

Management within the Public Service Marketplace: The Management Imperatives of Assembling Service Marketplaces and Delivering Services under Contract

The prescriptive literature on contracting focuses on how public managers can negotiate, implement and monitor effective contracts to improve service delivery and save costs. Yet, the well functioning markets that contracting requires can not be taken for granted because governments generally begin decisions about whether and how to deliver services where private market service delivery falls short of public expectations. Consequently, public managers must often manage the market place to ensure competition and the flow of information about vendor performance, effective contract practices and so on. In this paper, we use transaction cost theory supplemented with network management analysis to evaluate refuse services in nine governments in the Columbus, Ohio metropolitan area. Our analyses reveal that even in the case of refuse collection, where non-specific asset investments and easily measured service outputs and outcomes enhance contracting success, public managers must still manage the market and their network to improve service delivery.

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Contracting has become an important mechanism for governments to deliver a range of public goods and services. Indeed, improving service delivery through contract has become a political desideratum, perhaps even a centrist “Third Way” formula for achieving the goals of the left – such as expanded social welfare programs – through the means of the right – harnessing private self-interest for collective ends. Accordingly, the view of contracting among many economists is hopeful, perhaps because they view government bureaucracies so pessimistically. In the competition for contracts, private firms overcome the principal agent problems, monopoly inefficiencies and other ills that plague service delivery through government bureaucracy. While some research finds support for the efficiency and cost savings claims (see e.g. Miranda and Lerner, 1995; Perry and Babitsky, 1986), recent reviews of the empirical literature suggest that this support is mixed at best (Boyne, 1998; Hirsch, 1995; Lavery, 1999). Moreover, many public administration scholars are concerned that ever-expanding contracting has “hollowed” the state, leaving governments akin to holding companies who merely oversee the various vendors who actually deliver services to citizens (see e.g. Milward, Provan, and Else, 1993). Such “hollowed states” may be unable to manage the complex tangle of contracts, causing rampant accountability problems and leaving citizens vulnerable to the whims of private service vendors who may be overly concerned with profits. Even if contracting is more efficient, it may sacrifice important public values on the altar of cost savings. In this context, for contracting to successfully balance efficiency, service quality, and other important performance criteria, public managers

must become more than simply procurement administrators narrowly focused on contracts with individual vendors. Instead, public managers must become network managers, adept at assembling, maintaining and monitoring a web of connections between a variety of service marketplace participants.

In this paper, we look to broaden the analysis of government contracting. From transaction costs economics, we draw insights on how governments approach service delivery decisions with an eye towards balancing cost efficiencies gained from contracting against the risks and management costs associated with third party service delivery. In this lens, public managers' primary task is managing delivery through balancing bid price, vendor capacity, service quality and so on, while assuming that much of the service delivery marketplace is exogenous to the contracting governments. That is, while governments can choose contracting and contract management approaches to mitigate transaction cost risks, transaction cost theory is largely silent on how governments can also manage underlying market structure and intergovernmental network that can reduce transaction costs. To address this, we complement a transaction costs framework with insights from network analysis, sociological institutionalism, and classic public administration scholarship to place contracting within a larger web of market structures, networks among vendors and governments, and organizations that span the marketplace. Such a network analysis reveals how governments can manage the marketplace to better harness the benefits of contracting while avoiding its pitfalls.

We examine these issues through an analysis of the refuse collection service marketplace in the Columbus, Ohio metropolitan area, where a majority of communities outsource for refuse collection. This is a case where transaction cost theory should

perform well in explaining governments' outsourcing decisions and prescribing contract management practices. Refuse collection has relatively easy to measure service outcomes and outputs, requires relatively few asset specific investments, and as a rather large metropolitan area, Columbus has a competitive market of potential vendors. In other words, refuse contracting should be relatively easy and common, with little need for managers to invest time and effort into network and market management. Our scope of inquiry includes the governments contracting for services (the purchasers), the private corporations who supply refuse collection services (the vendors), and the regional solid waste authority (the marketplace overseer and quasi-regulator). We first examine the contract management practices of both the governments and their private vendors, with a focus on transaction costs and the strategies governments employ to improve contract performance and how vendors respond to those strategies. We also examine the network dimension of our case to illustrate how public managers can further improve contracting practices by managing the larger market context. For example, we show how the solid waste authority has promoted a more competitive refuse collection marketplace through collaborations with governments and vendors. The research presented in this paper begins to flesh out the specific management capacities needed to successfully deliver services within a "hollow-state" framework. We conclude by arguing that the contract management literature needs to expand in concert with the literature on assembling and managing networks.

This paper is divided into three sections following this introduction. The first outlines our framework for analyzing the transaction cost, management and network dimensions of contracting and contract management. The second presents our analyses

of the refuse collection marketplace in the Columbus, Ohio metropolitan area. The third section concludes the paper by examining how our framework informs contract management theory and practice.

A Framework for Analyzing Contracting and Contract Management

The research on public sector contracting, in which vendors compete to deliver services to or on behalf of governments, largely has its roots in economic theories of organization and service provision – public choice, agency, property rights, and transaction cost theories. Initially, public sector contracting was championed as a way to generate cost savings through efficiencies in competitive service production (see e.g. Savas, 1974, 1977). The focus among contracting practitioners was on structuring the bid process to stimulate price competition. Critics argued that even if contracting reduced costs, it sacrificed quality and accountability. More recently, research and practice has tackled the balance between cost and service quality in the contracting process, most notably with the rise of performance contracting, in which contracts clearly specify a range of measurable performance outcomes rather than simply specify the work to be performed (Behn and Kant, 1999).

Any theory of contracting and contract management must also incorporate longstanding research on public administration and management, notably long standing research on organizational capacity (see e.g. Gargan, 1981; Honadle, 1981). In the case of contracting, Gulati and Singh (1998) highlight the importance of coordination costs – for example, the costs of simple communication between a contractor and a vendor. In a study of state contracting for social services, Romzek and Johnston (2002) find that there

are a variety of administrative challenges that must be addressed in order to ensure contract success, such as resource adequacy, training for government contract managers, and sound contractor staff and financial management capacity enhance contract effectiveness. On the flip side, Brown and Brudney (1998) find that higher levels of contracting for information technology by local governments leads to a reduction in internal management capacity and consequently fewer benefits from contracting. Some public organizations may view contracting not as a function to be managed, but as a means to reduce, if not shirk, their overall management responsibilities. There is growing evidence that contract success is conditioned by basic organizational capacity factors like human and fiscal resources, as well as organizational capabilities like strategic planning, negotiation, etc. Fortunately, there is evidence that as governments increasingly rely on contracting, they also expand their organizational capacity devoted to contract management (Brown and Potoski, 2003b).

In the tradition of economic theories of organization, public sector contracting research has largely focused structuring the purchaser-vendor agreement – the contract itself. One approach is to create a package of incentives to governing the relationship between the principal (i.e. the purchaser) and the agent (i.e. the vendor). Similarly, transaction cost theory focuses on the boundaries of the organization with the transaction as the unit of analysis. Another literature focuses on the front-end of contracting, rather than what steps public managers should take to manage the process once the contract has commenced. For example, a recent International City/County Managers Association (ICMA) report (Gordon, 2001) describes ten steps for contracting:

Define Outcomes
Identify Contractors
Develop Scope of Work
Determine Contract Type
Estimate Costs
Establish a Monitoring Plan
Solicit Proposals
Evaluate Proposals
Launch the Contract
Evaluate Performance.

While the report gives considerable direction on initiating the process, reviewing proposals, and selecting a vendor, it provides no guidance on what to do between launching the contract and evaluating performance, and says very little about these last two steps.

With contracting becoming increasingly common (Warner and Hedbon, 2001), public management scholars have begun to extend theory building beyond the act of contracting into the field of contract management, including Kettl's (1993) call for transforming governments into "smart buyers", Milward and Provan's (2000) research on managing the "hollow state", and Kelman's (2002) appeal to regard contract management as a core organizational competency in the public sector (see also, Gansler, 2002). In the next section, we contribute to this line of inquiry by synthesizing the economic research on contracting – notably transaction cost theory – with insights from network analysis

and sociological institutionalism.

Economic Theories of Organization

Economic theories of organization largely focus on two related questions with regards to public sector contracting. First, what functions should be performed within the organization and which functions should be procured or contracted from outside the organization? Second, how should service delivery (i.e. contracts) be governed to minimize costs and maximize performance? Transaction cost theory is a compelling beginning for studying service delivery management: deciding whether to internalize or outsource production, governments balance production cost savings that potentially result from contracting against the transaction costs – or management costs – associated with either internally producing the service or contracting for it. The factors that give rise to transaction costs in contracting result from limited information and uncertainty (Coase, 1937; Williamson, 1981, 1996). Because parties to a transaction have incomplete information, they cannot fully predict all possible future scenarios. Consequently, contracts cannot be fully specified, and vendors may opportunistically take advantage of the contracting organization (Williamson, 1997). Three transaction cost risk factors that increase these information problems and hence the potential for vendor opportunism – service specific characteristics (i.e. asset specificity, or the propensity for monopoly provision of the service, and ease of measurement, or the ability of the contracting organization to measure and monitor the vendor’s activities or the outcomes of that activity), the competitiveness of the service marketplace, and goal incongruence between the vendor and the contracting organization. When transaction cost risks are low,

governments turn to more contracting, while higher transaction costs risks compel governments to be more selective about their production choices (Brown and Potoski, 2003a, Besley and Ghatak, 2001; Crocker and Masten, 2002; Ferris and Graddy, 1991; Hart, Shleifer & Vishny, 1997).

Transaction cost theory has proven valuable because its models service production under different institutional arrangements as a function of both financial costs and management costs. Even in competitive marketplaces with many participants, incomplete information means that contracting decisions cannot be based on price alone. In particular, transaction cost theory identifies market and vendor assessment, contract specification, monitoring and negotiation as key tasks that managers must undertake when evaluating contracting. Yet, transaction cost theory is limited in that it assumes that the information managers hold about contracting is exogenous to the contracting process. Yet, managers can reduce information problems by building skill and expertise through their network interactions, including those in the market. Experience is a firm teacher; public managers can build on past experiences to write better contracts that align vendor performance with public expectations. Public managers can also learn from the experiences of others by exchanging information about designing contracts, selecting reputable vendors and so on.

Nor is the structure of the marketplace exogenous to the contracting process. Unlike private firms, governments begin decisions about whether and how to deliver services where private markets fall short of public expectations. Consequently, theories of public sector contracting should (obviously) not take the existence of competitive markets for granted, and should also (perhaps not so obviously) take into account

governments' ability to build and manage the underlying structure of markets. Markets after all are political, if not always governmental constructs (Lindblom, 1977). Finally, transaction cost theory speaks little to basic administrative issues of planning and coordinating across boundaries, and instead focuses on addressing the potential opportunistic behavior of vendors. Even when the contracting government has a significant degree of trust in the vendor and consequently does not have to engage in steps like extensive monitoring to curb opportunism, there are still management costs associated with coordinating service delivery across the boundaries of two organizations (Gulati and Harbir, 1998).

This begs the question about what public managers do to reduce the costs of learning about how to reduce information problems inherent in contract management. Unfortunately, transaction cost theory has little to say about the management costs of knowledge diffusion through the market and other mechanisms. This is of critical importance for public sector contracting, since many times when contracting for a service, the contracting government has to take additional steps to stimulate demand in order to gain the benefits of a competitive marketplace. As a result of these deficiencies in transaction cost theory, we believe a complete theory of contracting and contract management must incorporate other theoretical perspectives. In particular, we complement our basic transaction cost framework for public sector contracting with insights from two other theoretical streams – network analysis and sociological institutionalism.

Network Analysis

The expansion of public sector contracting is part of a larger movement away from a hierarchical model of service provision towards a model in which governments are only one actor within a constellation of actors responsible for delivering public services (see e.g. Agranoff and McGuire, 1998). There are a variety of different types of interorganizational arrangements among governments, private firms, non-profits, and other governments. Within the government-private firm dyad alone, Schaeffer and Loveridge (2002) identify contracting as one of four types of relationships type. The rise of partnerships, collaborations, exchanges and other forms of interorganizational arrangements has sparked a burgeoning literature on network management (LaPorte, 1996; Page, 2003; Provan and Milward, 1995; Thurmaier and Wood, 2002). One strand of this literature starts from the assumption that governments play a principal role in organizing networks. Consequently, researchers are in the process of identifying what steps public managers must take to assemble and manage the networks of organizations necessary to deliver public services or achieve a public policy goal (Agranoff, 2003; Agranoff and McGuire, 2003).

Effective markets require participants be well informed about the quality, price and availability of the goods being exchanged.¹ Even markets with scant government intervention or even oversight require coordinating and matching buyers and sellers, standardizing and disseminating information. Where boundedly rational actors face transaction costs in acquiring and using such information, markets serve as a social network in which buyers and sellers not only exchange products, services and money, but also information about their products and about other market participants. In

marketplaces for many public services, this role is more likely to be taken on by a government – either some combination of the buyers of the service or through some entity that spans the marketplace, like a public regulatory body. This is the case for several reasons. First, in many instances, governments contract for services for which they are the only buyer or the primary buyer (i.e. waste water treatment). When this is the case, purchasing governments have the most at stake in policing the marketplace, at least initially. Second, while the prospects for a viable market of many buyers and sellers may appear positive, at the outset the marketplace is often undeveloped (i.e. policing). In such cases, governments become the de facto market arranger and overseer since there are unlikely to be many vendors ready to assume the role. Third, because of the controversial and political nature of contracting for public services, legislative bodies often create oversight bodies to regulate the marketplace in order to placate those opposed to third party service delivery.

Consequently, a full accounting of the transaction costs that governments face when they chose to contract for services must also incorporate the costs of building and maintaining the marketplace network. There may be a competitive marketplace in the sense that there are multiple suppliers of a particular service, but markets also require coordinating devices, particularly mechanisms that coordinate through the provision of information. If one government is the only purchaser of that service, that government may bear a larger share of the management costs associated with undertaking the steps identified by network scholars in an effort to assemble and maintain the market. Such market maintenance costs exist even for easily measured, low asset specific – or low transaction cost – services. This invites a larger analysis of the marketplace, in particular

¹ Effective markets also require a sufficient number buyers and sellers to avoid oligopoly.

relations among the governments purchasing and providing services, as well as the regulators and overseers of the market.

Sociological Institutionalism

Markets are only one venue for the diffusion of information. Sociological institutionalism argues that rules and norms endogenous to organizational fields pressure participants towards homogeneous behavior (March and Simon, 1993). Organizations seek legitimacy and consequently scan their field to identify and adopt forms and routines that appear successful in other organizations (Meyer and Rowan, 1977). In line with the work on network analysis and its focus on the relevant policy or service network, we believe that the important mechanisms for diffusing contracting knowledge are likely to be localized, policy specific, and possibly informal. Local governments are likely to mimic the practices of other similarly situated neighboring governments that are deemed to be legitimate. More specifically, in the absence of tools to give them concrete evidence about whether or not to contract and if so, how to do it, public managers located within specific departments are likely to scan their environment to see what other governments do and then replicate those that appear to be successful. This presumes that there are some governments in the neighboring environment that are entrepreneurial and willing to take on the risk of being first movers in adopting a new policy regime. In large metropolitan areas it is likely that one or two governments will pursue this course of action in an effort to stay ahead of the pack.

In many cases where markets may not function effectively, there are public or quasi-public market-spanning organizations that manage service delivery markets. There

are now numerous examples of regional public entities that are charged with coordinating the activities of neighboring governments, as well as serving as a means for information exchange. These organizations often serve as the primary mechanism for policy diffusion. Local governments located in environments in which such organizations exist are less likely to have to go through independent information gathering than governments that operate in environments without such an organization.

All in all, our integration of transaction cost theory along with network, sociological institutionalism and public management theory focuses our inquiry on key issues for how public managers can address problems inherent in contracting. First, as transaction cost theory suggests, a key factor in contracting is the interaction of service specific characteristics with market conditions. Governments are likely to avoid contracting when services require asset specific investments or when services are difficult to measure. Furthermore, when contracting under these conditions, they are likely to invest in additional capacity to manage contracts. Second, the efficacy of the market and managers' expertise and information about contracting are endogenous to managers' experiences in the service market place. Consequently, because the existence of well functioning markets should not be taken for granted, governments are likely to invest some effort building the market. Moreover, governments can learn about contract management and best practices through their interactions with other governments. Below we present a framework for addressing these contract management issues by directing attention to the interplay between transaction costs and network analysis in particular. The framework spans the contract process, including the production decisions

of government (i.e. whether to outsource or not); the contract management decisions of government (i.e. what steps governments take to manage contracts); and the performance of contracts (i.e. whether investments in contract management improve contract performance).

Applying the Framework: Refuse Collection in the Columbus Metropolitan Area

Method

In our previous work, we use a large sample of data collected by the ICMA on local government service production choices across a range of local government services. Specifically, we used a basic transaction cost framework to analyze: the factors that influence local governments' service delivery choices (Brown and Potoski, 2003a); how local governments manage their capacity to deliver services under different production arrangements (Brown and Potoski, 2003b); and how local governments use contract oversight procedures to help better monitor vendor performance and thus mitigate the risk of contract failure (Brown and Potoski, 2003c). These empirical studies are informative in that they provide confirmatory evidence that the transaction cost risk factors we identify influence the local government contracting decision, as well as contract management capacity and strategy. However, these empirical studies also showed that a transaction cost framework only partially explains local government contracting and contract management.

Building on this empirical research, we have begun to explore service delivery practices up close through case studies of refuse collection practices in nine communities

in the Columbus, Ohio metropolitan area: Columbus, Dublin, Gahanna, Grove City, Hilliard, Reynoldsburg, Upper Arlington, Westerville, and Worthington. With relatively easily measured outcomes and outputs and assets that are relatively unspecific, refuse collection is a prime candidate for successful contracting, particularly in a larger metropolitan with a rich market of vendors competing for contracts. Only two governments in our case sample – Columbus and Upper Arlington – do not contract for refuse collection. Indeed, because of these characteristics, the information requirements of refuse contracting is quite low relative to other government services, and consequently, the tasks of managing service networks should be relatively easy.

Our case studies are based on semi-structured interviews with key informants (mainly public service directors) supplemented with information collected from publicly available sources (e.g. copies of all contracts). In our interviews, we asked these respondents questions about their service delivery practices, including whether they contract for particular functions what steps they take to manage those contracts, and how they interacted with others in the service marketplace. We supplemented this information with interviews of vendors (i.e. the contracted refuse collection providers) and the primary regional government authority that serves as the market overseer and quasi-regulator – the Solid Waste Authority of Central Ohio (SWACO). Interviews and document analysis of these two additional sources give us a more complete picture of the service marketplace and the steps governments take when going to the market. Based on these case studies we present the results from the perspectives of the three participants – the purchasing government; the vendor; and the market overseer.

The Decision to Contract

In all nine cases, governments decided whether to contract based in large part on the logic of transaction costs. Interviews with public service directors in the seven contracting cities indicate that the primary reason these governments contract for refuse collection is cost savings. The fixed costs of maintaining a fleet of refuse trucks, along with the increasing liability costs for refuse collection employees and equipment, are prohibitive for these seven suburban governments (all have populations around 30,000). All indicated that refuse collection was a core service for their city – one of the services elected officials got the most calls about – and that cost pressures had forced these governments to outsource. Almost all of these governments had contracted for refuse collection services for over ten years, some for twenty and thirty years, and noted that while vendors had come and gone, a market had always remained because government was not the only consumer of refuse services. Commercial and industrial establishments had long procured refuse collection and disposal services.

As in the suburban governments, City of Columbus officials see refuse collection as a core city service and dedicate significant attention and resources to ensure it is provided to the satisfaction of citizens. Yet Columbus, as a city of over 750,000, can achieve economies of scale and consequently deliver directly cost effective curbside refuse collection. However, the City of Columbus contracts for the provision of a handful of other refuse collection related services, notably yard waste collection and recycling. Low participation among citizens in the recycling program along with seasonal variation in yard waste collection mean that Columbus cannot achieve the same economies of scale that it can with curbside refuse collection; consequently, the City

contracts for the service. Interestingly, City of Columbus public service officials indicated that they had been approached by some neighboring communities – mostly townships – to bid on their refuse collection contracts. City of Columbus officials indicated that they were not opposed to serving as a vendor to these communities, but that it was a question of timing and capital infrastructure. According to the City of Columbus Public Service director, “We wouldn’t do it to break even. We’d have to make a profit on it in order to do it.”

Upper Arlington, the lone suburban government that continues to provide refuse collection services directly, is the outlier in some sense. In fact, the city of Upper Arlington arguably provides the highest level of service of all the communities in the sample, offering service through golf-cart size trash collection buggies that drive up to resident’s doors. According to Upper Arlington service officials, the community has a high percentage of elderly residents that demand at-your-door service. The city periodically studies whether at-your-door collection can be done cheaper through contracting, but since it requires such a specialized fleet of vehicles, no private vendor has been able to offer the service at a reasonable cost.

In sum, a transaction cost framework can successfully be employed to explain the make or buy decision for refuse collection. All nine of the communities indicated that citizens demanded high quality refuse collection and that cost is the over-riding factor in determining whether to contract or continue to deliver the service directly. Because governments can more easily gauge service quality, they can exploit the competitive local market and turn to contracting to reduce production costs. As a corollary to this finding, Upper Arlington has expressed interest in contracting, but because the nature of the

service is asset specific there is no market. Consequently, they have little choice but to internalize service provision; at the moment there are no production cost savings to be had, and the asset specific nature of the service their citizens desire likely means that the transaction costs would be high if the City was to find a willing supplier. Next, we enter into terrain where less theorizing and theory testing has been done – the contracting process and contract management.

The Contracting Process

All of the contracting local governments use a competitive bidding process, although one of the communities – Grove City – uses a franchising system rather than a more frequent contracting system for awarding contracts. Contract periods vary from a low of one year with four additional years pending the annual approval of the service director (City of Gahanna), to a high of five years with two additional possible years (Grove City). The modal number of bidders in the most recent contract bid for each city was three, with a minimum of one and a maximum of five. Since all of the governments had been contracting for refuse collection for some time, most of the service directors had been through several rounds of contracting. In most cases, to the degree that public service directors could remember, the first contracts went to local trash haulers with small fleets. In recent years, this has changed as several large regional and national commercial haulers had come to dominate the public sector side of the market, although there were a variety of haulers that serviced private commercial and industrial consumers. Eight of the local governments had contracts with Rumpke, a large-scale commercial outfit, and only one local government had a contract a smaller local hauler. When asked about the

competitiveness of the public sector refuse collection marketplace, the Public Service Director of Worthington reports, "...it [is] not very competitive and it has not been the last couple times we bid. Other than Local Waste that's coming on board now, Rumpke has had the hold on municipal refuse collection." Several governments had indicated that they had encouraged small local haulers from neighboring to bid on their current contracts, but these haulers either did not submit a bid or Rumpke easily beat them on price.

The rise of large-scale commercial haulers like Rumpke has both reduced costs and in some cases improved service quality. The majority of service directors in governments that contract with Rumpke indicate that they selected this particular vendor because they had the best combination of low bid and a track record of professional service. Not all service directors were happy with Rumpke, and one in fact was adamant that he would not select Rumpke in the next round of bidding. Instead, he preferred to find a local hauler because he trusted companies with roots in the community. The downside of Rumpke's success is that one firm is slowly gaining a monopoly market position, potentially leading to an increase in both transaction costs and financial costs. The Worthington Public Service Director summarized the sentiments of others public service directors though on the concerns about monopolization of the marketplace:

What I think is interesting is the number of companies that we meet with that say they are getting into this business still can't beat Rumpke's price. In this case a monopoly does help us because it's a volume issue. I always have the concern that something can go wrong, like a strike occurs. For example, this happened in

the 1970s when Local Waste [a local hauler] workers struck. Worthington city workers borrowed trucks from the City of Westerville who at that time collected their own trash and the city ran the routes for a couple of weeks. I'm afraid of that but I don't worry about it every day.

In sum, while the public sector refuse collection marketplace has become less competitive, the fact that City of Columbus remains a direct service provider and that Columbus is close to other large refuse collection marketplaces where vendors other than Rumpke dominate (i.e. Cleveland and Cincinnati) lowered the concerns among service directors about marketplace monopolization. All of the service directors indicated that they remain vigilant towards market consolidation, a cost of managing the market place beyond simply conducting the bidding process. Many of the public service directors – particularly those that had served for long periods – had made investments in not only learning about the local marketplace (i.e. Columbus), but also in learning about dynamics in neighboring marketplaces. Several public service directors tracked the activity of other regional trash haulers – potential competitors to Rumpke – through personal connections with other service directors, as well as through relevant periodicals (i.e. *Cleveland Plain Dealer*) A transaction cost framework alone can account for these costs – they can be conceived of merely as the costs to management in gathering information about potential vendors – but the analysis of the contracting process confirms our proposition that a narrow focus on the contract itself is limited. This becomes more evident in examining the contract management process.

Contract Management

Contracts are not self-executing. Once contracts had been let, service directors in our sample report that they engage in two primary tasks to ensure that service quality remains high – monitoring and communication with the vendor. All of the contracting governments engaged in some form of contract monitoring, although the degree and sophistication varied. All of the governments used citizen complaints as their primary fire alarm for tracking vendor performance. Even when citizens were directed to call the vendor with complaints about service quality, invariably they call the local governments first. Some local governments had quite elaborate complaint monitoring systems, tracking the rise and fall using database management programs. Staff from these communities indicated that most complaints resulted from missed trash collection, and were typically caused by weather delays, changes to the route schedule due to holidays, or new route drivers. A few of the local governments go farther, conducting randomized spot checks on trash collection days and implementing citizen satisfaction surveys to track service quality. The primary factor that appears to explain this difference in monitoring intensity is organizational capacity. The three communities that engage in extensive monitoring (Dublin, Westerville and Worthington) all have a staff person beyond the service director whose primary responsibilities include contract management. In the other communities, the contract management responsibilities fall to the public service director, although primary communication typically flowed through a secretary. Through a separate analysis of citizen satisfaction with refuse collection services (Brown and Vogt, 2003), these three communities ranked among the highest in the metropolitan area. Empirical analysis demonstrates that part of this is due to the fact that these

communities conduct more monitoring and invest in contract management capacity.

While there are costs to management in ensuring high quality service provision through extensive contract monitoring, the case analyses also demonstrate that there are costs to public managers when poor performance is discovered. Each call from a citizen elicits a response of some kind from the local government, typically a call to the vendor to address the problem. While citizen complaints appeared to be low across communities (typically only 2-3% of all citizens served complained each week trash is collected according to interviews), they still required redress. Yet, the same costs might exist if the service was internalized; public managers would still have to uncover the problems and take steps to address them. However, service directors with low contract management capacity (i.e. they had to make the calls because they lack the staff to do) indicated that too much of their time was spent in communication with vendors over missed trash pickups.

In an effort to lower the occurrences of misses and improve contract performance (and consequently lower the transaction costs of addressing poor performance), one of the local governments (City of Westerville) recently incorporated penalty clauses into their contracts. These penalty clauses assess a financial penalty on vendors for every day that they are unable to perform contracted services. These fines are imposed on top of the costs Westerville will have to incur to ensure that trash is collected that day (i.e. collecting the trash themselves or having a neighboring community like the City of Columbus collect the trash). The Public Service Director of Westerville reports that he has exercised the penalty clauses on a couple of occasions. The vendor – Rumpke – has responded by placing a service coordinator in the region responsible for overseeing the

contract.

Interviews with the other communities indicate that many of the local governments intend to incorporate similar penalty clauses into their future contracts. Very few indicated that they were doing this because of poor performance on the part of the vendor. According to the City of Worthington Public Service director, “I have to tell you that performance and penalty clauses were added not because of any significant problems with Rumpke. Rather we work very closely with other suburban areas and I think you’ll find that the contracts are very similar.” Upon further probing many local governments indicated that they watch what other governments do and want to make sure they keep pace. Furthermore, several indicated that they worked with SWACO to craft their contracts. It appears that several forces spur contract innovations like penalty clauses – initial dissatisfaction on the part of a leading government with current arrangements; the desire to mimic other governments that appear as successful (remember that the City of Westerville has one of the highest citizen satisfaction ratings for refuse collection); and coordinating efforts from the regional government overseer. These forces drive governments to extend their activity outside the policy space of refuse provision in their community. This examination of contracting practices indicates that the specific instruments governments include in their contracts result from interacting with other participants in a network of market participants. The next step is to see whether such instruments influence vendor behavior.

The Vendor’s Perspective

Interviews with the primary private refuse collection vendor in the Columbus

metropolitan area provide a more complete perspective on the contracting process. To begin, the basic human resources structure of direct service providers like Upper Arlington and Columbus, and Rumpke appear similar. Both employ similar line staff, use route managers to direct line staff on the days of collection, and have a supervisor that oversees operations across larger areas. Rumpke, based out of Cincinnati, has a four-acre facility in the heart of Columbus it uses to serve the metro area. While it owns its own landfill in Cincinnati, like the City of Columbus and Upper Arlington, it uses the Franklin County landfill for dumping trash collected in the metro area. Rumpke, a private firm, is clearly driven by the profit motive in providing services to local governments. While it performs some services at a loss (i.e. curbside recycling and yard waste collection in the City of Columbus) it does so in order to gain access to more profitable markets (i.e. drop box recycling in the City of Columbus).

According to the Rumpke Operations Manager in Columbus, providing refuse collection services to the Columbus metro area has been a recent growth area for the company, although future growth in the area lies in subscription service from individual recipients in surrounding townships. When asked about the contracts themselves, the Operation Manager indicates that even though longer contracts with fixed recuperation costs can sometimes expose Rumpke to unfavorable cost fluctuations (i.e. rising fuel costs), they are preferable to short contracts because they provide a stable income stream over a long period of time. Rumpke is more likely to engage in upgrading its fleet under these circumstances, and consequently improving the quality of service. Although none of the contracts in the Columbus area require Rumpke to report on performance – that responsibility typically lies with the contracting government – Rumpke engages in a

series of steps to ensure quality control, including having route supervisors follow trucks around, maintaining constant communication with city officials the day prior through to the day after scheduled refuse collection, and internally tracking misses.

When asked about whether contract incentives make a difference in terms of the quality of the service provided, the Operations Manager offered the following:

We are focused on delivering a quality service from day one. It doesn't matter if they charge me \$100 a day or \$1000 a day, we want to deliver a quality service. But I'd be lying to you if I said those clauses don't make us work harder to improve services. I think it's in the best interest of the communities to have these. Keeps everybody honest and working hard. Same thing with the end of the contract; we are more focused on the quality of the service we provide when we're up for bid in a community. That's just human nature.

It appears, at least in this instance, that incentives and vigilance impact vendor behavior. Furthermore, the Operations Manager suggested that ongoing and open communication between his staff and the local government staff was the key to contract success. The operations manager states:

The more the service director or the city contract manager knows about the details of service provision, the better the relationship. New service directors are typically the most difficult to deal with. Most problems – notably misses – are due to citizens not understanding the specifications. We got a call from a new

service director recently who called on behalf of a citizen that said we didn't pick up some cardboard. I asked the service director what form the cardboard was in. She indicated that it was a refrigerator box. We'll happily take that cardboard, but the contract clearly specifies that it has to be of a certain size and shape; the customer has to cut up the cardboard before we'll take it. The service director wasn't up to speed on the contract.

Communities with dedicated contract managers would appear to fare better. In fact, the Operations Manager highlighted the City of Dublin, a city with a dedicated refuse collection contract manager, as a primary example where the contract works smoothly.

In sum, contracting is designed to harness the self-interest of private firms to offer a quality service at a low price. That appears to be the case in terms of Rumpke in central Ohio; the vendor acknowledges that financial incentives like penalty clauses and contract renewals spark increased activity. However, contracting also requires an investment in contract management capacity, both on the part of the contracting government and the vendor. Rumpke has responded to concerns among contracting governments about poor performance by employing contract managers throughout the region to work directly with the contracting governments. On the other side, contracting governments that employ a counterpart contract manager appear to enjoy smoother contract relations and better service. Contracting is clearly not costless. As suggested by the public management literature, service performance is a function of organizational capacity. This appears to be the case for services provided internally or through contract. However, the concept of organizational capacity changes in this context from having the appropriate resources to

deliver services directly, to having the organizational capacity to manage contract relations and participate in – if not arrange – a network.

The Market Overseer Perspective

To this point, the focus of the analysis has largely been on the dyadic connection between the contracting government and the vendor. According to our interviews the Solid Waste Authority of Central Ohio (SWACO) is the refuse collection market overseer and regulator in the Columbus metropolitan area. Constituted by the State of Ohio in 1989 as a board driven government agency, SWACO purchased the Franklin County landfill from the County government and established a large-scale resource recovery facility in the early 1990s. All organizations that collect refuse in Franklin County – private haulers and governments – pay a fee to SWACO in order to dump the materials in the landfill. SWACO also offers a variety of educational programs and other activities to encourage recycling and conservation of resources. This provides SWACO considerable resources to follow its mission, which according to its formal mission statement is as follows:

As adopted by the Board of Trustees, the Authority's mission is to provide a comprehensive, environmentally sound, cost-effective, and technically reliable solid waste management program for all people living and working within the jurisdiction of the Solid Waste Authority of Central Ohio.

Through its monopoly on refuse disposal facilities, SWACO also serves as a quasi-

regulator and overseer of the refuse marketplace in the region. In particular, SWACO undertakes a variety of steps to encourage competition in the public sector refuse collection marketplace. First, SWACO works with local governments in constructing their contracts for refuse collection. About half of the contracting governments in the study worked with SWACO in crafting their most recent contract. Interestingly, these governments all only took half of their advice. In an effort to engender more competition in the marketplace, SWACO counsels governments to enter into two contracts when they decide to outsource refuse collection, one for refuse collection and one for the hauling and dumping of trash at the landfill. All of the contracting governments that worked with SWACO indicated that this two stage contracting process was too cumbersome and consequently opted to contract for both services in one contract.

The second way SWACO influences the structure of the marketplace is by attempting to build the capacity of all organizations by brokering partnerships. In particular, SWACO coordinates the recycling and yard waste program in the City of Columbus, even though the service is provided through a contract to Rumpke. In addition, SWACO has partnered with the City of Dublin, as well as Rumpke, to experiment with new refuse collection technologies that are more cost efficient. Finally, and most recently, SWACO has attempted to engender competition by entering into the marketplace as a provider and consequently a competitor to vendors like Rumpke. For example, according to the Operations Manager of Rumpke in Columbus, SWACO is currently attempting to wrest control of recycling drop-box collections in Columbus – the profitable component of Rumpke’s contract with the City of Columbus. Good.

SWACO plays a critical role in the marketplace as the coordinator and overseer of

refuse collection services. Through its various activities, SWACO lowers the transaction costs to contracting governments by maintaining competition and providing advice on contracting practice. In the absence of an organization like SWACO that spans the marketplace, contracting governments would be faced with the additional burden of dedicating resources to maintaining the marketplace. SWACO may not perform this function in a cost efficient manner², but the collective action burden faced by each individual contracting government might prevent them from joining together to take on this responsibility on their own. Furthermore, SWACO facilitates policy diffusion by serving as a clearinghouse for information on refuse service delivery practices, including contracting. Rather than gather information on the service delivery practices of each local government in the metropolitan area, governments can receive much of this information by directly contracting SWACO.

The Purchaser's Perspective Reprise: The Management Imperatives of Assembling Service Marketplaces and Delivering Services under Contract

Taken together these interviews map out the service marketplace more completely while illustrating the value of our proposed synthesis of transaction cost theory with network analysis, sociological institutionalism, and classic public administration scholarship. Consistent with transaction costs economics, governments clearly go to the market in an effort to reduce costs for refuse collection. They are able to do so for this service primarily because of the economies of scale that private firms can create, and because they can avoid vendor opportunism because of the (still) competitive service

² Recent articles in the local press have highlighted the expensive dumping fees SWACO charges for the landfill and how most of this goes for education programs and administrative costs.

market in the Columbus area and because refuse collection's outcomes and outputs are relatively easy to measure. At the same time, they remain vigilant through the contracting process of vendor opportunism. Contracting governments engage in monitoring to ensure vendors are meeting contract specifications. Some governments have even gone further by adding penalty clauses and performance incentives to their contracts to reduce vendor opportunism and stimulate high performance. Interviews with vendors suggest that these tools are effective. It appears then that even for services like refuse collection with low transaction cost risks that governments must balance production cost savings versus potential transaction costs that come from contracting.

However, by expanding the scope of inquiry beyond simply the contract between the government and the vendor, there are more factors that governments must consider when they decide to outsource. First, by looking at all the connections in the marketplace, it is clear that there are costs to market maintenance that governments must consider both when they decide to contract and when they decide how to structure contract management systems. These are transaction costs, and in the absence of an organization like SWACO to take on the market assembly role, these costs can be significant.

Governments in the Columbus area benefit from operating in a marketplace that is semi-governed by SWACO, but they do pay a financial cost in higher landfill fees – fees which go to support SWACO. A network perspective is a powerful complement to a basic transaction cost framework, particularly for public sector contracting since marketplaces for public sector goods and services are often underdeveloped (to the degree that they exist) and some entity must take on the role of stimulating and maintaining the market.

Second, the case studies provide evidence that governments reduce the transaction

costs of deciding how to structure contracts by emulating their successful neighbors, as predicted by sociological institutionalism. Many of the governments replicated tools and techniques they found employed by other governments, often before they knew if these tools would be successful. Third, the cases provide evidence that contract management capacity influences contract success. According to the primary private vendor, government contracts worked better when there were well functioning lines of communication between the vendor and the government. This entailed a contract manager on both sides. Consequently, governments cannot simply eliminate all staff positions related to service provision when they contract; they have to retain some contract management capacity, even for services with low transaction cost risks.

Conclusion

Our analysis of refuse collection practices and markets in the Columbus, Ohio metropolitan area shed light on the management imperatives of contracting and contract management. Numerous authors have outlined capacities and skills that governments need to be able to operate in a “hollow state” world including contract specification, performance measurement, an understanding of incentives, negotiation and bargaining and strategic planning (see e.g. Cooper, 2003; Kelman, 2001; O’Leary, 1996). Our case analysis confirms that these are all critical skills and capacities, but adds some more. To begin, contracting governments must understand markets and how they operate. At a minimum they must know how to do more than assess an individual vendor, but ideally should understand how the marketplace for their service is likely to mature over time. Second, contracting governments must maintain and enhance monitoring and oversight capacity. Proponents of contracting have sometime suggested that contracting will

reduce the size of government. If contracting is to be successful, our analysis suggests that rather than reduce the size of government, it may simply change it. Ironically, governments may take on more of a regulatory and oversight role than has traditionally been the case. Third, in concert with the scholarship on public management networks, governments need to enhance their networking capacity, primarily those skills that relate to assembling networks and maintaining them. Our research sheds light on the critical importance of some entity playing the role of market overseer. In the case of refuse collection in central Ohio, a regional government organization played that role. In the absence of such an entity, individual governments may find that they shoulder those costs, or face the higher risks of contracting in a more freewheeling marketplace.

Our research suggests directions for future research. First, because government decisions about service delivery often occur where markets fail to provide services that meet public expectations, governments cannot take well functioning markets for granted. While our research has shown how governments can perform quasi-regulatory market functions, future research should study additional ways that local governments can manage markets to improve contracting. Second, the study of network dimensions of contracting should be further incorporated into contracting research, a task we have only begun here. As this research continues, it should move beyond studying whether or not governments contract, to focus more on how transaction costs, contract management, and networking influence contract outcomes, including cost efficiency, quality of service and citizen satisfaction.

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