Since that time, the research on privatization has elaborated a more sophisticated understanding of market failure in the delivery of public services (Alexander, 2001; Zebre & McCurdy, 1999). This literature recognizes the limits of quasi-markets (Lowery, 1998), the importance of transactions costs (Brown & Potoski, 2003; Sclar, 2000), and the fundamental need for citizen engagement in the service delivery process (deLeon & Denhardt, 2000; Frug, 1999).

We analyze mixed delivery for the most recent decade, using the 1992, 1997 and 2002 ICMA surveys, and find support for each of these concerns. Local governments must structure the market for service delivery, especially in locales which lack competitive supply. Governments are substituting mixed public/private delivery for other forms of market management, such as competitive bidding. Increased attention to citizens recognizes that market delivery alone can not assure greater customer satisfaction. These results show city managers have moved beyond the dichotomy of public vs. private delivery and instead practice a middle position integrating markets and planning to ensure efficiency, service quality and citizen satisfaction.

Trends: Dramatic Growth in Mixed Delivery as Complete Contracts Decline

Local government use of alternative service delivery is tracked by the International City County Management Association (ICMA) in quinquennial surveys since 1982. Due to consistency in survey design and broad coverage of services and alternative delivery mechanisms, this is the best source for tracking local government use of alternative service delivery options over time.¹ We use data from the 1992, 1997 and 2002 Surveys of Alternative Service Delivery. The ICMA surveys are conducted every five years and cover all counties with more than 25,000 population and cities over 10,000 population. In addition, a sample is drawn from one in eight cities and counties from 2,500 to 9,999 population and from those under 2,500. Roughly a third of all governments contacted respond (31 percent for 1992, 32 percent for 1997 and 24 percent for 2002). We use a repeated cross section analysis and generalized estimation model to preserve sample size.

The ICMA surveys measure direct public delivery and six alternative forms of service delivery (for-profit, non-profit, inter-municipal cooperation, franchises, subsidies and volunteers) for 64 different services in seven broad areas: public works and transportation, public utilities, public safety, health and human services, parks and

recreation, culture and art, and support functions. The surveys also measure government managers' responses to a range of managerial and structural factors believed to be motivators or obstacles to alternative service delivery. We supplement these factors with socioeconomic and government expenditure data drawn from the City/County Data Book, based on the Census of Population and Housing for 1990 and 2000 and the Census of Government Finance files for 1992, 1997 and 2002.

We look at the decade since 1992, when Osborne and Gaebler's famous book, *Reinventing Government*, was first published and widely read by local government officials. This decade was marked by wide experimentation with alternative forms of service delivery. For each service it is possible to differentiate responses into one of three exclusive categories: delivery with public employees entirely, delivery with a mix of public employees and outside contracts, or complete contracting out. Figure 1 tracks the changes in composition of city service delivery by these three categories averaged over all services and all governments from 1992 to 2002 (the latest available data). From 1992 to 1997 we see a four percentage point increase in local governments' use of contracting. In that year 50 percent of government services were provided by contracts – either complete contracts (33 percent) or mixed contracts (17 percent). The ratio of complete to mixed contracts is almost 2:1 in 1997, but it flips to 1:1.5 by 2002 as complete contracts drop from 33 to 18 percent of service delivery and mixed contracts rise from 18 to 24 percent. Direct public delivery also rises from 50 to 59 percent by 2002. The number of services provided by government dropped during the decade (from an average of 43 to 35 of the 64 measured services), but by 2002 local government services were *more* likely to be provided entirely by public employees and less likely to be provided by contracts than in 1992. Why did complete contracts decline so precipitously after 1997 and mixed contracting rise? Does this change reflect a managerial learning process of how to better address problems with competition, contract specification and monitoring and citizen satisfaction, or does it reflect opposition to reform? This paper explores the nature of that mixed delivery, which governments use it, and if the motivators for mixing public and private delivery have shifted over time.

Figure 1 about here

Theoretical Review

This theoretical review covers three important and related themes in public management: 1) the New Public Management with its focus on competition and consumer responsiveness, 2) Transaction Cost Economics with its emphasis on firms, markets and contract management, and 3) the New Public Service which gives greater attention to the importance of citizen engagement. The New Public Management champions the possibility of creating market based service delivery systems for public services which will be competitive and efficient. Governments are encouraged to act more like a business and promote competition and consumer responsiveness in service delivery (Dunleavy & Hood, 1994; Hood, 1991; Kettl, 1993; Osborne & Gaebler, 1992; Savas, 1987). Government's role is to create competition internally and externally through contracting. Mixed contracting in this view would stem from internal opposition, institutional constraints or lack of private market supply due to crowding out by government (Niskanen, 1971; Osborne & Gaebler, 1992; Savas, 1987). Such governmental reform can be discouraged by opposition from labor and management

(Hirsch & Osborne, 2000; Siegel, 1999) and practical legal, social, and economic obstacles (Caiden & Sundaram, 2004; Thomas & Davies, 2005).

Experienced government managers have learned that contracting poses additional transactions costs. In both public and private firms, the calculus for determining when to 'make' internally and when to 'buy' (outsource) production is a complex decision based on service and market characteristics, and the need for internal knowledge and control (Nelson, 1997). Transactions costs economics provides a valuable theoretical approach for determining whether internal production is more efficient than outsourcing to the market (Williamson, 1999; Zebre & McCurdy, 1999). Transactions costs in public organizations allow us to see the costs of information asymmetries, need for fail safe service delivery, and the benefits and costs of outsourcing or maintaining capacity in house. Government plays an important market management role when contracting (Hefetz and Warner 2004), but transactions costs can be reduced if there are established legal and market institutions to ensure success (Webster & Lai, 2003). In studies of local government contracting, Sclar (2000) has found that relational contracting is more important than competition because the complex nature of government services requires an ongoing relationship with the private provider. Recent research has explored the challenges of network management under contracting (Goldsmith & Eggers, 2004; Milward & Provan, 2000). Mixed delivery would help government maintain the internal capacity to be a player in the market and ensure fail safe delivery. Mixed delivery could also reduce information asymmetries and the costs of monitoring by allowing governments to experience production costs directly.

Recent literature has challenged the citizen as consumer view of new public management as too narrow (deLeon & Denhardt, 2000) and argues citizen deliberation is at the core of public service delivery (Denhardt & Denhardt, 2003; Mintrom, 2003). Local officials have been experimenting with new forms of citizen engagement recognizing that a sense of engagement is critical to effective service delivery and democracy (Crocker, Potapchuck, & Schechter, 1998; Osborne & Plastrick, 1997). Government plays a critical role as convenor, securing citizen access and participation. Government capacity is crucial, both to manage markets and to support democratic debate (Nalbandian, 1999; Sclar, 2000). This view, captured in the academic literature as the New Public Service, argues government is more than a business (Box, 1999) and should serve, not simply steer a market process (Denhardt & Denhardt, 2003; Denhardt & Denhardt, 2000). Mixed delivery would ensure continued public involvement in the service delivery process – not just at the moment of letting the contract.

Each of these theoretical strands has relevance to understanding mixed service delivery. Our empirical analysis shows a process of managerial learning over time (Borins, 2001; Rashman & Randor, 2005; Rogers, 1995), where local government experimentation with market delivery has moved beyond a primary concern with cost reduction and competition to increasing recognition of the importance of monitoring and citizen satisfaction. We can understand mixed delivery as part of an innovative and dynamic decision making process where city managers recognize the need to balance the benefits of markets, the costs of contracting and the need for citizen engagement in service delivery.

What is Mixed Delivery?

Miranda and Lerner (1995) first noted the importance of mixed delivery when analyzing the ICMA data from 1982. They argued that redundancy in delivery method could in fact be efficient, as a form of benchmarking with the private sector, and a means to promote bureaucratic competition in house. Miranda and Lerner's regression analysis challenged the superiority of markets by showing a negative relation between percent mixed delivery and expenditures. They found no significant correlation between percent complete contracts and expenditures. If mixed contracting enhanced efficiency, then it was a false dichotomy to choose between markets and government and it would be better to ask how both markets and governments might be used to improve performance (Alexander, 1992; Zebre & McCurdy, 1999). Mixed delivery as benchmarking represents a middle position that could potentially avoid the all or nothing contracting based on public choice. For example, Chautauqua County NY maintains both public and private nursing homes. The county maintains its public home to help benchmark costs and ensure quality – putting pressure on the private homes to keep up quality standards. They also used their position in the market to ensure that the private homes took their fair share of Medicaid patients (Warner & Hefetz, 2001).

When governments contract out, they must be sure the service delivery will not fail (Landau, 1969). By maintaining public delivery capacity, even while using private delivery mechanisms, mixed contracting ensures redundancy in the system. Organizational redundancies are a means to avoid monopoly outcomes and ensure failsafe delivery in the event of contract failure. This would be especially important for services with high asset specificity. If government loses its capacity to deliver the service (e.g. by selling off its garbage trucks) then it can not step in to ensure delivery when contracts fail. For example, Lubbock Texas divided the city into districts and bid out a few to private garbage haulers and maintained the rest in house. This assured competition, to keep prices down, and internal capacity to ensure failsafe delivery in the event of contract failure (Ballard & Warner, 2000).

Theoretically we would expect mixed delivery to be most common among for profit contracts because problems with principal agent conflicts would be more likely between the profit focus of contractors and the mission focus of government. These principal agent problems would be less likely with non profit and inter-municipal contracts because these organizations have a community mission similar to government. The ICMA data show that for services where respondents specified the form of the contract, mixed delivery was almost three times more likely with for profit contracts (average 40%) than inter-municipal contracts (average 15%). Although the largest growth in mixed delivery occurred from 1997 to 2002, the dominance of mixed delivery with for profit contracting did not change significantly. Bozeman (2004) has argued that private institutions will produce more public value if there is more government funding, communication and control over mission. The rise in mixed delivery from complete contracting reflects attention to the positive potential of mixed delivery over the 'either/or' dichotomy of public or private (Boyne, 1998b; Brown, Potoski, & van Slyke, 2006; Hefetz & Warner, 2007).

Mixed delivery as collaborative service delivery is on the rise. For example, worksharing is a new form of industrial organization which involves extensive collaboration between the public sector and private firms to reduce costs, expand market

reach and promote new technology. See (Hickey, 2007) for a detailed discussion of this in the U.S. Postal Service and its private partners. At the local level, in Ithaca, NY the public transit system is a consortium of private providers (Swarthout and Tioga Transit which bring in workers from surrounding rural counties), non profit providers (Gadabout which provides elderly and disabled transit and Cornell University which provides on campus service), and the public bus system Tompkins County Area Transit (which provides urban transit). They share garage and maintenance facilities and collaborate in route planning. Together they create a seamless regional transit system that would not be possible with public dollars alone.

Where has the growth in mixed delivery come from? To understand changes over time we paired the surveys and tracked service delivery across time periods. Roughly 40 percent of the sample was similar across any two surveys. We developed data strings for each individual case of service delivery over the two time periods (1992-1997 and 1997-2002) and compared how service delivery shifted among forms: entirely public, mixed public private, complete contracts (inter-municipal cooperation, for profit or non profit). On a by service case basis, we calculated the ratio of movements between each form of contracting and mixed delivery over time. Table 1 shows us that in the 1992 to 1997 period, movements to mixed delivery from complete contracting (for profit, cooperation and non profit) were roughly equal to the movements from mixed delivery to each of these forms, resulting in equal movements in both directions, or a 1:1 ratio. The growth in mixed delivery was from entirely public delivery where services were twice as likely to move from public to mixed delivery as the other way, resulting in a two to one ratio. This was the period when governments were experimenting with contracting out and public delivery dropped.

For the 1997 to 2002 period these ratios changed. The ratio of movements from entirely public delivery to mixed delivery dropped to one to one. Growth in mixed was primarily from cooperation (2:1), for profit (1.6:1) and non profit (1.5:1) delivery. In this period complete contracts dropped and mixed delivery rose. Interestingly, the highest ratio of movements in was from cooperation, where we expect fewer principal agent problems than with for profit contracting but the composition of mixed was still predominately with for profit contracting. This shows that the rise in mixed in 2002 is from contracting and suggests mixed may be a new form of market management in a networked governance system.

Table 1 about here

Modeling Mixed Delivery

Our question is not whether mixed delivery is more efficient, the question explored by Miranda and Lerner (1995) in their original paper on the 1982 data. Rather our question addresses the changes in motivators for mixed delivery over the next decade 1992-2002. We hypothesize that the factors motivating governments to pursue mixed delivery have shifted over time. Our dependent variable is number of services provided by mixed delivery over total number of services provided. Model variables address concerns with scale, capacity, financial motivations, market competition, transactions costs, opposition and citizen satisfaction. Variable descriptions are given below. Descriptive statistics are provided in Table 2.

Table 2 about here

Scale – Due to the increased demand for publicly provided services in more urban places, as a result of congestion, and the increased complexity of service delivery management in more heterogeneous populations, we expect the level of mixed delivery to rise with population. Population is a proxy for the size of place. We hypothesize that mixed delivery will be higher among richer and larger governments because they have the scale to address a more complex management system.

Capacity – Places with more professional managers will have higher capacity to manage service delivery. We believe there has been a learning curve over the decade as managers have gained experience with contracting. We expect managers to be less likely to use mixed delivery in 1992, when governments were experimenting with more contracting out, and more likely to use mixed delivery as they learned about the importance of market management. We include a dummy for places with the council manager form of government to capture governments with more professional managers (Feiock & Kim, 2000). We hypothesize that professional managers will be early innovators and recognize the need for mixed delivery earlier than the majority of governments. We also expect mixed delivery to be higher in places that have higher income and lower poverty. Per capita income and percent poverty measure the relative wealth of a place. Recent analysis has found that market and managerial characteristics of place are more important than service characteristics in determining the level of contracting. Places with professional management and monitoring systems are more likely to contract out (Hefetz & Warner, 2004), as are richer, suburban places compared to rural places (Warner, 2006; Warner & Hefetz, 2003).

Financial Motivations -The desire to decrease costs should motivate places to pursue a higher level of mixed delivery, especially if it is used to benchmark costs. We include a question from the ICMA survey, “Internal attempts to decrease costs of service delivery,” to measure this. We also use a measure of political climate, “Change in political climate emphasizing a decreased role for government.” Concerns with political climate were stronger in 1992 and 1997 as public enthusiasm for efficiency and reducing government was stronger. These questions are coded as dummy variables: one if checked, zero otherwise.

The notion that private delivery is cheaper remains a primary philosophical driver for contracting (Eggers & O’Leary, 1995; Savas, 2000) although the empirical literature does not lend strong support (Bel & Warner, 2007; Boyne, 1998a; Entwistle & Martin, 2005). Miranda and Lerner used expenditure per capita to measure this and found mixed delivery was associated with lower expenditures. We include real expenditure per capita (in constant 1992 dollars), drawn from the U.S. Census of Governments finance files, for our analysis. We see that expenditure per capita drops significantly in real terms over the decade. We see a decline in managers’ reports of attempts to decrease costs from 1997 to 2002. The limited success with private delivery as a cost saving strategy might explain the reduction in managers’ rating of cost reduction as important. Also mixed delivery may represent a more sophisticated form of cost control given declining real expenditures over the decade.

Market Competition - Mixed delivery could also be a means to create competition in municipal service markets. Two variables, whether the government engaged in competitive bidding, or if the government faced problems with “inadequate supply of

alternative deliverers” were used to measure if supply and competition problems were present. We would expect mixed delivery to be positively related to each of these.

Lowery (1998) and Sclar (2000) have pointed to the erosion of competition in public service delivery more typically characterized by few sellers and one buyer. Osborne and Gaebler (1992) acknowledged that competition could be both external (via contracting) or internal via competitive bidding. Competitive bidding was promoted in the 1990s as a strategy to force cost comparisons and enable public units to compete (Martin, 1999). External competition and internal labor management cooperation were heralded as ways to enhance public sector productivity (U.S. Department of Labor, 1996), but these management forms have not proved to be stable over time (Walton, Cutcher-Gershenfeld, & McKersie, 2000). In our data we see that competitive bidding rose from 1992 to 1997, but fell again by 2002.

Managing Transactions Costs - New Public Management emphasizes the high internal costs of government bureaucracy and the lower costs of market based competition. Critics of privatization point to the high transactions costs associated with contracting, particularly the costs of monitoring (Kavanagh & Parker, 1999; Sclar, 2000). Stein (1990) in his review of the 1982 ICMA data argued that public services could be classified by their asset specificity and measureability and those that are less asset specific and easier to measure would be more likely to be contracted out. Brown and Potoski (2003) ranked the ICMA services on asset specificity and measureability and found that monitoring was common when asset specificity was higher. Ironically, monitoring was less common when services were more difficult to measure. Low monitoring under conditions of difficult measurement is a recipe for failure (Poister & Streib, 1999) and this may contribute to the dramatic rise in mixed delivery in the 2002 survey as a form of internal benchmarking en lieu of an adequate monitoring system for external contracts.

We develop a monitoring index based on four survey questions: whether managers reported that they evaluated costs, compliance with delivery standards specified in the contract, conducted field observations, and analyzed data and records.ⁱⁱ The ICMA data show that less than half the governments monitor their contracts and rates of monitoring have not risen over the decade. We expect a complementary relationship between monitoring and mixed provision.

While theoretical support for the notion that service characteristics help explain differential levels of contracting has held firm since Stein’s original work, recent analysis shows even those services which are easy to measure (park landscaping, street repair, data processing, building maintenance and fleet management) exhibit great variety in level and form of contracting as we look across governments (Hefetz & Warner, 2004). Transactions costs economics is now elaborating a more sophisticated understanding that reaches beyond service characteristics to the organizational and institutional environment in mixed market/government systems. Relational contracting and managing networks of collaboration are being given more emphasis than the role of competition in promoting innovation (Boyne, 1998b; Entwistle & Martin, 2005; Goldsmith & Eggers, 2004; Sclar, 2000). Mixed delivery helps position government to realize the benefits of both worlds.

Opposition and Citizen Satisfaction - Mixed contracting could be an adaptive response to internal opposition from department heads and line employees (Niskanen, 1971; Osborne & Gaebler, 1992; Savas, 1987). We created an opposition index based on

managers' answers to four questions regarding opposition by line employees, department heads, elected officials and restrictive labor agreements. We expect that opposition will result in higher levels of mixed delivery in all time periods.

Government managers also must give attention to external citizen concerns with participation in the service delivery process. We created a citizen satisfaction index based on managers' answers to four questions: evaluated citizen satisfaction, conducted citizen surveys, kept the complaint mechanism in house, and monitored citizen complaints. Recent theoretical debate on the limits of viewing citizens as customers, has emphasized the need for managers to address both technical efficiency concerns as well as the political engagement process (Box, Marshall, Reed, & Reed, 2001; Feldman & Khademian, 2001; Nalbandian, 1999). Indeed, analysis of the 1992 and 1997 ICMA data showed that increased use of for profit contracting was *not* associated with increased attention to citizen voice (Warner & Hefetz, 2002). Local government managers have recognized that market delivery alone is not sufficient to ensure citizen voice. Public service markets are quasi markets where the benefits of consumer sovereignty are not guaranteed (Lowery 1998). Problems with preference substitution and loss of deliberation limit the ability to reach a social optimum (Hipp & Warner, 2006; Lowery, 2000; Sager, 2001; Starr, 1987). To ensure citizen satisfaction, government must institute explicit mechanisms for citizen voice. This may explain why we see a rise in explicit attention to citizen satisfaction in 2002 after the rise in contracting in 1997.

Modeling Process and Results

To understand which places were using mixed delivery and if the factors motivating mixed delivery have changed over time, we ran a probit model for each of three survey years.ⁱⁱⁱ This provides a direct analysis of significant variables for each year. However to make statistical comparisons over time, and determine which variables are significantly different from year to year, we also analyzed the data using a generalized estimating equation model using a binomial distribution with a probit link to account for the fact that each place was repeatedly measured over time.^{iv} We found multicollinearity between poverty and income variables, and between the monitoring and citizen satisfaction indices. Poverty and the monitoring index were dropped from the final analyses. The generalized estimation equation includes the same independent variables as the single year probit models, but it also includes interaction effects by year. All main effects and interactions were tested and only the significant year interactions are reported in the final model. The Genmod procedure in SAS was used to run the generalized estimation analysis.

Most of our variables have the expected effect. See Table 3. Scale matters and places with larger populations have higher levels of mixed delivery in each yearly model and in the combined model. Capacity also matters and mixed delivery is higher in places with higher income. We see a managerial learning process over the decade of experience. Management capacity, as measured by the existence of a council-manager form of government was not significant except in the 1997 model. Recall this is the year when total contracting peaked while mixed delivery was flat. Experienced managers, who were early innovators, tested contracting out in 1992. These managers realized the importance of mixed delivery and by 1997 showed higher levels of mixed delivery than other governments. This managerial learning regarding mixed delivery had caught on

and diffused across urban and suburban municipalities by 2002 so that we no longer see a significantly higher level of mixed delivery among professional managers. In the combined model the coefficient for council manager is not significant. Note that the dispersion is higher than the coefficient, reflecting the power of the repeats in 1992 and 2002 overwhelming the 1997 effect. This provides further evidence of the managerial learning, innovation - diffusion effect.

Table 3 about here

Managers who were concerned with decreasing costs showed higher levels of mixed delivery in all years and in the combined model. This suggests that Miranda and Lerner's notion of benchmarking is still part of what explains the use of mixed delivery. However mixed delivery was not related to lower average per capita expenditures in any model. Recall that per capita costs were dropping across the decade for all governments.

Mixed delivery also could be used to create competition in local service markets. We see that competitive bidding was only significant in the 1992 and 1997 models where it served as a substitute to mixed delivery. Use of competitive bidding declined from 1997 to 2002 as mixed delivery rose. It was not significant in the combined model. Mixed delivery is more an effort to maintain internal capacity vis a vis external providers, rather than a result of competitive bidding by in house crews. We see that inadequate supply of alternative private providers was important in both 1992 and 2002 and in the combined model. Competitive bidding creates competition in the contract letting process. Mixed delivery maintains internal knowledge and capacity about service delivery over the life of the contract and thus ensures more failsafe service delivery than competitive bidding.

Opposition and citizen satisfaction also affect the level of mixed delivery. Internal opposition from department heads, line workers and elected officials was associated with higher levels of mixed delivery in all three years and in the combined model. By contrast, internal opposition had greater force than external political forces. Managers who faced a 'political climate favoring a decreased role for government' actually had higher levels of mixed delivery in 1992 and 1997. This was in the early years of the reinventing government movement when markets were heralded as superior. However, experienced managers were more likely to use mixed delivery rather than trust the market to ensure cost efficiency and failsafe service. The political climate variable ceases to be significant in the 2002 model and is not significant in the combined model. This confirms our hypothesis that managers are driven more by pragmatic concerns with service cost and quality than politics.

Citizen satisfaction is significant in all years and in the combined model. The measures of government efforts to ensure citizen satisfaction are similar to the measures of contract monitoring (Recall monitoring was excluded due to colinearity with citizen satisfaction). Mixed delivery serves as a complement to monitoring in all three model years. By remaining directly engaged in service delivery, governments can ensure that contractors maintain efficient processes, high quality, competitive costs and attention to citizen satisfaction. Despite the consumer orientation of New Public Management, quasi markets do not ensure consumer sovereignty. We expected citizen satisfaction to become more of a concern for managers in the later part of the decade as managers recognized market processes alone do not ensure citizen voice and indeed we see the value of the coefficient triple over the decade.

The individual year models tell us about sample responses in each year, but to test for statistically significant differences in coefficients across years we need a combined model. We used 1997 as our reference year and tested for an overall year main effect and interaction effects with year and each of the independent variables. Mixed delivery is higher in municipalities with more capacity (larger population, higher income), interest in decreasing costs, recognition of supply problems, and in places which face more opposition and give more attention to citizen satisfaction. Political climate, competitive bidding, expenditure and council manager do not have a significant impact on mixed delivery. This is true in all years.

The main year interaction effects show the models are different from year to year. To determine how the models are different we tested all independent variables with interaction effects by year. The only variables to show significant difference effects across the years are income, which was higher in 1997, and citizen satisfaction which was lower in 1992. This confirms our story of managerial learning and diffusion. The income effect on mixed delivery was about 40 percent higher in 1997 than in 1992. This demonstrates the role of capacity (income) in determining early innovation. By 2002 mixed delivery was becoming widespread over a larger range of governments. Richer governments were still more likely to use mixed delivery but the size of this effect dropped by more than a third. The diffusion process was not just with respect to capacity, it also reflects increased attention to citizen satisfaction. The importance of citizen satisfaction on mixed delivery grew fourfold from 1992 to 1997 as innovative managers recognized the need to explicitly address citizen concerns in service delivery, not simply leave those to a market process. By 2002, attention to citizen satisfaction had diffused more widely across the sample.

There is a story here of a managerial learning process based on pragmatic practice as city managers sought to improve service delivery over the decade. Cost efficiency was a key driver of the reinventing government reforms as managers were exploring the benefits of market delivery. But in 1997, the year when total contracting out peaked, mixed delivery was flat as many governments faced a belief in the self regulating ability of competitive markets to ensure efficient and failsafe delivery. Richer governments with managers who recognized the need to give special attention to citizen satisfaction were more likely to maintain mixed delivery in this year.

By 2002 we see diffusion in the managerial learning process that recognizes market-based service delivery requires continued public delivery to create competition, ensure cost efficiency and citizen satisfaction in the service delivery process. City managers realize that market management and citizen satisfaction require government remain in the delivery process through mixed service delivery.

onclusion

Mixed delivery has been a source of consternation for market advocates who view such redundancy as potentially inefficient and unnecessary. A closer look at the structure and function of public service markets however, shows that their quasi-market structure of one buyer and few sellers requires government remain engaged as a market actor in order to ensure some form of competitive market formation (Lowery, 1998). But even then competition is a poor substitute for internal control to ensure efficient and failsafe delivery. A closer look at the transaction costs of monitoring and the need to maintain

internal knowledge and capacity in service delivery argues for a mixed position that could indeed be efficient (Miranda and Lerner 1995). Recent work on the private sector, shows a similar shift in ideology and practice as managers recognize the structural risks of outsourcing in terms of loss of internal intelligence, control and flexibility (Deloitte, 2005).

But governments must manage an even broader set of objectives than private firms. Private firms are interested in profit, efficiency and control. The public sector is interested in efficiency, but is also expected to provide failsafe delivery and ensure a higher level of public accountability and involvement. These features require that governments both steer and row in order to better manage market processes. While the early reinventing government movement exhorted government managers to “steer and not row” (Osborne and Gaebler 1992), more recent literature, even from privatization proponents like Savas (2000) argues for a partnership where government cooperates with private providers for mutual gain. This network governance literature acknowledges the challenges of managing service delivery across a network of public and private providers (Goldsmith & Eggers, 2004; Salamon, 2002) and mixed delivery shows a more dynamic management process where governments seek to promote innovation by focusing on partnerships and collaboration, rather than a simple focus on competition (Boyne, 1998b; Caiden & Sundaram, 2004; Entwistle & Martin, 2005; Hefetz & Warner, 2007).

Reforms tend to beget new reforms. New Public Management gave emphasis to efficiency, market management and consumer voice. But problems with quasi market failure required governments maintain a mixed position. Transaction cost economics has elaborated a more sophisticated understanding of the challenges of contract management (Brown et al., 2006; Lamonthe, Lamonthe, & Feiock, 2005; Nelson, 1997; Sclar, 2000). New Public Service argues that democratic participation and citizenship are at the core of local public service. Democratic processes are not efficient, but they are highly valued by citizens. While privatization at the state and national level in the U.S. continues to be primarily a political project, at the local level city managers recognize the need to balance efficiency concerns with the challenges of market management and citizen satisfaction. Local government accountability is higher as citizens can actually see the impact of privatization on service quality and demand pragmatic behavior on the part of city managers (Warner & Hefetz, 2004). The rise in mixed forms of delivery reflects a continuing process of innovation and change at the local government level that combines the benefits of market with the benefits of public delivery. Three types of agents are critical in this new market composition: governments, private providers and citizens. Mixed delivery confirms that local government managers have moved beyond the dichotomy of public or private and captured a middle ground - a position more likely to yield benefits both for efficiency and democracy.

References

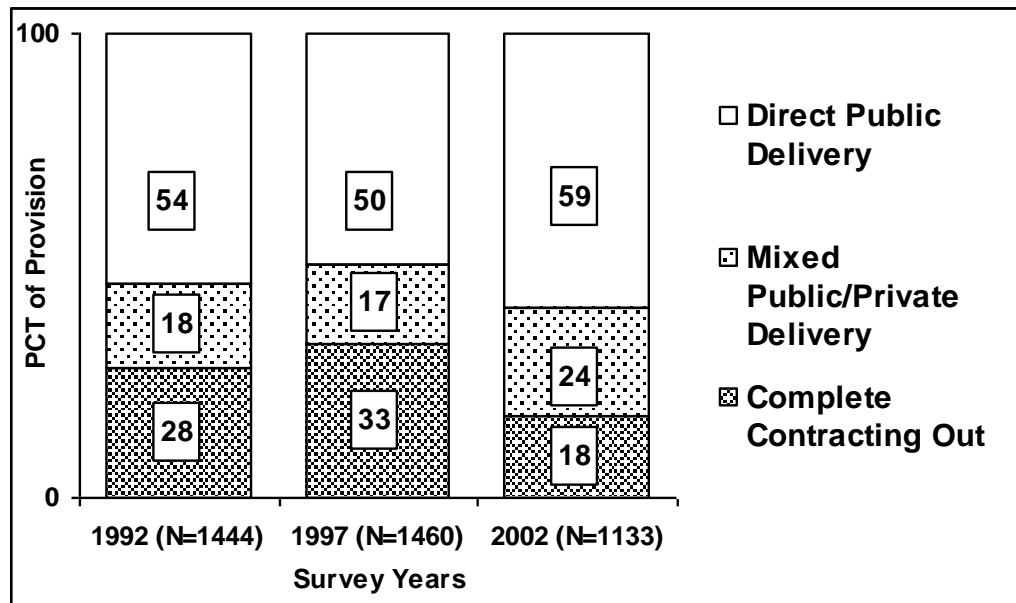
- Alexander, E. R. (1992). A Transaction Cost Theory of Planning. *Journal of the American Planning Association*, 58(2), pp.190 - 200.
- Alexander, E. R. (2001). Why Planning Vs. Markets Is an Oxymoron: Asking the Right Question. *Planning and Markets*, 4(1).
- Ballard, M. J., & Warner, M. (2000). *Taking the High Road: Local Government Restructuring and the Quest for Quality* (Working Papers in Planning No. 194). Ithaca, NY: Cornell University, Department of City and Regional Planning.
- Bel, G., & Warner, M. E. (2007). Challenging Issues in Local Privatization. *Environment and Planning C: Government and Policy*, forthcoming.
- Borins, S. (2001). Public Management Innovation: Toward a Global Perspective. *American Review of Public Administration*, 31(1), pp.5-21.
- Box, R. C. (1999). Running Government Like a Business - Implications for Public Administration Theory and Practice. *American Review of Public Administration*, 29(1), pp.19-43.
- Box, R. C., Marshall, G. S., Reed, B. J., & Reed, C. M. (2001). New Public Management and Substantive Democracy. *61*(5), pp.608-619.
- Boyne, G. A. (1998a). *Public Choice Theory and Local Government: A Comparative Analysis of the UK and the USA*. (Houndmills UK and New York City: Macmillan and St. Martin's Press).
- Boyne, G. A. (1998b). Public Service under New Labor: Back to Bureaucracy? *Public Money & Management*, 18(3), pp.43 - 50.
- Bozeman, B. (2004). *All Organizations Are Public: Comparing Public and Private Organizations*: Beard Books).
- Brown, T., Potoski, M., & van Slyke, D. (2006). *Changing Modes of Service Delivery: Costs and Constraints*. Paper presented at the International Workshop on Local Government Reform: Privatization and Public-Private Partnership, (Barcelona, Spain).
- Brown, T. L., & Potoski, M. (2003). Managing Contract Performance: A Transaction Costs Approach. *Journal of Policy Analysis and Management*, 22(2), pp.275-297.
- Caiden, G. E., & Sundaram, P. (2004). The Specificity of Public Service Reform. *Public Administration and Development*, 24(5), pp.373 - 383.
- Crocker, J., Potapchuck, W., & Schechter, W. (1998). *Systems Reform and Local Government: Improving Outcomes for Children, Families and Neighborhoods*. Washington, DC.: Center for Community Problem Solving.
- deLeon, L., & Denhardt, R. B. (2000). The Political Theory of Reinvention. *Public Administration Review*, 60(2), pp.89 - 97.
- Deloitte. (2005). *Calling a Change in the Outsourcing Market: The Realities for the World's Largest Organizations*. New York: Deloitte Consulting.
- Denhardt, J. V., & Denhardt, R. B. (2003). *The New Public Service: Serving, Not Steering*. (Armonk, N.Y.: M.E. Sharpe).
- Denhardt, R. B., & Denhardt, J. (2000). The New Public Management: Serving Rather Than Steering. *Public Administration Review*, 60(6), pp.549 - 559.
- Dunleavy, P., & Hood, C. (1994). From Old Public Administration to New Public Management. *Public Money & Management*, July-September, pp.9 - 16.

- Eggers, W. D., & O'Leary, J. (1995). *Revolution at the Roots: Making Our Government Smaller, Better, and Closer to Home*. (New York: Free Press).
- Entwistle, T., & Martin, S. (2005). From Competition to Collaboration in Public Service Delivery: A New Agenda for Research. *Public Administration*, 83(1), pp.233 - 242.
- Feiock, R. C., & Kim, J.-H. (2000). Form of Government, Administrative Organization, and Local Economic Development Policy. *Journal of Public Administration Research and Theory*, 11(1), pp.29 - 49.
- Feldman, M. S., & Khademian, A. M. (2001). Principles for Public Management Practice: From Dichotomies to Interdependence. *Governance: An International Journal of Policy and Administration*, 14(3), pp.339 - 361.
- Frug, G. E. (1999). *City Making: Building Communities without Building Walls*. (Princeton, N.J.: Princeton University Press).
- Goldsmith, S., & Eggers, W. (2004). *Governing by Network: The New Shape of the Public Sector*. (Washington, DC: Brookings Institution Press).
- Hefetz, A., & Warner, M. E. (2004). Privatization and Its Reverse: Explaining the Dynamics of the Government Contracting Process. *Journal of Public Administration Research and Theory*, 14(2), pp.171-190.
- Hefetz, A., & Warner, M. E. (2007). Beyond the Market Vs. Planning Dichotomy: Understanding Privatisation and Its Reverse in U.S. Cities. *Local Government Studies*, forthcoming.
- Hickey, R. (2007). *Re-Routing the Mail Stream: Strategies and Institutional Change in the U.S. Mailing Industry*. Unpublished Dissertation, Cornell University, Ithaca, NY.
- Hipp, M., & Warner, M. E. (2006, 21-23 September, 2006). *Market Forces for the Unemployed? Training Vouchers in Germany and the U.S.* Paper presented at the ESPANet Conference, (Bremen, Germany).
- Hirsch, W. Z., & Osborne, E. (2000). Privatization of Government Services: Pressure-Group Resistance and Service Transparency. *Journal of Labor Research*, 21(2), pp.315-326.
- Hood, C. (1991). A Public Management for All Seasons? *Public Administration*, 69(Spring), pp.3 - 19.
- Kavanagh, I., & Parker, D. (1999). Managing the Contract: A Transaction Cost Analysis of Externalization. *Local Government Studies*, 26(4), pp.1 - 22.
- Kettl, D. (1993). *Sharing Power: Public Governance and Private Markets*. Washington, DC: Brookings Institute.
- Kuss, O. (nd). *How to Use Sas for Logistic Regression with Correlated Data*.
- Lamonthe, M., Lamonthe, S., & Feiock, R. (2005). *Revisiting Contracting Decisions: Examining the Dynamics of Public Service Production*. Paper presented at the Assoc of Public Policy and Management, (Washington, DC).
- Landau, M. (1969). Redundancy, Rationality, and Problem of Duplication and Overlap. *Public Administration Review*, 29(4), pp.346-358.
- Lowery, D. (1998). Consumer Sovereignty and Quasi-Market Failure. *Journal of Public Administration Research and Theory: J-PART*, 8(2), pp.137.

- Lowery, D. (2000). A Transactions Costs Model of Metropolitan Governance: Allocation Versus Redistribution in Urban America. *Journal of Public Administration Research and Theory: J-PART*, 10(1), pp.49-78.
- Martin, L. L. (1999). Public-Private Competition a Public Employee Alternative to Privatization. *Review of Public Personnel Administration*, 19(1), pp.59-70.
- Milward, H. B., & Provan, K. G. (2000). Governing the Hollow State. *Journal of Public Administration Research and Theory*, 10(2), pp.359-379.
- Mintrom, M. (2003). Market Organizations and Deliberative Democracy: Choice and Voice in Public Service Delivery. *Administration & Society*, 35(1), pp.52 - 81.
- Miranda, R., & Lerner, A. (1995). Bureaucracy, Organizational Redundancy, and the Privatization of Public Services. *Public Administration Review*, 55(2), pp.193-200.
- Nalbandian, J. (1999). Facilitating Community, Enabling Democracy: New Roles for Local Government Managers. *Public Administration Review*, 59(3), pp.187 - 197.
- Nelson, M. A. (1997). Municipal Government Approaches to Service Delivery: An Analysis from a Transactions Cost Perspective. *Economic Inquiry*, 35(1), pp.82-96.
- Niskanen, W. A. (1971). *Bureaucracy and Representative Government*. (Chicago: Aldine Atherton).
- Norton, E. C., Bieler, G. S., Ennett, S. T., & Zarkin, G. A. (1996). Analysis of Prevention Program Effectiveness with Clustered Data Using Generalized Estimating Equations. *Journal of Consulting and Clinical Psychology*, 64(5), pp.919-926.
- Norusis, M. (1990). *Spss Advanced Statistics User's Guide*. (Chicago: SPSS Inc.).
- Osborne, D. E., & Gaebler, T. (1992). *Reinventing Government: How the Entrepreneurial Spirit Is Transforming Government*. (Reading, MA: Addison-Wesley).
- Osborne, D. E., & Plastrick, P. (1997). *Banishing Bureaucracy*. (Reading, MA: Addison-Wesley).
- Poister, T. H., & Streib, G. (1999). Performance Measurement in Municipal Government: Assesing the State of the Practice. *Public Administration Review*, 59(4), pp.325 - 335.
- Rashman, L., & Randor, Z. (2005). Learning to Improve: Approaches to Improving Local Government Services. *Public Money & Management*, 25(1), pp.19 - 26.
- Rogers, E. M. (1995). *Diffusion of Innovations*. (4th ed.). (New York: The Free Press).
- Sager, T. (2001). Positive Theory of Planning: The Social Choice Approach. *Environment and Planning A*, 33(4), pp.629-647.
- Salamon, L. (2002). The New Governance and the Tools of Public Action: An Introduction. In L. Salamon (Ed.), *The Tools of Government: A Guide to the New Governance* (pp. 1 - 47). (Oxford: Oxford Univ. Press).
- Savas, E. S. (1987). *Privatization : The Key to Better Government*. (Chatham, N.J.: Chatham House Publishers).
- Savas, E. S. (2000). *Privatization and Public Private Partnerships*. (Chatham, NY: Chatham House).
- Sclar, E. (2000). *You Don't Always Get What You Pay For: The Economics of Privatization*. (Ithaca: Cornell University Press).

- Siegel, G. B. (1999). Where Are We on Local Government Contracting? *Public Productivity & Management Review*, 22(3), pp.365 - 388.
- Starr, P. (1987). *The Limits of Privatization*. (Washington, D.C.: Economic Policy Institute).
- Stein, R. M. (1990). *Urban Alternatives : Public and Private Markets in the Provision of Local Services*. (Pittsburgh, PA: University of Pittsburgh Press).
- Thomas, R., & Davies, A. (2005). Theorizing the Micro-Politics of Resistance: New Public Management and Managerial Identities in U.K. Public Services. *Organization Studies*, 26(5), pp.683 - 706.
- U.S. Department of Labor. (1996). *Working Together for Public Service: Report of the U.S. Secretary of Labor's Task Force on Excellence in State and Local Government through Labor-Management Cooperation*. (Washington, DC: U.S. Dept. of Labor).
- Walton, R. E., Cutcher-Gershenfeld, J., & McKersie, R. B. (2000). *Strategic Negotiations: A Theory of Change in Labor-Management Relations*. (Ithaca N.Y.: ILR Press).
- Warner, M. E. (2006). Market-Based Governance and the Challenge for Rural Governments: U.S. Trends. *Social Policy and Administration: An International Journal of Policy and Research*, 40(6), pp.612-631.
- Warner, M. E., & Hefetz, A. (2001). *Privatization and the Market Structuring Role of Local Government* (No. 112). Washington, DC: Economic Policy Institute.
- Warner, M. E., & Hefetz, A. (2002). Applying Market Solutions to Public Services: An Assessment of Efficiency, Equity and Voice. *Urban Affairs Review*, 38(1), pp.70-89.
- Warner, M. E., & Hefetz, A. (2003). Rural-Urban Differences in Privatization: Limits to the Competitive State. *Environment and Planning C: Government and Policy*, 21(5), pp.703-718.
- Warner, M. E., & Hefetz, A. (2004). Pragmatism over Politics: Alternative Service Delivery in Local Government, 1992-2002. In *The Municipal Yearbook 2004* (pp. 8-16). (Washington, DC: International City County Management Association).
- Webster, C. J., & Lai, L. W.-C. (2003). *Property Rights, Planning and Markets: Managing Spontaneous Cities*. (Cheltenham, UK ; Northampton, MA: Edward Elgar).
- Williamson, O. E. (1999). Public and Private Bureaucracies: A Transaction Cost Economics Perspective. *The Journal of Law, Economics, & Organization*, 15(1), pp.306 - 342.
- Zebre, R. O. J., & McCurdy, H. E. (1999). The Failure of Market Failure. *Journal of Policy Analysis and Management*, 18(4), pp.558 - 578.

Figure 1. Composition of Local Government Service Delivery 1992-2002



Percent of provision averaged across all responding governments. Provision is percent of total number of services provided on average. Provision Rates: 66%, 61%, 53% for 1992, 1997, 2002 Respectively

Source: International City/ County Management Association, Profile of Alternative Service Delivery Approaches, US Municipalities, 1992, 1997, 2002, Washington DC.

Table 1 Sources of Growth in Mixed Delivery by Form

	1992-1997	1997-2002
Public→ Mix : Mix→ Public	2 : 1	1 : 1
For Profit → Mix : Mix→ For Profit	1 : 1	1.6 : 1
Cooperation→ Mix : Mix→ Cooperation	1 : 1	2 : 1
Non Profit→ Mix : Mix→ Non Profit	1 : 1	1.5 : 1

Mixed Cases of Service Delivery: 1992=3265 cases, 1997=3048 cases, 2002= 3439 cases

Source: Paired surveys 1992-1997, 1997-2002, case wise comparison

International City/ County Management Association, Profile of Alternative Service Delivery Approaches, Survey Data 1992, 1997, 2002 Washington DC.

Table 2 Model Variable Descriptive Statistics

Variable Name	Description	1992 Survey		1997 Survey		2002 Survey	
		Mean	STD	Mean	STD	Mean	STD
Mixed #	Number of services with mixed delivery	7.70	5.87	6.61	6.19	8.29	6.78
Provision #	Number of services provided	43.37	9.98	39.07	10.55	35.23	10.58
Mixed %	Percent mixed delivery	0.18	0.14	0.17	0.16	0.23	0.18
Expenditure pc	Total local expenditure per capita dfl 1992\$ ²	819.2	619.9	783.7	555.0	648.5	501.8
Population	Average Population Size ¹	63,606	163,108	66,995	175,778	83,626	211,499
Per Capita Income	Census Per Capita Income ¹	15,154	6,331	14,883	6,096	22,497	7,232
Ln(population)	Log natural of Population ¹	10.22	1.17	10.25	1.17	10.42	1.19
Ln(income pc)	Log natural of Per Capita Income ¹	9.56	0.33	9.55	0.32	9.70	0.33
Poverty %	Percent persons below poverty level ¹	11.61	7.92	11.83	7.95	11.44	7.29
Council Manager	Council manager (dummy, 1= yes)	0.64	0.48	0.62	0.49	0.56	0.50
Decrease Costs	Attempt to decrease costs (dummy, 1= yes)	0.62	0.49	0.60	0.49	0.49	0.50
Political Climate	Emphasizing decreased role for government (dummy, 1= yes)	0.14	0.34	0.16	0.37	0.09	0.28
Competitive Bidding	Competitive bidding (dummy, 1= yes)	0.11	0.31	0.16	0.37	0.12	0.32
Lack of Competition	Insufficient supply of private deliverers (dummy, 1= yes)	0.12	0.32	0.12	0.33	0.13	0.34
Monitoring Index	Monitoring Index based on 4 factors	0.35	0.41	0.34	0.40	0.36	0.42
Opposition Index	Opposition based on 4 factors	0.18	0.27	0.18	0.26	0.16	0.27
Citizen Satisfaction Index	Citizen satisfaction based on 4 factors	0.20	0.28	0.20	0.30	0.23	0.32
N	Number of places	1444		1460		1133	

Source of Variables:

¹ U.S. Bureau of the Census (1990, 2000), Population and Housing. Washington, D.C.:

² U.S. Bureau of the Census (1992, 1997, 2002), Census of Government Finances, Washington, D.C.: U.S. Department of Commerce.

All others: International City/ County Management Association, Profile of Alternative Service Delivery Approaches, Survey Data 1992, 1997, 2002 Washington DC.

Table 3: Regression Results Explaining Level of Mixed Delivery

Variable Name	Probit Models						GEM Model	
	Year 1992		Year 1997		Year 2002		Combined Model Ref. Year 1997	
	Coeff.	SE(Ceff.)	Coeff.	SE(Ceff.)	Coeff.	SE(Ceff.)	Coeff.	SE(Ceff.)
LN(population)	0.064	0.006**	0.080	0.006**	0.067	0.006**	0.068	0.008**
LN(income pc)	0.245	0.018**	0.368	0.020**	0.200	0.023**	0.366	0.046**
Council Manager	-0.020	0.013	0.038	0.014**	0.025	0.015	0.015	0.020
Expenditure pc	-0.016	0.009	0.003	0.011	0.017	0.014	-0.005	0.015
Decrease Costs	0.077	0.015**	0.120	0.016**	0.059	0.016**	0.084	0.021**
Competitive Bidding	0.037	0.019*	-0.049	0.018**	0.014	0.023	0.001	0.027
Lack of Competition	0.091	0.019**	0.024	0.019	0.048	0.021*	0.062	0.026*
Opposition Index	0.084	0.024**	0.208	0.024**	0.196	0.028**	0.162	0.034**
Political Climate	0.051	0.018**	0.061	0.018**	0.002	0.025	0.038	0.026
Citizen Satisfaction Index	0.047	0.022*	0.178	0.022**	0.145	0.024**	0.199	0.051**
Intercept	-4.004	0.182**	-5.512	0.199**	-3.518	0.224**	-5.323	0.441**
Year 1992 Main Effect							1.401	0.550*
Year 2002 Main Effect							1.829	0.618**
Interaction Terms:								
Year 92 * LN(income pc)							-0.138	0.058*
Year 02 * LN(income pc)							-0.167	0.064**
Year 92 * Citizen Satisf. Index							-0.157	0.066*
Year 02 * Citizen Satisf. Index							-0.069	0.072
N		1414		1418		1039		3871

**sig. at p<0.01; *sig. at p<0.05.

Source: International City/ County Management Association, Profile of Alternative Service Delivery Approaches, Survey Data 1992, 1997, 2002 Washington DC.

Endnotes

ⁱ The U.S. Census of Governments also measures service delivery but for fewer services and delivery alternatives than the ICMA surveys.

ⁱⁱ This index and the other indices used in this paper are created by summing positive responses to component questions and dividing by the total number of questions in the index.

$\frac{1}{Q} \sum_{i=1}^Q f_i$, where $f=1$ if checked yes to question and 0 if not, and $i = 1,2,\dots,Q$, questions.

ⁱⁱⁱ The probit regression technique is used to transform the actual proportion of new contracting out and contracting back-in from a zero to one scale into a full scale variable following the standard normal distribution. Probit analysis uses the maximum likelihood technique to fit the best coefficients for the predictors (Norusis, 1990).

^{iv} Only about 40 percent of respondents are the same in any two survey years and only 243 places answered the survey for all three years. The generalized estimation procedure takes into account the fact that all observations are not independent since each place can have up to 3 measurements. It does so by using all information available without discarding observations that do not have all 3 repeats (Kuss, nd; Norton, Bieler, Ennett, & Zarkin, 1996). Our combined data set had 3871 observations (720 were places with three repeats, 1493 places with two repeats and 1658 places with one repeat).