

UNDERSTANDING REVERSE PRIVATIZATION IN U.S. LOCAL GOVERNMENTS

by

SABRINA RILES

(Under the Direction of Hal G. Rainey)

ABSTRACT

Objective. Reverse contracting is a rare event. Consequently, this research uses complementary log-log regression to analyze the probability of a local government internalizing previously contracted services. *Methods.* Data from the International City/County Management Association's 1997, 2002, and 2007 Alternative Delivery Surveys were paired and analyzed to detect changes in service delivery from one survey year to the next. *Results.* Using the Institutional Analysis and Development (IAD) framework as a guide, the results illustrate that the probability of a local government reverse contracting is a dynamic, complex occurrence that is contingent on previous contracting rates, previous mode of delivery, transactions costs, opposition to privatization, and financial factors that differ across governance structure and time. *Conclusions.* The findings of this research warrant the use of theories other than failure theories to explain shifts from indirect to direct delivery.

INDEX WORDS: Contracting, Reverse contracting, Internalization, Reverse privatization, Transaction costs, Market competition, Government failure, Market failure, Voluntary failure, Institutional Analysis and Development framework, Organizational learning, Organizational change, Capacity

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CHAPTER 1

INTRODUCTION

For decades, local governments have used various modes of delivery for the provision of public services. Today, local governments choose among several options for both service delivery and production. For instance, local governments can choose intermunicipal cooperation, privatization (i.e., contracting out), reverse privatization (i.e., cancelling the contract), joint delivery, governmental entrepreneurship, or cessation of services (Warner and Hebdon, 2001). In addition, local governments can also choose between private for-profit, nonprofit, and other governments as providers for services.

Contracting with for-profit and nonprofit organizations can provide different benefits to local governments. These benefits often determine which type of provider is chosen and for which service. From a theoretical perspective, for-profit firms risk being driven out of business if they are not able to compete in the market. This risk assumes that businesses that intend to survive will be well-managed and have the capacity to provide new technologies that are not available in the public sector. In addition, private firms have access to capital which allows them to expand capacity quickly, move into new service areas, and potentially enhance service quality faster (Sanger, 2001).

Yet, local governments may also be advantaged in transferring the delivery of public services to nonprofits. For instance, in a market where consumers do not have the same information as the sellers, nonprofit status might be a signal of quality especially when consumers often do not trust for-profit businesses not to cut corners (Frumkin, 2005).

Furthermore, research highlights the potential of nonprofit organizations to improve responsiveness, to reduce unnecessary “red tape,” to enhance accountability to the community being served, and to encourage higher morale amongst agency staff (Brock and Banting, 2001; Hall, Barr, Easwaramoorthy, Sokolowski and Salamon, 2005). Similarly, Hefetz and Warner (2004) found that local governments choose private nonprofit delivery when consumer interest in service delivery is high and when social values are at a greater stake. However, local governments that value public delivery might contract to other government authorities when internal capacity to provide services is limited. On the other hand, local governments might prefer joint delivery when contracting is a short-term goal and internal capacity to provide services is moderate.

Yet why do local governments shift from one mode of delivery to another? Increasingly, recent shifts in local governments’ modes of delivery and production have been driven in-part by pressures on local officials to find new ways to provide cheap, high quality services to a growing body of citizens. As a result, many local governments seeking efficiency gains have shifted from direct or in-house delivery to market contracts and from market contracts back to in-house delivery. Research analyzing these shifts has primarily focused on the shift from direct delivery to market contracts. This shift, known as privatization, has been used for centuries, but recently has been fueled by New Public Management reforms that have advocated contracting out public services to private entities on the grounds that it leads to greater efficiency, cost savings, flexibility, higher quality of services, shorter implementation time, and risk-sharing (Kettl, 1993).

However, not all local governments that have contracted out services have attained these benefits. For instance, Savas (2000) argued that contracting out is not a panacea. Savas (2000)

maintained that contracting is often associated with limited competition, high monitoring costs, corruption, retrenchment of government workers, an inability of government to adequately respond to emergencies, reduced accountability, and reduced control. Moreover, deLeon and Denhardt (2000) argued that because contracting considers citizens as customers it has the potential to restrict civic engagement in government decision making, focusing on efficiency rather than community building, equity, and fairness. Still, despite arguments for and against privatization, some local governments have experienced greater success with contracting than others. Unanswered in the literature is whether success alone determines contract tenure.

Analyzing the fluidity of local government service arrangements over time using the International City County Management Association surveys in the United States, Goldsmith (2011) found that privatization peaked among local governments around 1997. From 1992 to 1997, Warner (2011) discovered new contracts accounted for 18 percent of all service delivery, while reverse contracting, or insourcing, accounted for 11 percent. According to Warner (2011), the ratios shifted from 1997 to 2002 with insourcing exceeding new contracts by 50 percent. From 2002 to 2007, Warner (2011) found the rates were approximately equal with new contracts accounting for 11 percent of all service delivery arrangements, while cancelling the contract accounted for 12 percent.

Warner (2011) conjectured that the pendulum toward privatization might be swinging back because local governments cannot afford to contract their core information functions. Consequently, local governments might use contractors to upgrade their systems only to bring them back in-house at a later date (Warner, 2011). Warner's assertion coupled with the aforementioned statistics suggests that reverse contracting might be predicated upon factors other than failed experiences. Similarly, Osborne and Plastrik (1997) argued that public-private

competitive bidding has been used effectively in the United States and Great Britain to encourage public sector units to become more efficient and/or to create competition. According to this view, reverse privatization serves as a complement to privatization.

Purpose of the Research

The purpose of this research is to understand why local governments have increasingly chosen to bring some previously contracted services back in-house while leaving others contracted. More specifically, this research aims to understand the conditions under which local governments are more likely to reverse contract. Consistent with this aim, this research seeks to investigate with which providers are contract reversals more likely. Understanding that changes in service delivery arrangements present changes in local governments' institutional structures, this research, unlike its predecessors, analyzes the extent to which different institutional arrangements in conjunction with economic, market, political, and service characteristics permit shifts in delivery.

Until now, research analyzing shifts in local government service delivery has relied on public choice and transactions costs theories to explain service delivery arrangements. However, these theories have not provided a fully comprehensive explanation for local government service delivery decisions. Public choice theory argues that bureaucrats are motivated by self-interest which results in budget maximization and inefficiency. However, public choice theory has not produced a general understanding of the bureaucratic and political factors that determine the specifications and outcomes of contracting systems.

Transaction cost theory, on the other hand, justifies the use of contracting only when the sum of production costs and the costs of managing are lower than direct provision (Globerman and Vining, 1996). This theory suggests that reverse contracts are an indication of contract

failure and goal incongruence (i.e., information asymmetries, high monitoring costs, principal-agent problems, etc). However, contracting back-in might reflect a value of maintaining core capacity in public services (APSE, 2011). For example, previous research has found that councils in the United Kingdom regarded insourcing as a way of responding positively to changing policies; joining up services at the neighborhood level; helping to meet strategic goals; and granting flexibility to shift resources quickly to tackle local needs and emergencies (APSE, 2011). In addition, reverse privatization could signal a more competitive bid for delivery by public employees (Ballard and Warner, 2000). Furthermore, reverse privatization could represent a new form of partnership between public and private actors (Freeman, 2000; Rhodes, 1996) where both cooperate in service provision (Hefetz and Warner, 2004).

In their analysis of the service delivery arrangements of local governments in the U.S. and Spain, Bel and Warner (2008) found the rate of privatizing to be lower and the tenure to be shorter in the U.S. than in Spain. Their finding suggests that reverse privatization could reflect changes in ideology regarding the private production of public services and/or a managerial learning process that favors local or public provision. Prior to 1996, Sioux City, Iowa, privatized its solid waste services. In 1996, public employees were allowed to submit a bid for this service. With help from the American Federation of State, County, and Municipal Employees (AFSCME), public employees won the contract, submitting the lowest of three bids. During the bidding process AFSCME member Garland Treloar told the Sioux City Council, “We can offer [city employees] a decent wage to support their families and be sure that the money the city spends stays here in Sioux City, or we can continue business as usual and send what we spend on trash collection to some corporate headquarters [in another state]” (O’Connell, 2005).

Although some reverse privatization might occur because of failure from contract misspecifications, failure of markets to meet desired outcomes, or failures of government to adequately manage and monitor contracts, reversals might also occur from the failures of the voluntary sector to provide services adequately. For instance, Salamon (1995) argued that contrary to popular belief, government is not always the answer to the market's failure to provide collective goods, and nonprofits are not derivative institutions filling in for government failure. Instead, nonprofit organizations often arise as a response to market failure, while government programs arise in response to voluntary failure (Salamon, 1995). This theory has not been analyzed in reverse privatization research.

In addition, neo-institutional theories maintain that institutional factors such as rules, values, habits, power, and internal and external pressure influence change processes in organizations (Lounsbury, 2008; Modell, 2009; Scott, 2008; Ter Bogt, 2008; Wassenaar, Groot, and Gradus, 2010). This literature assumes one of the primary determinants of organizational structure is the pressure exerted by external and internal constituencies on the organization to conform with a set of expectations to gain legitimacy and so secure access to vital resources and long-term survival (Wassenaar et al. 2010). Therefore, the primary objective of organizational change is not better performance but greater legitimacy (Wassenaar et al. 2010).

Oliver (1992) identified three sources of pressure on institutional norms or practices leading to institutional change (Wassenaar et al. 2010). The first source of pressure, functional pressure, arises from perceived problems in performance levels or the perceived utility associated with organizational practices (Oliver, 1992; Wassenaar et al. 2010). The second source of pressure, political pressure, arises when the utility or legitimacy of current practices is called into serious questioning (Oliver, 1992; Wassenaar et al. 2010). The final source of

pressure, social pressure, arises from either disruptions to the organization's historical continuity, changes in the law, or societal expectations (Dacin, Goodstein, and Scott, 2002; Wassenaar et al. 2010).

Similarly, Innes and Mitchell (1990) argued that change processes need drivers to occur (Wassenaar et al. 2010). They identified three types of drivers thought to facilitate change. The first type of driver, facilitators, comprise of a set of factors conducive to change (Innes and Mitchell, 1990; Wassenaar et al. 2010). According to Innes and Mitchell (1990) while facilitators are necessary for change, they are not sufficient (Wassenaar et al. 2010). The second type of driver, motivators, are factors that influence change processes in a general manner (Wassenaar et al. 2010). Motivators provide decision makers the reasons and grounds to initiate and permit change (Innes and Mitchell, 1990; Wassenaar et al. 2010). Catalysts, the third type, are occurrences that lead directly to the initiation of change and provide the opportunity for change to occur (Groot and Lukka, 2000; Wassenaar et al. 2010).

Consistent with neo-institutionalism, Brown and Potoski (2003) showed that institutional forces exert significant influences on governments' service production choices. For example, council-manager forms of government were more innovative, experimenting with contractual arrangements at higher levels than other forms of governments. Additionally, Joassart-Marcelli and Musso (2005), in a study of 500 cities in Southern California, found that service provision and production arrangements, made at the time of city formation, limit the extent to which arrangements are subsequently changed. Moreover, Brown, Potoski, and Van Slyke (2008) discovered that service delivery choices exhibit strong inertia, and when change occurs the previous service delivery mode influences the likelihood of changing to other modes in significant ways.

Research Questions

Despite the vast majority of research on local government service delivery arrangements, a comprehensive explanation for shifts from market contracts to direct delivery is not yet available. Research on reverse privatization has primarily focused on theories of failure to explain contract reversals (Hefetz and Warner, 2004). However, reversals might result from factors other than failure. For instance, shifts in delivery might represent strategic attempts by local governments to build internal capacity to provide services directly. Moreover, because shifts in delivery are likely to cause changes in production and management systems, institutional factors might also explain service delivery restructurings. Furthermore, service delivery arrangements might be explained by factors related to the state in which the local government is located, size of the local government, its administrative and financial capacity, characteristics of local political institutions, the type of service or activity in question, and characteristics of the provider. Using transactions cost and institutional choice theories and complementary log-log regression analysis, this research attempts to fill the empirical research on this subject, determining when local governments are more or less likely to restructure service delivery.

Despite growing recognition of the role of nonprofits in the delivery of public services in communities, limited scholarly attention has been directed toward identifying the various ways that nonprofits fit into systems of local governance or how the characteristics of communities and their political institutions shape the role of nonprofits in service delivery (Feiock, 2006). This research aims to enhance our understanding of the patterns in which local governments' reverse contract with nonprofit organizations. Using ICMA surveys of local government managers in 1997, 2002, and 2007, this research asks to what extent do local governments contract with nonprofit organizations? What types of services are contracted to these

organizations? How do these services compare with those contracted to for-profit firms or other government authorities? What types of services are contracted back in? Moreover, it asks whether reverse privatization is merely a consequence of failed privatization efforts. Is reverse privatization a means to an end whereby local governments increase their capacity to manage and provide services internally? And finally, what roles, if any, do institutional and other factors play in these decisions?

Significance of the Research

This study is important for three reasons. The first reason deals with ensuring the public or common good. Government services have traditionally been made accountable by law to ensure the public good. This good, defined by John Rawls (1971, 1999), consists of “general conditions that are... equally to everyone’s advantage.” As such, the public good consists of having the social systems, institutions, and environments on which we all depend work in a manner that benefits all people. Examples of particular common goods or parts of the common good include an accessible and affordable public health care system, an effective system of public safety and security, a just legal and political system, an unpolluted natural environment, and a flourishing economic system. If local government restructurings are an attempt to optimize the public good, then restructurings are critical to our understanding of decisions regarding public welfare.

The second reason concerns government’s capacity. Local governments must not only be able to maintain internal capacity to carry out core functions but must also be able to build additional capacity to carry out new functions. Contracting has been criticized for limiting local governments’ internal capacity. Consequently, local governments that are heavily reliant on contracting for their provision of services might prove more vulnerable than local governments

with fewer services contracted. Understanding this, local governments might experiment with various modes of delivery to improve their core capacities. Knowing which factors allow for greater fluidity of delivery (i.e., shifts from one service delivery arrangement to another) might help local governments to achieve greater cost savings, efficiency, and service quality. These efficiency gains can prove beneficial not only to local governments but also to the citizens who not only rely on these services but also pay for them.

The third reason deals with the additional insight this study is expected to deliver. This research explores avenues that previous research has not and attempts to answer questions that existing research has left unanswered. As a result, this research is expected to foster a greater understanding of not only reverse privatization but reverse privatization at the municipal level.

Outline of the Research

Chapter Two documents the history of reverse privatization in local governments across the United States. Chapter Three provides a conceptual theoretical framework for this study. Chapter Four discusses the methodology and variable measurements utilized in this research. Chapter Five provides a description of reverse privatization rates across local governments, regions, services, and time. Chapter Six discusses the statistical models used to test factors that are thought to influence local governments' probabilities of reverse contracting and presents the findings of the research. Chapter Seven summarizes the findings and presents implications for public administration theory and practice. In addition, the chapter discusses the limitations of this research and makes suggestions for future research.

CHAPTER 2

HISTORY OF PRIVATIZATION AND REVERSE PRIVATIZATION IN THE U.S.

To understand why local governments internalize previously contracted services requires understanding why they initially contracted. Consequently, this paper explores both the theory of privatization and the history of privatization efforts in the United States. Moreover, it discusses recent trends in reverse privatization. In addition, it discusses theoretical critiques of contracting public services. Finally, it explores why local governments in the past have reverse contracted and compares those reasons with recent decisions by other local governments to reverse contract.

The Theory of Contracting

The most common motivation for engaging in contracting is to substitute more efficient business operations for what has been seen as less efficient, bureaucratic, and often politicized operations in the public sector (Poole, 2010). This view has been sparked by organizational and management literature that have identified differences between the public and private sector in terms of personnel management, decision making processes, and goals (Rainey, 1983; Perry and Rainey, 1988; Bozeman and Bretschneider, 1986; Aldridge and Stoker, 2002; Mort, Weerawardena, and Carnegie, 2003). Perry and Rainey (1988) illustrate this fact by recalling the etymological distinction between the terms. For instance, in Latin, *publicus* means pertaining to the people, whereas *privatus* means set apart.

The rationale for public organizations contracting services to the private sector hinges on the perceived differences in incentives between the two sectors. For example, the objective of a

private firm is to maximize profit (Jenson and Stonecash, 2004). In the private sector, profits can be measured easily and can be tied to a manager's performance (Jenson and Stonecash, 2005). However, public organizations have more complex, less measurable goals such as maximizing social welfare (Laffont and Tirole, 1991; Tirole, 1994). Given the difficulty of measuring these goals, the power of incentives in the public sector is presumed weaker (Laffont and Tirole, 1991; Tirole, 1994). Research suggests that employers in the public sector are often intrinsically motivated to provide optimal effort (Francois, 2000). Moreover, theorists argue that high-powered incentive schemas might be muted in the public sector because managers are not the beneficiaries of any increases in assets (Jenson and Stonecash, 2005). Similarly, Poole, Tooney, and Harris (2014) maintained that because government almost always acts as a monopoly provider, public managers have weaker incentives to innovate in order to find more cost-effective ways to operate.

Moreover, proponents of privatization argue that governments might only be motivated to improve a function when its poor performance becomes politically sensitive (Onses, 2004). Furthermore, managers of privately owned companies are accountable to their shareholders and to the consumer and can only exist and thrive where needs are met (Onses, 2004). However, managers of public organizations are required to be more accountable to the broader community and to political stakeholders (Onses, 2004). This difference can reduce their ability to directly and specifically serve the needs of their "customers," and can bias investment decisions away from otherwise profitable areas (Onses, 2004). Furthermore, private companies can raise investment capital and focus those resources toward specific functions that government cannot (Onses, 2004).

So what makes privatization more efficient and/or effective than public delivery?

According to Sullivan and Sheffrin (2003), a system is economically efficient if a) no one can be made better off without making someone else worse off, b) more output cannot be obtained without increasing the amount of inputs, and c) production proceeds at the lowest possible per unit cost (15). Effectiveness, on the other hand, is more results-based and concerns the degree to which an organization achieves its desired outcomes. In a free market, voluntary exchanges between someone who wants to buy and someone who wants to sell determine the level of supply and production (Friedman, 2002). This voluntary exchange is expected to result in an efficient resource allocation along with an increase in individual welfare (Friedman, 2002). This efficiency in resource allocation, reinforced by competition among producers, results in lower costs, limited price increases, and increased consumer's choice (Friedman, 2002). Yet, the choices made by governments are presumed inferior to those by markets because demand and supply rarely balance in government programs. Moreover, government monopoly structurally excludes competition so that it cannot minimize costs or increase consumers' choices (Friedman, 2002). Consequently, it is the competitive nature of the market that is expected to ensure lower costs and improved services.

While these arguments are plausible, few have been empirically supported. For example, proponents of contracting maintain competition to be the service provider should produce greater efficiency (Poole, 2010). However, research on contracting has rarely found competition to exist in markets for public goods (Hefetz and Warner, 2004; Lowery, 1998; Sclar, 2000). Similarly, Lowery (1998) maintained that quasi-markets often fail to meet their objectives due to lack of competition, failure by preference error on the part of consumers, and failure by preference substitution (i.e., the difference between individual and collective wants). Consequently, Lowery

(1998) maintained that direct provision of goods and services, with hierarchy and bureaucratic controls, might be needed precisely because it is less responsive to market influences.

Contrastingly, Zerbe and McCurdy (1999) argued that the case for eliminating market failure by the internalization of externalities is flawed, and that governments should intervene in the marketplace only when they have the ability to lower transaction costs. However, Sclar (2000) maintained that public contracting is complex and transaction costs are often high. Consistent with the view, Folbre (2001) argued that standard economic measures used to make privatization decisions fail to accurately assess the real costs and benefits of market delivery. Collectively, these arguments might explain why some local governments have internalized previously contracted services.

The History of Contracting

The Causal Forces of Contracting

Concern over the cost of excessive government ownership of industry led to privatization efforts of the Adenauer government in Germany in the 1960s and the Thatcher government in the United Kingdom in the 1980s (Gerber, Hall, and Hines, 2004). Following a New Public Management philosophy, these governments believed that in creating market competition and market incentives, they could shrink the size of government, reduce its costs, and improve its performance (Gerber et al. 2004). Moreover, the crisis of the welfare state led to questions regarding the role and institutional character of the state (Gerber et al. 2004). Additional drivers of NPM-type reforms included the ascendancy of neoliberal ideas from the late 1970s, the development of information technology, and the increased use of international management consultants as advisors on reforms (Gerber et al. 2004). In countries such as Africa factors such

as lending conditionalities and increased emphasis on improved governance drove this movement (Gerber et al. 2004).

The increased use of alternative providers for public service delivery and production in the United States during the 1970s was spurred by factors similar to those in other countries. The government's role had expanded dramatically, causing severe fiscal stress. Consequently, the government sought privatization as an approach to provide more programs with smaller budgets. Moreover, technological change and the consequent complexity of government services further contributed to this growth. Unable to attract and retain the expertise needed to execute many programs and services, the federal government started relying on private entities for help. In addition, ideology played a part in this growth. At the time, many citizens believed government had become too big, powerful, and intrusive in the people's lives, and hence, was a threat to democracy (Savas, 1987).

Contracting at the Federal Level with For-Profit Organizations

The United States government has had a long history of purchasing supplies and services from private vendors (Stanton, 2008). During the Revolutionary War, President George Washington complained about the slow and unpredictable production of private arms and munitions producers (Stanton, 2008). In the Civil War, President Abraham Lincoln hired Pinkerton National Detective Agency as the original Secret Service (Stanton, 2008). At the same time, the federal government contracted with local governments and private firms to coordinate the jailing and prisoners and the policing of ports and harbors (Stanton, 2008). During this time, the U.S., operating under the Pacific Telegraph Act of 1860, solicited contract bids publicly and mandated that contracts be awarded only to the lowest bidder (Stanton, 2008). The War Powers

Act of 1942, suspended previous laws and customs regarding federal procurement and allowed the government freedom to autonomously negotiate contracts (Stanton, 2008).

After the World War II, a new subfield in political science called implementation was created to understand why so many federal programs seemed to work so poorly (Kettl, 2005). Reformers worried that federal grant programs administered through state and local governments had produced inflexible approaches that poorly matched local problems and gave too little power to those areas most affected by the programs (Kettl, 2005). Moreover, worries arose that the American government was becoming too centered at the national level and that Washington was creating an “imperial presidency” (Kettl, 2005).

During the Nixon and Ford administrations, the federal government enjoyed significant control over programs like Medicaid and the environmental protection initiatives. However, when the Reagan administration took office, its officials took a different approach. Under these administrations, the federal government increased contracting to the private sector (Kettl, 2005).

Like its predecessors, the Clinton administration launched its set of reforms. These reforms, known as “reinventing government”, were designed to make government smarter, cheaper, and more effective (Kettl, 2005). In phase one of the initiative, the federal government hired hundreds of federal employees to identify ways in which the federal government could reduce waste and improve management (Kettl, 2005). In 1994, Congress passed the Federal Acquisition Streamlining Act, which simplified procurement regulations and gave managers more flexibility in contracting services (Kettl, 2005). In phase two of the initiative, several budget cuts were made. Finally, phase three of the initiative concerned building an information-age government managed as best as America’s best corporations (Kettl, 2005).

However, it was the Federal Aid Facility Privatization Act of 1995 that helped increase privatization by state and local governments (Commission on Government Forecasting and Accounting, 2006). Before 1992, complete privatization of public assets to private investors was limited due to federal regulations that required state and local government units to fully reimburse the federal government for grant monies received for infrastructure assets upon the sale of those assets (Commission on Government Forecasting and Accounting, 2006). By presidential order in 1992, the amount of reimbursement was reduced to the depreciated value of federal grant monies (Commission on Government Forecasting and Accounting, 2006). The Federal Aid Facility Privatization Act of 1995 allowed state and local governments to transfer assets without reimbursing the federal government as long as the asset continued to be used for its original purpose (Commission on Government Forecasting and Accounting, 2006).

The Bush administration introduced a different set of initiatives. Central to the administration's initiatives were five business-like characteristics. These included strategic management of human capital, competitive sourcing, improved financial performance, expanded electronic government, and budget and performance integration (Lynn, 2009). Bush directed each agency to a chief operating officer who would be responsible for implementing the agency's management goals, developing strategic goals, and improving agency performance (Peckenpaugh, 2001; Lynn, 2009). In addition, the former president assigned an "owner" or designated individual from the Office of Management and Budget or the Office of the Personnel Management to monitor implementation in their assigned agency. Because the administration found little data on how domestic non-entitlement programs were meeting their goals, it created the Program Assessment Rating Tool (PART), which used stop-light scorecards to rate how well each agency accomplished its goals during the quarter. Yet, events, such as the wars in Iraq and

Afghanistan and Hurricane Katrina, forced the federal government to contract at unprecedented rates. In 2005 alone, the federal government awarded over \$381 billion, nearly 14 percent of the federal budget, in contracts – an increase of \$173 billion in only five years. Moreover, efforts were discussed to privatize Social Security, the nation’s largest entitlement program.

Contracting at the Federal Level with Nonprofit Organizations

Government financial support of nonprofit organizations also dates to the colonial period (Salamon, 1987; Smith and Lipsky, 1993). During its formative years, Harvard University, Massachusetts General Hospital, and many other educational and health institutions received public funding (Salamon, 1987; Smith and Lipsky, 1993). Throughout the 19th and early 20th centuries, this funding continued and was concentrated mostly in the Northeast and Midwest regions (Smith, 2006). However, the rise of health and social programs such as Medicaid and Medicare, community mental health facilities, child protection agencies, and neighborhood health centers in the 1960s expanded the presence of these organizations (Smith, 2006). In the 1970s, the federal government sponsored a network of drug and alcohol treatment programs in response to scientific research that showed treatment could help patients addicted to drugs stop using, avoid relapse, and successfully recover their lives (National Institute of Health, 2009). Other community agencies receiving assistance during this time were battered women shelters, rape crisis programs and centers, and emergency shelters for runaway youth (Smith, 2006). In the 1980s, the federal government contracted with nonprofits as a response to concerns regarding AIDS, hunger, homelessness, and housing (Smith and Lipsky, 1993; Smith, 2006).

During the 1990s, the federal government devolved more administrative responsibilities and decision-making authority to states (Kettl, 2005). For example, the federal government “ended welfare as we know it” by giving the states responsibility for getting welfare recipients

off the dole and into productive jobs (Kettl, 2005). Moreover, the EPA delegated greater authority to the states in devising strategies for reaching pollution reduction goals (Kettl, 2005). In addition, states were allowed to experiment with new managed care plans for their Medicaid recipients and devise innovative performance management systems (Kettl, 2005). Simultaneously, contracting out by local governments increased substantially (Kettl, 2005).

Contracting in Local Governments

The roots of privatization at the municipal level date before the millennium. For example, the city of New York has deep roots in privatization. The first water supply system the city had was developed by an ancestor of Chase Bank (Savas, 2005). In New York, fire protection was a public-private partnership from the outset. Private volunteers did the work but the city government provided the fire department (Savas, 2005). In 1676, private contractors used pigs to clean the edible garbage along the street (Savas, 2005). Furthermore, the city relied on private contractors for many of its initial mass transportation systems such as ferry, railway, and cab transit (Savas, 2005).

Many other cities have also had long histories with privatization. Since 1899, Vermont allowed towns with no public high schools to provide vouchers to their students to attend any non-parochial schools within or outside the state up to the cost of comparable union district high school education (Linowes, 1988). Moreover, San Francisco has privatized garbage collection since 1932 (Linowes, 1988). Historically, the city of Chicago contracted its public printing, road construction, and utility services (Johnson, 2004).

Adding to the practice of contracting in local governments was the establishment of contract cities. In 1954, Lakewood, California, became the first city in the U.S. to contract for the majority of its services. The previously unincorporated area was facing annexation from

Long Beach. The decision was spurred by residents wanting to retain local control while maintaining the existing services provided by Los Angeles County. However, contracting did not become common in municipal governments in the Sunbelt region until the 1980s (Poole, 2010). In California, more than seventy cities joined the California Contract Cities Association, vying to obtain most of their public services via contractual arrangements with other governments, public agencies, or private organizations (Poole, 2010). In the 1990s, contracting was embraced by both Democrat and Republican mayors in cities of all sizes (Poole, 2010).

Despite the history of public-private partnerships for services, survey data from the International City/County Management Association illustrate that for every eight services contracted by local governments during the early 1980s to late 1990s, five were brought back in-house (Warner and Hebdon, 2001). While reverse privatization has occurred throughout the history of privatization in the United States, the rates of reverse privatization at the local level have increased dramatically in recent years, nearly surpassing the rates of new contracts entered (Warner, 2011). The following case studies provide reasons some local government reverse privatized in the late 1990s. Responses were recorded from interviews conducted by Mildred Warner and colleagues in the summer of 1999 (Cornell University, 2013).

1. Akron, Ohio – Road Repairs

In this city, public works workers in Akron were in charge of putting temporary patches on damaged pavement. However, private contractors were also hired to resurface the temporary patches. City officials felt this arrangement was redundant. Ending the contract saved the city \$500,000 in just 2 years.

2.. Campbell, California – Buildings and Grounds Maintenance

In this city, the decision to reverse contract was caused by poor quality. Under the previous contract, the city received numerous complaints from residents about the quality of maintenance at city parks. Growing tired of having to monitor the contractor's work, the city of Campbell decided to bring the service in-house. Moreover, the city's growing tax base served as a facilitator for the change and enabled it to become less concerned about cutting costs, helping to focus its attention on improving service quality.

3. Fort Collins, Colorado – Paratransit Service

During the contract, the private company providing the service had numerous problems hiring and retaining employees. The result was unreliable service. In addition, users of the program complained about the lack of courtesy on the part of van drivers. The service was later internalized by the city.

4. Fort Lauderdale, FL – Infrastructure and Pipe Installation

Two-thirds of pipe installation was contracted to private contractors when the city announced that plans to put the final third of the service for competitive bid. Public employees submitted the lowest bid, winning the contract. Public employees managed to lay over three and a half miles of pipe in one year, tripling the amount laid by private contractors. City officials were so impressed that the pipe contract was later doubled to include two-thirds of the city's pipe installation jobs.

5. Lubbock, Texas – Residential Trash Collection

This marked Lubbock's first experiment with private service delivery. According to the contract, the private company would be paid on a per-household basis. However, the weight of trash collected per household was higher than the company anticipated, resulting in the company

having to pay more to dispose of the trash. Despite the burden, the city refused to renegotiate. After the contract ended, the city later allowed providers to charge based on the number of cubic yards tipped to avoid unanticipated costs. City workers submitted the lowest bid and won the contract. The transition was easy because the city had kept its trucks and previous equipment. 6.

Savannah, GA – Fire Services

The city contracted its fire services in the South Side area to a local nonprofit organization. The organization was not effectively responding to calls. According to local standards, the fire services were considered subpar to those of other areas in the city. Moreover, services were significantly overpriced, resulting in the city paying higher fees each year for the same level of service.

7. Sioux City, Iowa – Residential Trash Collection

The city of Sioux had privatized its trash collection services for nearly 20 years. When city officials started taking competitive bids for the service, public employees submitted the lowest bid. The city's bid and its competitors weren't drastically different. However, under public provision, the city reported improved service quality and lower accident rates.

Privatizing Water in Atlanta

In 1998, the city of Atlanta, Georgia signed a 20-year, \$428 million contract with United Water, a subsidiary of the French corporate conglomerate Suez, to operate, manage, and maintain its water supply system (Claybrook, 2003). It was the biggest privatization contract in the United States at the time. According to the contract, United Water was responsible for raw water supply, treatment and distribution, billing, collection, and other customer services (Ohemeng and Grant, 2011). In addition, the company was expected to undertake certain capital repairs and improvements (Ohemeng and Grant, 2011). Contrastingly, the city was responsible

for capital improvement planning, providing legal support for intergovernmental and wholesale water agreements, and rate setting (Labovitz, 1999; Ohemeng and Grant, 2011).

In the first four years of the city's contract with United Water, a number of problems surfaced. The French subsidiary broke many of its promises such as improving performance, making capital investments, and reducing costs (Ohemeng and Grant, 2011). In addition, a number of employees were laid off and the amount of training for the remaining employees was cut in half (Claybrook, 2003). There was a backlog of work orders for nearly every part of the system (Claybrook, 2003). Moreover, the number of meters the city could install in one month, United Water installed in nearly a year (Ohemeng and Grant, 2011). Furthermore, the city discovered that United Water personnel, while under contract, were working on projects outside of Atlanta, including efforts to land contracts in other cities (Claybrook, 2003). As a result, the city withheld some of its funds until the contractual obligations were filled. Unable to negotiate with United Water, the city opted to regain control over its water supply system.

Theoretical Critiques of Contracting

The aforementioned cases illustrate a number of theoretical issues associated with contracting public services. Despite the normative assumption that privatization creates efficiency through competition, competitive markets for public services rarely exist. As a result, privatization, in many cases, only substitutes one monopoly for another. Moreover, contractual agreements are subject to principal-agent problems, in which agents almost always know more than principals do. This information asymmetry can lead agents to act in ways that are contrary to the preferences of principals. Moreover, Smith and Lipsky (1993) argue that contracting has ironically resulted in an increase in government's role. Through regulations, obligations, and restrictions accompanying contracts, privatization has produced an unprecedented involvement

of government in private affairs. This “governmentalization” has made private contractors another interest group (Rainey, 1997) that seeks to protect and expand their financial bases and services (Smith and Lipsky, 1993). From a theoretical perspective, contracting also presents accountability and governance issues. For instance, Moe (1987) maintained that in attenuating the linkage between citizens and government, contracting weakens the lines of political accountability. In allowing private institutions to exercise discretion over the spending of public money and the use of public authority (Salamon, 1981), government has relinquished a substantial degree of autonomy for which it remains responsible.

A Shift in Ideology: The Rise of the Public Value Management

Critics of New Public Management have argued that management reforms failed to achieve its objectives of efficiency and effectiveness (Dunn and Miller, 2007). Consequently, a post-New Public Management movement is underway. For instance, Bhatta (2003) maintained that there is currently a re-emphasis on public sector values and how government can be strengthened. Under this public value paradigm, values serve as collectively expressed, politically mediated preferences by the citizenry that are created not just through outcomes but through processes that generate trust and fairness (O’Flynn, 2005). Similarly, Dunleavy (2006) maintained that there is at present a growing concern with reintegrating services into government control, holistic or joined government, and digitalization. These arguments, coupled with America’s history with reforms, coincide with Novak’s (2009) statement that “our current policy preferences are time-bound and contingent – a product of a particular politics and a politically-charged economics” (24).

How Valid are Formal Explanations of Reverse Contracting?

Previous research on reverse privatization in the United States suggests that local governments reverse privatize services to improve service quality and reduce costs (Hefetz and Warner, 2004). However, that same research illustrates that the services with the highest level of reverse contract rates also have the highest rates of new contracts (Hefetz and Warner, 2004). This finding suggests that additional factors explain contract reversals.

Explaining Reverse Contracting Today

Reverse Contracting in the United Kingdom

Anecdotal evidence suggests that the shift from private to public delivery is a policy manifestation that results from a process of managerial learning by local governments. According to research conducted by APSE, nearly fifty-seven percent of local governments in the U.K. had either contracted services back in-house or were in the process of either reverse contracting or considering doing so (O'Brien, 2011). In a 2011 report of 50 local governments, which analyzed the reasons for reverse contracting, sixty percent of respondents cited the need to cut costs as the primary reason for bringing previously contracted services back in-house (O'Brien, 2011). Forty-four percent of respondents cited the need to improve service quality as their primary reason for reverse contracting (O'Brien, 2011).

However, a large share of those governments also reported additional benefits from reverse contracting. For instance, Coventry City Council reported that insourcing strengthened its accountability and governance in addition to savings (O'Brien, 2011). Telford and Wrekin maintained that they brought economic development back in-house to enable the council to have more control of the borough's future (O'Brien, 2011). Other councils have shown that reverse contracting minimizes risks and enhances local economies (O'Brien, 2011).

Reverse Contracting in the U.S.

In recent years, federal, state, and local governments in the U.S. have increasingly brought previously contracted services back in-house. At the federal level, insourcing has gained traction in the Internal Revenue Service, the Department of Homeland Security, and the Department of Defense (InThePublicInterest, 2013). By bringing services back in-house, the government has been able to save money and create federal jobs without compromising pay by simply removing contractor fees (InThePublicInterest, 2013). At the state level, Ohio, prompted by a 2003 lawsuit, improved the provision of medical services to inmates by insourcing physicians (InThePublicInterest, 2013). Also at the state level, Nebraska has now internalized its child welfare services. The reform was sparked, in part, by news coverage of two toddlers who had been found living in filth and squalor by Lincoln police while under the care of KVO, a contracted nonprofit organization. The children were found saturated in urine and feces and had been in that condition for days. At the local level, “contract cities”, such as Milton, Georgia, have brought many of its municipal services back in-house to reduce costs and rebuild its public workforce (InThePublicInterest, 2013). Moreover, in 2011, the city of New York reverse contracted many of its IT functions to take advantage of the unique knowledge and know-how of its public workforce and to reduce costs (InThePublicInterest, 2013).

Analyzing the trend toward public takeovers, Mary Bottari (2013) maintained that most takeovers by local governments have to do with issues of local control, better customer service, and better prices. In Monterey, California, an activist group, called Public Water Now, helped residents regain control of their water supply by highlighting that in 10 years nearly \$300 million would be sucked out of the community and sent to New Jersey if the peninsula continued its contract with Cal-Am, a for-profit water supply company.

Although many of the aforementioned instances of reverse contracting did not occur in the years under observation, the reported reasons for reverse contracting might shed light on the factors that precipitated increased reverse contracting by local governments in the years under observation. If organizations adopt policies based on a process of learning from their own experiences as well as the experiences of other governments, reverse contracting could be seen as a strategic gesture by local governments to reassert public control over public services and assets. This research seeks to explore this contention.

CHAPTER 3

THEORETICAL FRAMEWORK

Existing Explanations for Local Governments' Reverse Contracting

Numerous reasons have been posited for reverse privatizing. The most cited reasons have been that privatization has not lived up to its expectations. Consistent with this argument, research on reverse contracting has found that local governments' reverse contract to cut costs and improve access and quality of services (Hefetz and Warner, 2004). Similarly, meta-analyses suggest that the evidence for cost savings is mixed and relations between private productions of services and cost savings cannot be demonstrated (Boyne, 1998; Hodge, 2000). Moreover, Bel and Warner (2006) reviewed econometric studies of costs for waste collection and efficiency for water distribution from 1965 to the present found that the majority of studies reported no differences in costs, efficiency, or productivity between public and private production. Additionally, Leland and Smirnova (2009) found that privately owned and managed transit systems were no more efficient or effective than government agencies.

Failed Privatization

Advocates of privatization argue that privatization fails when governments privatize the “wrong” services. Consequently, this section explores research that has analyzed how the characteristics of public services determine the efficiency of those services when performed via alternative delivery.

Transactions Cost Theory, Asset Specificity, Contract Management Difficulty, Limited Market Competition, and Nonprofit Delivery. Local government service arrangements represent

economic exchanges. These exchanges often involve the “costs of adapting, planning, and monitoring a task’s completion under alternative governance structures” (Williamson, 1985, 2). In determining how to deliver a service, public managers must weigh the costs associated with executing a transaction within government versus the costs associated with executing the transaction in the market. While calculating the costs of production might be easy for managers, calculating the transactions costs might prove more difficult.

Williamson (1985) maintained that there are two human factors which can increase transactions costs. These factors are *bounded rationality*, the idea that in decision-making, the rationality of individuals is limited by the information they have, the cognitive limitations of their minds, and the finite time they have to make a decision, (Simon, 1957) and *opportunism*, the act of taking opportunities with little regard for principles or consequences (Williamson, 1985). These factors often exacerbate problems of commitment. For instance, Ingram and Silverman (2000) maintained that the problem of credible commitment is faced by any party to an exchange that wants to promise in the present to do something in the future that might not be in their interest to do when the future actually arrives. According to them, the problem is almost endemic because in almost every exchange there is at least a moment where one of the parties has control over all or most of the goods and must decide whether to follow through on the agreed upon bargain or take more. Thus, the goal of institutions is to rearrange incentives so that parties of an exchange make credible commitments (Ingram and Silverman, 2000).

Brown and Potoski (2006) argue that the nature of transaction costs varies not only by service provision but also by specific characteristics of the good or service to be delivered, the degree of goal incongruence between government and those providing the service, and external conditions such market competition among service providers (Ferris & Graddy, 1991; Hart,

Shleifer, & Vishny, 1997; Hodge, 1999; Sclar, 2000). Where transaction costs are low, Brown and Potoski (2006) maintain competitive contracting can mitigate bureaucratic inefficiencies stemming from direct service delivery (Brown & Potoski, 2006). However, when management transaction costs are high, governments face significant risks in transferring these responsibilities to a vendor.

Williamson (1985) maintained that services characterized as asset specific represent risky transactions (i.e., high transactions costs). In these arrangements, parties are “tied in” a contractual relationship in which there is little transferability of specialized assets for other uses (McGuinness, 1994). Given that buyers lack these specialized assets and the exit costs associated with the time searching for new providers are high, sellers have the potential to act opportunistically. Similarly, Brown and Potoski (2005) argued that asset specificity was the reason markets turn uncompetitive. For instance, the winner of the first contract often has a competitive advantage in subsequent bidding rounds given they have already made the required investments necessary to deliver the service (Brown and Potoski, 2005). Furthermore, the dependence of local governments on contractors for the provision of these services and the uneven access to information increases opportunities for opportunistic behaviors.

Moreover, Brown and Potoski (2003) maintained that the degree of difficulty associated with measuring outputs and monitoring services represents costs. According to them, difficult-to-measure services increase transaction costs because local governments cannot effectively assess whether and to what extent vendors hide their true performance. However, Williamson (1986) argued that internalization of production does not necessarily eliminate transaction costs. Internalization allows governments to utilize internal control mechanisms such

as selection use of employment, promotion, remuneration, resource allocation, etc. to minimize the costs of evaluating and monitoring performance.

Reluctant to contract completely to for-profit firms, local governments might enter joint delivery arrangements, whereby they maintain production capacities and partner with vendors for cooperative delivery. Joint delivery can reduce upfront costs associated with complex, specialized delivery. In addition, it can serve to discourage contractors' opportunistic behaviors because public officials have comparable information on provider performance and operation costs. Yet, research has found that joint delivery to be the least stable form of delivery (Brown, Potoski, and Van Slyke, 2008).

Despite these arguments, local governments might not always be able to provide these services directly. Fiscal pressures and/or the lack of internal management capacity might serve impetuses for alternative service delivery. For example, local governments might rely on nonprofit organizations for service provision when the goals are to achieve both the cost efficiencies and flexibility associated with private production and the protection against self-interested behavior by for-profit providers. One assumption is that the nature of nonprofit organizations' advocacy orientations, funding processes, and governance structures safeguard against opportunistic behavior. Furthermore, research found that nonprofit organizations can respond to specific service demands that cannot be easily differentiated or satisfied through purely governmental provision (Weisbrod, 1988, 1997). Finally, nonprofit contracting has been found to allow local governments to acquire special experts and talents for which there were programmatic or budget inflexibility (Smith and Lipsky, 1993).

Criticisms of Transactions Cost Theory. Although local government restructuring decisions might be driven by cost benefit analyses, transaction cost explanations have limitations. For

example, these explanations ignore the role of different capabilities in structuring decisions (Richardson, 1972). Moreover, they neglect power relations that might serve as impetuses or constraints to decisions (Perrow, 1986). In addition, transaction cost explanations overlook evolutionary considerations (Langlois, 1984). Furthermore, research analyzing local government service restructurings has failed to analyze the impact of interactions among transaction cost related factors and other contractual conditions on local governments' reverse contracting decisions (Lamothe, Lamothe, and Feiock, 2009). For example, asset specificity or contract management difficulty alone might not be sufficient to explain why local governments choose to reverse privatize previously contracted services. Yet, combined with other factors, these factors might influence decisions to internalize.

Market Competition. A basic tenet of economic theory is that competition leads to the production of cheaper, higher quality goods (Coase, 1937). Yet, competitive markets for public services might not exist for all services in every geographic location. Supporting this claim, research on local governments' restructurings has shown lack of alternative suppliers to be a barrier in both inner cities and rural areas (Hirsch, 1995; Kodryzcki, 1994; Warner and Hefetz, 2003). Yet, competition for the market might erode due to incumbency—more contracts being renewed as other providers exit the market. Research analyzing contracting patterns, in areas with limited markets, have found correlations with higher costs, limited access, and reduced quality of services (Hirsch, 1995; Kodryzcki, 1994; Warner and Hefetz, 2003, 2004, 2007). These findings suggest that in the absence of competitive markets, local governments might not find privatization useful. Moreover, research has found that local governments that have privatized services with limited markets reverse privatized at higher levels (Hefetz and Warner, 2004).

Criticisms of Market Competition. Still, theories of market competition might not be suitable for explaining reverse contracting by local governments. Supporting this claim, Warner (2003) found that competition is rarely found in markets for public goods because of the fundamental structure of these markets. If true, most services contracted have few organizations that can provide the service alternatively. Therefore, many services that are not contracted and/or reverse contracted share the same characteristic as services that have been contracted. This makes it difficult to prove correlation and, consequently, causation.

Furthermore, theories of failure use government intervention as the standard justification of failure. One reason for this justification is the presumption that market processes are the default for allocating scarce resources. This amounts to an assumption of perfect competition, where price information will direct self-interested market participants to correct mistakes in resource use. Another reason for this justification is when competition is imperfect, the consequent market failures can and should be corrected by government. This assumes that political actors have the appropriate incentives and information so that Pareto or near Pareto optimal allocations can be achieved. However, public officials have bounded rationality and might also act in ways that are not consistent with promoting the public good. For these reasons, theories of market failure might not explain shifts from external to direct delivery.

Nonprofit Failure. In addition to service characteristics, privatization efforts can also fail because of aspects of the provider chosen. One of the most common issues associated with nonprofit service providers is the scale limitations inherent in nonprofit enterprise. The financial and human resources of most nonprofit organizations limit their ability to mount complex, large-scale programs with the speed and ease possible for for-profit firms (Frumkin, 2005). Aside from a few highly visible national charities, nonprofit organizations are, for the most part, poorly

financed and understaffed (Frumkin, 2005). In addition, small nonprofits, which make up much of the nonprofit organizational population, lack experience with complex information technology and management systems, skills that are needed to handle large caseloads and complex administrative requirements (Frumkin, 2005). While local governments could benefit from privatizing social services to nonprofit organizations, the majority of nonprofits with the capacity to provide these services are faith-based organizations.

Moreover, given that some government contracts withhold part of the service fees until the client has been served or some documented outcome has been achieved, nonprofits face under-capitalization (Frumkin, 2005). In contrast, business firms have several tools at their disposal with which to raise capital (Frumkin, 2005). For instance, businesses can seek large amounts of funding and a long-term commitment from venture capital investors in exchange for a stake in the firm (Frumkin, 2005). Nonprofit organizations, however, cannot sell ownership stakes or take part in equity markets (Frumkin, 2005). While nonprofit organizations can use bonds to fund major capital projects, few have been able to take part in the bond market and use these instruments to launch major expansion efforts (Frumkin, 2005). One reason for this is the high transaction costs associated with evaluating, underwriting, and servicing bonds (Frumkin, 2005). In addition, few banks are willing to invest the effort to establish lending criteria in areas that lack an observable track record (Frumkin, 2005). As a result, only the largest nonprofits are able to use bonds (Frumkin, 2005). Furthermore, nonprofits, lack the ability to cut costs when necessary—a limitation which often causes for-profit organizations to appear more attractive.

Criticisms of Nonprofit Failure. Yet, theory of voluntary failure might be misguided (Lohmann, 1992). Lohmann (1992) argued that voluntary failure grafts a theory of narrow self-interest and profit-seeking onto a social domain that substantially differs from commercial market activity.

Human rationality is much richer than self-interest (Lohmann, 1992). Consequently, a theory of nonprofits must acknowledge how the efficiency gains from using these organizations might differ from the ideal efficiency characteristics of competitive for-profit firms (Lohmann, 1992).

Why Do Organizations Change?

Shifts in local government service delivery arrangements represent drastic changes in an organization's structure. Thus, research that attempts to understand why these shifts occur and when they are more or less likely to occur must take into the factors that drive organizational change. Organizational changes are actions or set of actions which result in the way an organization works (Daft, 2010). Change can be deliberate or unintentional (Daft, 2010).

Changes in organizations may affect the strategies an organization uses to carry out its mission, the processes for implementing those strategies, the tasks and functions performed by the people in the organization, and the relationships between those people (Daft, 2010). Because change is a fact of organizational life, organizations are expected to embrace change in order to survive. According to Daft (2010), the need for change is driven by a number of environmental forces. These can include, but are not limited to, global changes, maturation of markets, new demands, opportunities, technological advances, and threats (e.g., competition). Moreover, pressures to change can come from internal organizational pressures. For example, existing systems and processes in an organization might no longer be applicable when the size of the organization increases. Similarly, identity and/or legitimacy pressures, new management, and political pressures can also serve as impetuses for change.

Daft (2010) maintained that organizations undergo at least four types of change. The first, technology change, occurs in production processes and equipment (Daft, 2010). The

second, administrative change, includes adjustments in performance-appraisal systems (Daft, 2010). The third type of change deals with products and services (Daft, 2010). The final type concerns changes in human resources that occur as a result of training, development, and recruitment efforts (Daft, 2010). Yet, in order for successful change to occur, organizations must have both the capability to adapt to changes in the environment and the capacity to learn from past experiences and other organizations.

In order to remain competitive, theorists argue that modern organizations have become learning organizations. Similarly, Peter Senge (1990) maintained that “learning organizations are organizations in which people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspirations are set free, and where people are continuously learning how to learn together” (69). Moreover, learning organizations tap people’s capacity and commitment to learn at all levels of the organization (Senge, 1990). According to Senge (1990), learning organizations possess the following critical dimensions:

1. *Personal mastery* – creating an environment that encourages personal and organizational goals to be developed and realized in partnership.
2. *Mental models* – recognizing that a person’s ‘internal’ picture of their environment will shape their decisions and behavior.
3. *Shared vision* – building a sense of group commitment by developing shared images of the future.
4. *Team learning* – transforming conversational and collective thinking skills, so that a group’s capacity to reliably develop intelligence and ability is greater than the sum of its individual member’s talents; and finally,

5. *System thinking* – developing the ability to see the ‘big picture’ within an organization and understand how changes in one area affect the whole system (69).

According to Senge (1990), learning allows us to recreate ourselves, become capable of doing something new, and re-perceive our world and our relationship to it.

A Framework from which Service Restructurings can be Analyzed

Conventional wisdom suggests that local governments choose service delivery arrangements that are Pareto optimal. However, in reality, service delivery arrangements are likely selected on the basis of multiple factors. Effective service delivery requires more than designing a theoretically optimal solution. For example, Imperial and Yandle (2005) argued that service delivery raises institutional, social, and moral issues that must be clarified through deliberation. Consequently, the job of the city manager is to consider important contextual factors affecting institutional design and examine the full range of transaction costs that influence institutional performance (Imperial and Yandle, 2005).

While generally applied to the problem of scarce natural resources, the Institutional Analysis and Development (IAD) framework can be applied to service delivery arrangements. Generally under IAD, resources are privatized in order to prevent depletion and free-riding. Like natural resources, local governments have limited financial, physical, and technical resources that allow them to provide some services in-house while others are provided via alternative arrangements. In understanding the institutional factors that permit successful private delivery, scholars might also be able to predict when alternative delivery is least desirable.

Because the Institutional Analysis and Development (IAD) Framework draws attention to the interactions between institutions and decision makers as well as aspects of the physical world and community culture, it is anticipated to be a useful tool for analyzing service delivery

restructurings. The analytical focus of the IAD Framework is on an “action arena,” where social choices and decisions take place. Three broad categories of variables have influence on the action arena. These include institutions or rules that govern the action arena, the characteristics of the community or collective unit of interest, and the attributes of the physical environment in which the institution acts (Ostrom, 1999; Ostrom, 2005; University of Colorado, 2013). The action arena consists of participants in the situation, participants’ decisions, the outcomes of those decisions, the benefits/costs associated with outcomes, linkages between actions and outcomes, participants’ control in the situation, and information (University of Colorado, 2013). Consistent with this framework, research analyzing shifts in service delivery have found modest support for the influence of local policy and local institutional arrangements on delivery choice (Brennan and Buchanan, 1980; Jang, 2006; Ostrom, 1999; McCabe and Feiock, 2001; Stein, 1990).

Influences on the Action Arena

In IAD, three levels of rules exist that dictate action. These rules are operational, substantive (or collective choice), and constitutional. Operational level rules concern who should monitor the actions of others and how, what information must be exchanged and/or withheld, and what rewards or sanctions will be assigned to different combinations of actions and outcomes” (Ostrom, 1990, 52). Substantive rules, on the other hand, indirectly affect the choice of operational rules and management of those rules, while constitutional rules concern collective-choice decisions and the rules governing those decisions (Ostrom, 1990). Using this framework, local government restructurings can be understood as policy outcomes influenced not only by local substantive rules but also by opportunities and constraints imposed by states.

As such, constitutional rules create a framework for formulating substantive and operational rules. As a result, this research analyzes these first.

Constitutional Rules

State Tax and Expenditure Limits. Under Dillon's Rule, states are allowed to create, modify, and/or extinguish local governments (Burns and Gamm, 1997). Because local governments receive their power from states, states have the power to provide both incentives and sanctions on new policy adoptions (Stein, 1990). Similarly, state laws regarding taxation have the potential to influence local governments' capacities to not only raise revenue but also to provide services to residents. In recent years, more than half of states have implemented tax and expenditure limitations on local governments in an effort to keep taxes down and limit the size of government budgets. These limitations might serve as impetuses for local governments to change their service delivery because property taxes, often part of these limits, are often one of their most reliable sources of revenue. For example, many local governments rely on property taxes to fund services when state budgets are cut and other sources of revenue deplete. Yet, New (2001) argued that a fiscal constraint created by the legislature is less effective than one created by citizen initiative.

Still, the impact of tax and expenditure limitations might not be uniform. Local governments differ in their reliance on property taxes and state and federal revenues. In addition, some local governments have found ways to get around these limits by creating special districts which have distinct taxing authority that is free from states' limits. For example, Kousser, McCubbins, and Moule (2008) found that TELs were ineffective and could be circumvented through the use of user fees. Yet, given the reliability of these taxes and revenues, state initiatives to place caps on taxes and expenditures might have significant implications for

local governments characterized by fiscal stress. Under fiscal stress, local governments, motivated to reduce costs, might be more inclined change their current delivery modes.

Substantive Rules

Local Government Discretion. In the United States, legislative authority granted to local governments varies by state. In Home Rule states, an amendment to the state constitution grants cities, municipalities, and/or counties the ability to pass laws to govern themselves as they see fit so long as they abide by state and federal law. In other states, only limited authority is granted to local governments by passage of statutes from the state legislature. In these states, a city or county must obtain permission from the state legislature if it wishes to pass a law or ordinance which is not permitted under existing legislation. However, this does not necessarily mean there must be a statute that specifically authorizes the local government to enter into a contract for every activity it might wish to support. For example, many state constitutions contain a general authorization for contracts with private entities. Moreover, some states have parallel statutes for cities and counties authorizing them to contract with any private entity to carry out any public purpose in which they have statutory authority to engage. This means that as long as a statute authorizes a particular activity, local governments have the choice of carrying out the activity themselves or contracting with a third party to carry out all or part of the activity. Although not analyzed in government restructuring research, limited authority is likely to have a negative effect on decisions to provide services alternatively.

Operational Rules

Local Governance Structure. Strongly influencing the quality of local decision-making are the checks and balances between the executive, legislative, and judicial branches of government and the separation of powers among them. In the United States, four structures characterize local

governments. These are mayor-council, strong council, council-manager, and commissioner structures. In a mayor-council government, there is an at-large or district-based elected council and a popularly elected mayor that wields strong authority in deciding public policy. In this regime, the executive branch of government has more power than the legislative branch (Lankina, Hudalla, & Wollman, 2007). In the second type of institutional structure known as the strong council government, the mayor is elected by the council. This structure not only gives the council more influence in supervising the bureaucracy but also reduces the role of the mayor to being mostly ceremonial (Sisk, 2001). Frequent under strong council systems is the council-manager structure. In council-manager governments, the council appoints and contracts with a politically neutral administrator to run and manage the city. Although the manager is accountable to the council, he or she is free to manage the local bureaucracy without interference, while also enjoying the freedom to recruit to the bureaucratic apparatus (Booth, 1968). Finally, under commissioner structures, elected commissioners manage departments and act as both legislators and department chairs (Bullock and Gaddie, 2013). Each commissioner has equal power in policymaking. However, one commissioner holds the title of mayor (Bullock and Gaddie, 2013).

Research on local governance structures contends that structure is a crucial determinant of local government performance. For example, Montjoy and Watson (1995) maintained that city managers were more likely to pursue policy innovations than elected mayors because they were ostensibly guided by actual effectiveness and efficiency rather than short-term electoral considerations and/or pressure groups' demands. Moreover, Clingermayer and Feiock (1997) argue that city managers are more likely to ensure policy continuity and have credible commitments to other actors in local development given that they are not subject to frequent turnover. In addition, research has found council managers have greater management capacity

and contract more than other managers (Hefetz and Warner, 2011; Warner, 2006, 2009).

Furthermore, research has found council managers were less likely to reverse privatize (Hefetz and Warner, 2004). These findings support Clingermayer and Feiock (1997).

The Limitation of Rules. Despite their promise, the aforementioned factors might minimally explain why local governments choose to exit contracts for services. One reason for this is that constitutional arrangements, discretion, and governance structures are fairly stable over time. Thus rather than serving as impetuses for reverse contracting, these factors might only facilitate decisions to reverse contract. If reverse contracting by local governments represents dynamic organizational changes, the factors that might have the most predictive power might also be dynamic.

Characteristics of the Local Government of Interest

Contracting and Reverse Contracting Proclivities. Local governments differ in their propensities to contract and reverse contract. This difference might stem from ideological differences regarding which mode of service delivery provides greater benefits. For instance, local governments with more services contracted might have a more favorable view of contracting than local governments with fewer of these services contracted. Although a lower contracting proclivity could signal greater internal capacity to provide services directly and/or fewer services for which private delivery would seem optimal, perceptions regarding modes of service delivery are likely to be part of any readiness calculation. Therefore, previous contracting rates are expected to influence reverse contracting rates.

Local Government Size. Normatively one might expect larger local governments to have greater readiness for organizational change because of the greater number of potential resources thought to be at their disposal. However, research analyzing service delivery restructurings have found

suburban governments to have higher contracting rates than metropolitan and rural governments. Similarly, Hefetz and Warner (2004) found that local government size was negatively associated with contracting but positively associated with reverse contracting. Consistent with these findings, this research expects local government size to be a determinant of reverse contracting patterns.

Attributes of the Physical Environment

Contract Management Capacity. Research on public sector performance maintains that management capacity is a “necessary antecedent for performance” (Donohue, Selden, and Ingraham, 2000, 385). Good management, scholars argue, can lower costs and improve results, while poor management can result in adverse effects (Dilulio, Garvey, and Kettl, 1993; Cogburn and Schneider, 2003). Yet, what is management capacity? Ingraham and Donohue (2000) define management capacity as “government’s intrinsic capacity to marshal, develop, direct, and control its human, physical, and information capital to support the discharge of its policy directions ” (294). Consistent with this definition is the assumption that governments with more management capacity perform better than governments with less management capacity, all else being equal.

A key assumption of transaction cost theory is that in principal-agent relations, where power is delegated to an agent, opportunistic behavior is likely. The problem arises because the principal and agent often have different interests and asymmetric information. As a result, the principal cannot directly ensure that the agent is acting in his/her best interests. Consequently, the agent can take risks because the costs that could result will not be felt by him/her directly.

Literature on contracting displays broad agreement that monitoring and transaction costs should be weighed heavily in decisions regarding whether to contract and with whom to contract.

This Kettl (1993) argued requires personnel with contract management experience; policy expertise; negotiation, bargaining, and mediation skills; oversight and program audit capabilities; and, finally, the communication and political skills to manage programs with third parties in complex political environments. Similarly, Brown and Potoski (2003) identified three phases of contract management critical to success. In the first or feasibility assessment phase, public managers determine whether a particular service is appropriate for contracting and whether contractors exist from which to purchase them (Brown and Potoski, 2003). Next, public managers implement the contract process by bidding the contract, assessing and selecting a contractor, and negotiating and structuring the contract terms (Brown and Potoski, 2003). In the final phase, Brown and Potoski (2003) maintained that public managers monitor and evaluate contractor performance to determine whether the contractor has fulfilled the responsibilities specified in the contract.

Paralleling the policy cycle, Yang, Hsieh, and Li (2009) distilled management capacity into four capacities—1) agenda setting capacity (determining whether a service is appropriate to contract at the present time), 2) formulation capacity (determining which vendor is the right choice), 3) implementation capacity (determining what can be done to make the contract succeed), and 4) evaluation capacity (has the contractor fulfilled its responsibilities) and test their relationships with contract performance. The researchers found that contracting outcomes were circumscribed by institutional and political constraints. Moreover, they found that imbalances result when contractors become more adept than government managers at deriving benefits from the process.

Although contract management capacity has the potential to improve private service delivery performance, research suggests that it can have adverse effects on internal capacity. In

a study of local governments' geographic information systems, Brown and Brudney (1998) found that substantial contracting undermined local governments' capacity, reduced GIS implementation, and lowered utilization of the technology by employees. However, at the state level, Van Slyke and Hammonds (2003) found that privatizing a state park in Georgia increased internal management capacity. Because contracting is not a one-size fits all proposition, the success or failure of contracting is likely to depend on how well governments can manage the entire contract process (Brown and Potoski, 2003). Therefore, governments investing in contract management capacity might be better positioned to harness the benefits of contracting while avoiding its pitfalls (Brown and Potoski, 2003).

Local Government Readiness for Change. In addition to having a learning culture, organizations contemplating change must also possess a capacity, or readiness, for change (Cunningham et al. 2002). Organizational capacity for change concerns broad and dynamic organizational capability that allows the organization to not only adapt old capabilities to new threats but also to create new capabilities (Judge and Elenkov, 2003). According to the United Nations Development Programme (UNDP) (1991), capacity building is the creation of an enabling environment with appropriate policy and legal frameworks, institutional development, including community participation, human resources development and strengthening of managerial systems. Collectively, these elements allow organizations to adapt to the changing needs of the population it serves.

Literature on organizational change distills the construct into the following dimensions:

1. Trustworthy leadership or the ability of senior executives to earn the trust of the rest of the organization and to show the members of the organization how to meet its collective goals (Bass, 1990; Kotter, 1996).

2. Trusting followers or the ability of the rest of the organization to constructively dissent or enthusiastically follow a new path advocated by leaders (Bass, 1990).
3. Capable champions or the ability of the organization to attract, retain, and empower change leaders to evolve and emerge (Huy, 2003; Kantor, 1983).
4. Involved middle management or the ability of middle management to effectively link senior management with the rest of the organization (Floyd and Wooldridge, 1996; Oshry, 1996).
5. Innovative culture or the ability of the organization to establish norms of innovation and encourage innovative activity (Kotter and Heskett, 1992; Hamel, 2000).
6. Accountable culture or the ability of the organization to carefully steward resources and successfully meet predetermined guidelines (Pfeffer and Sutton, 2000; Ulrich et al. 1999).
7. Systems communication or the ability of the organization to communicate verbally, horizontally, and with customers (Oshry, 1996; Senge, 1990).
8. Systems thinking or the ability of the organization to focus on root causes and recognize the interdependencies within and outside the organizational boundaries (Senge, 1990; Kilmann, 1991).

Thus, any organization that optimizes along these dimensions is presumed to be well positioned to react to threatening changes and consequently, seize opportunities to adapt, learn, and innovate (Judge and Elenkov, 2003).

Weiner (2009) argued that organizational readiness for change varies as a function of how much organizational members' value the change and how they appraise three key determinants of implementation capability: task demands, resource availability, and situational

factors. In formulating change efficacy judgments, Weiner (2009) maintained that organizational members acquire, share, assimilate, and integrate information bearing on three questions: do we know what it will take to implement this change effectively; do we have the resources to implement this change effectively; and can we implement this change effectively given the situation we currently face? Thus, when organizational members share a common, favorable assessment of task demands, resource availability, and situational factors, they share a sense of confidence that collectively they can implement complex organizational change (Weiner, 2009).

Task Demands. One factor that might prove important in decisions to switch from private to public delivery might be a service's previous mode of delivery. For example, Brown, Potoski, and Van Slyke (2008) argued that changing service-delivery modes is a potentially costly undertaking. Governments that elect to switch typically are compelled to make changes to their production and management systems (Brown, Potoski, and Van Slyke, 2008). As a result, they maintained that costs associated with altering existing production and management systems make switching from some modes of service delivery easier than others, depending in part on how the service was initially delivered.

Specifically, they posited the costs of changing from direct delivery to alternative delivery are likely to be high because managers must dedicate time and effort to dismantling existing production and management systems and building new ones. According to Brown et al. (2008) switching costs can include downsizing public employees; negotiating with unions; crafting requests for proposals; establishing protocols for reviewing and selecting vendors; crafting contracts including developing and formalizing incentives and performance measures; negotiating with vendors; integrating new systems with existing systems; and establishing

oversight. Under contracted service delivery, local governments might opt to switch the contract to another vendor. However, this switch might be easiest because government have already outsourced the service (Brown et al. 2008). Thus, the transaction and production costs are likely to be low. Contrastingly, reverse contracting decisions are likely to be rare given local governments face many of the same transaction and production costs associated with contracting. Analyzing panel data from the 1992 and 1997 International City/County Manager Association's Alternative Service Delivery surveys along with data from the US Census and other sources, Brown et al. (2008) found that governments which had already internalized the upfront costs of changing modes of service delivery were more likely to approach service-delivery choices more dynamically in the future. More specifically, they found that local governments reverse privatized services that were jointly delivered at higher rates than services that were fully contracted irrespective of provider.

Another factor that might weigh heavily on decisions to internalize previously contracted services is the interaction among service characteristics and previous mode of delivery. For instance, research has found that many services that are newly contracted or reverse contracted share similar characteristics (Hefetz and Warner, 2004, 2011). These findings suggest that local governments differ in their perceptions of costs. Understanding that local governments' capacities differ, Lamothe et al. (2009) discovered that asset specificity was negatively associated with reverse contracting decisions because of the association with high fixed production costs and barriers to entry. However, they found these obstacles to be mitigated by joint delivery. Similarly, Lamothe et al. (2009) found that services characterized by contract management difficulty that were contracted to for-profit firms were reverse contracted at higher rates than those contracted to nonprofits and other governmental agencies. This finding suggests

that the perception of goal incongruence and related transaction costs are greater when difficult to manage services are contracted to for-profit firms (Lamothe et al. 2009). Moreover, it suggests that contract management difficulty might not be sufficient to explain why local governments choose to produce rather than privatize (Lamothe et al. 2009).

Resource Availability. Effective strategic human capital management approaches serve as the cornerstone of any serious change management initiative. Employees represent human capital for local governments. They bring various ideas and skill sets to local governments and provide labor for services. Given their significance, this research posits that changes in the public labor force influence restructuring decisions. For example, an inadequate number of employees might signal a lack of internal capacity to provide services directly, while a growth in the number of public employees might signal enhanced capacity. Similarly, Hefetz and Warner (2004) found that the percentage of public employees was negatively associated with new contracts in 1992, and positively associated with reverse contracts. Although a larger labor supply might not always be indicative of greater internal capacity, it might arguably be indicative of a local governments' potential capacity. Contrastingly, growths in the public workforce might be correlated with higher levels of contracting. If citizens have a strong desire to decrease the role and size of local government, larger public workforces might be regarded as catalysts for contracting.

However, if increases in the number of full-time employees represent internal capacity increases and joint delivery ensures the maintenance of local governments' core capacities, the interaction of increases in both should represent additional capacities for local governments to provide services directly. Thus, the presence of increases in the number of full-time employees

and joint delivery arrangements should be positively associated with decisions to reverse contract.

Situational Factors. Research on organizational readiness for change suggests that the perception of situational factors can influence an organization's ability to change (Weiner, 2009).

Consistent with this argument, this research contends that factors beyond the control of local governments have the potential to impact their readiness for service delivery restructurings. For example, financial concerns might weigh heavy in the calculus of different modes of delivery. Early research on local government service delivery argued that local governments chose private delivery when they were faced with fiscal stress (Warner and Hebdon, 2001). However, research analyzing local government service delivery arrangements have found mixed results for contracting being motivating by fiscal stress (Hefetz and Warner, 2007; Zullo, 2009).

Distinguishing between private and intermunicipal contracting, Zullo (2009) failed to find evidence that debt induced privatization (Hefetz and Warner, 2004). Rather, he found that high debt levels were associated with higher levels of public delivery even when time was controlled. More interesting, Zullo (2009) found that the strongest predictor of both private and intermunicipal contracting was the creation of new services. Given these findings, this research believes analyzing more than one factor thought to depict stress will uncover more consistent results.

In addition to fiscal pressures, external political factors might also influence local governments' decisions to restructure service delivery. For instance, research has found that local governments contracted at lower rates when there was opposition to privatization from city/county employees, citizens, and public officials (Hefetz and Warner, 2004, 2011).

Similarly, research has found that reverse contracting rates were higher when opposition existed

(Hefetz and Warner, 2004, 2011). Yet, research has found that local governments with council managers are less swayed by these pressures (Hefetz and Warner, 2004, 2011). These findings suggest that if council managers respond different to political pressures than the other managers, research analyzing the effects of these pressures on local government restructurings might need to control for reverse contracting patterns by type of government structure.

Criticisms of this Literature. The prevailing assumption of readiness literature is that if we could arrange for the correct quantifiable inputs to be inserted into organizations, then certain predetermined outputs will occur, and the organization would be “capacitated.” However, this is not necessarily true. For example, inputs must be determined by context, and their efficacy is further dependent on the competence of the embodying agency. Consequently, a direct causal link might not exist if outputs can result from endogenous factors.

A Review of the Empirical Research on Contracting and Reverse Contracting

Contracting Literature

Although the primary emphasis of this research is on reverse contracting, exploring the factors which make motivate contracting might be equally important. One reason for this is because existing research on contracting back-in has framed the decision as one spurred by negative experiences with contracting. Thus, understanding the factors which precipitate contracting might also explain when contracting will be stable.

One of the first studies to assess the sourcing decision was performed by Stein (1990). Analyzing the 1982 ICMA survey data, Stein (1990), using Ostrom and Ostrom’s (1977) typology of goods, found that local governments contracted private goods more and common property goods less. Stemming off this research, Brown and Potoski (2005) conducted a survey and analyzed how the characteristics of services influenced their mode of delivery. They found

that contracting asset specific services and services characterized by contract management difficulty posed risks for successful service delivery, and contracting these services required sufficient contract management capacity.

Using independent survey data of 23 local governments in the United States, Levin and Tadelis (2010) found that services that were difficult to manage and those in which residents were quality sensitive were less likely to be privatized. Second, they found that newer cities were more sensitive to these concerns than older cities. In addition, they found that substantial variation in privatization across cities. For example, western cities contracted more services to both the private and public sectors, while smaller cities contracted more with other public agencies. Consistent with Hefetz and Warner (2004), Levin and Tadelis (2010) found that council managers privatized more services than city managers who were elected. Finally, they found that cities that engaged in more contracting spent notably less per capita, and those that had greater long-term debt privatized more than those with less debt.

In 2011, Hefetz and Warner published the results of their 2007 survey of city managers and their sourcing decisions. Using multinomial logistic regression analysis, they analyzed the influence of various management, market, and service characteristics on service delivery choice. The researchers found striking differences between governments with council managers those without. In local governments with other managers, market competition was negatively associated with public and intergovernmental cooperation, while being in a statistical metropolitan area was positively associated with direct and nonprofit delivery. Furthermore, they found that local governments in rural areas utilized intergovernmental delivery at lower rates. Moreover, the results illustrated that local governments with other managers contracted more with all providers when opposition to privatization from line employees was present.

Restrictive labor agreements were negatively associated with all providers. In local governments with council managers, contract management difficulty was positively associated with contracting with other governments but was negatively associated with contracting with for-profit providers. Citizen interest was also negatively associated with for-profit delivery. As with local governments without council manager forms of government, competition was negatively associated with direct delivery and intergovernmental cooperation. Contrastingly, in rural counties with council managers, contracting with nonprofits and for-profit providers was more likely to occur. However, the presence of a political climate favoring less government was positively associated with direct delivery. The results of their analysis illustrate that governments with council managers might be more adept at balancing transaction cost concerns than governments without these managers. Together, these findings suggest that decisions to contract and with whom to contract are precipitated by a host of factors. What the research lacks is an examination of how these factors collectively relate to decisions to reverse contract. This research attempts this arduous task.

Reverse Contracting

The first empirical work to analyze reverse contracting focused on local governments in the state of New York. In this work, Warner and Hebdon (2001) examined survey responses from over 200 governments and found that reverse contracting was a strategy local governments used to attain economies of scale, create competition, and structure the market. They found that reverse contracting was also a logical consequence of privatization. More specifically, change in government management capability, monitoring capacities, and principal-agent concerns were most important in explaining decisions to contract back-in.

The first national empirical research to analyze local governments' decisions to reverse contract was done by Hefetz and Warner (2004). Pairing data from the International City/County Management Association's 1992 and 1997 Alternative Delivery Surveys, Hefetz and Warner (2004) were able to document shifts in local government service delivery over time from a transitional matrix they developed. Using probit regression analysis, the researchers found that local governments with council manager forms of government and monitoring mechanisms were less likely to reverse contract, while local governments who experienced opposition to privatization from various groups, kept their complaint mechanism in-house, and were more populous reverse contracted at higher rates. Similarly, they found that opposition, an insufficient number of alternative suppliers, and the presence of in-house complaints were negatively associated with decisions to contract additional services, while the presence of a council manager was positively associated with decisions to contract. The findings of their research illustrate that principal-agent problems, market structures, and government management significantly influence local governments' decisions to restructure service delivery.

While both groundbreaking and insightful, Hefetz and Warner's (2004) research is not without its shortcomings. First, the authors fail to account for the ability of local governments to shift from one mode of delivery to another. Similarly, they fail to propose any theory that would make shifting modes easier. Moreover, the researchers misguidedly use only one measure of fiscal stress. This differential usage of a single proxy has made been argued to be the reason for mixed findings regarding the effect of financial concerns on decisions to contract (Zullo, 2009). While the researchers do account for previous contracting rates to for-profit providers in both their models for new and reverse contracts, they do not account for the influence of reverse contracting rates on decisions to contract additional services. This is problematic because local

governments' prior experiences with contracting are likely to affect their decisions to contract in the future. In addition, the authors do not examine whether there are geographical differences in service delivery arrangements. The only factors they account for are being in a county and/or metropolitan statistical area, leaving regional influences unexplored. Moreover, the researchers do not isolate the effects of for-profit, nonprofit, and intergovernmental delivery on decisions to reverse contract services. This makes it difficult to ascertain with which group is contracting most and least stable.

Utilizing the ICMA's 2002 and 2007 Alternative Delivery Surveys to ascertain the factors which lead to both insourcing and outsourcing, Hefetz and Warner (2004, 2011) found that lack of cost savings drove local governments to re-internalize previously contracted services. Moreover, the researchers found that early monitoring identified the need for reversals, but current monitoring and market management through joint delivery reduced the need for reversals. However, contrary to theory, the researchers found that citizen interest and contract management difficulty reduced reverse contracting rates, while asset specificity increased reverse contracting rates. Similarly, services with greater contract management difficulty and citizen interest were contracted at higher rates than services that were asset specific. These results suggest that transaction costs might not be as important in decisions to restructure service delivery as previous research has presumed. On the other hand, city managers might view transaction costs differently. Moreover, the findings suggest that factors that explain service delivery restructurings in one time period might not explain restructurings in another. This time dependence has not been extensively assessed by existing research. Building on the findings of these works, this research explores the effects of service delivery across geographic region, institutional context, mode of delivery, provider, and time.

CHAPTER 4

VARIABLE DEVELOPMENT

Explaining Shifts in Local Government Service Delivery

To analyze shifts in delivery, this research uses data from the International City/County Management Association's (ICMA) 1997-2007 Alternative Delivery Surveys. These surveys are sent to managers of U.S. cities and counties every five years. The surveys ask managers whether their locality provides 67 services, and if so, how it provides each service. Because the surveys do not ask city managers to differentiate whether a service is new or existing, this research employed Hefetz and Warner's (2004) service transition matrix to track changes in delivery over time. The matrix divides service delivery in the following exclusive categories: public entirely, mixed public provision and private contracts, contract exclusively, or not provided at all (Hefetz and Warner, 2004). To gauge shifts by local government, only local governments whose managers responded to the 1997 and 2002 or the 2002 and 2007 surveys are included as observations. The result was 540 from 1997 to 2002, and 511 observations from 2002 to 2007.

Since services that are "not provided" are non-essential to this analysis, this category is excluded. The result is nine possible combinations that can be grouped into four categories: stable public delivery, stable contract, new contracting, and contracting back-in (Hefetz and Warner, 2004). In the matrix, stable public delivery is defined as government employees providing the service in both observed years. Stable contracting, on the other hand, is defined as government contracting the service in part or completely to an alternative provider in both observed

years.¹ New contracts are those services which were previously delivered by government that are delivered via mixed public/private or total contract in the second survey year. Finally, contracting back-in is defined as those services that were previously provided via mixed public/private delivery or total contract that were provided by government in the second survey year. Table 4.1 illustrates this methodology.

Table 4.1 Service Delivery Matrix Tracking Movements over Time (Hefetz and Warner (2004).					
Current Survey					
Former Survey		Public Entirely	Mixed Public/Contract	Totally Contract	Not Provided
	Public Entirely	Stable Public	New Contract	New Contract	Shedding Service
	Mixed Public/Contract	Contract Back-in	Stable Contract	Stable Contract	Shedding Service
	Totally Contract	Contract Back-in	Stable Contract	Stable Contract	Shedding Service
	Not Provided	New Service	New Service	New Service	Shedding Service
← Towards Public Provision					

Existing Explanations

Transaction Costs and Failure Theories

A great deal has been written about the generic make-versus-buy decision and the choice between direct and alternative production for government. Although a full account of the criteria that determine whether or not a task is suitable for privatization is likely to include many points of rationale, exceptions, nuances, and caveats (Freeman and Minow, 2009), three characteristics have been identified in the literature that make a task unsuitable for contracting. These characteristics are asset specificity, contract management difficulty, and limited market

¹ Although the two contracts differ, the primary interest of this research is whether a local government contracts or not rather than differences between how governments contract (Hefetz and Warner, 2004).

competition. As a result, this research uses a measure of each to predict shifts in local government service delivery over time.

Asset Specificity. According to transaction cost theory, asset specificity, or the inability of the assets of a service to be transferrable, increases the ability of alternative providers to act opportunistically and, in limited markets, can increase dependence on those providers. Gauging asset specificity is difficult because it is a multi-faceted concept. Yet, researchers that have created measures for the term have failed to take its multi-faceted nature into consideration.

Similarly, Williamson (1991) identified six types of asset specificity: site, physical asset, human asset, brand name capital, dedicated assets, and temporal. According to Williamson (1991), site specificity refers to an asset that becomes committed to a particular use owing to its location. Physical asset specificity, Williamson (1991) maintained that represents investments in machinery or equipment that have one narrowly defined purpose. Human asset specificity arises when individuals develop skills with narrow application as a result of learning-by-doing or special training courses (Williamson, 1991). Dedicated asset specificity refers to general investments made by the seller which are made with the expectation of a considerable amount of trade with one particular buyer (Williamson, 1991). Brand name capital specificity refers to becoming affiliated with a well-known “brand name” and thus becoming less free to pursue other opportunities (Williamson, 1991). Finally, temporal specificity arises when an assets value is highly dependent on it reaching the user in a limited and/or specified time (Williamson, 1991). Analyzing differences among each type, Joskow (1987) maintained that the first four types point to essentially the same phenomenon, but conceded that it was instructive in empirical analyses to treat each type distinctively.

Consistent with these arguments, this research used data by Hefetz and Warner (2011) to gauge which services were asset specific. Surveying city managers who responded to the International City/County Management Association's Alternative Delivery Surveys, Hefetz and Warner (2011) recorded the average degree to which specific infrastructure or expertise were perceived to be needed for each service. Scores were operationalized from 1 to 5, with higher scores indicating greater asset specificity. Because the actual scores ranged from 1.87 to 4.49, services with scores 3.84 (75%) or higher were considered asset specific.² Given that each local government is a separate unit of analysis, data were aggregated by locality and operationalized as the percentage of asset specific services as a proportion of total service delivery for each survey year. To ensure causality and time order, percentages for the previous survey year were included in each model. This research anticipates that local governments with more asset specific services contracted will have a greater probability of reverse contracting.

Contract Management Difficulty. To gauge contract management difficulty, this research employed measures derived by Hefetz and Warner (2011). Consistent with asset specificity, scores were derived from city managers' responses regarding their perception of each service. Scores were operationalized from 1 to 5, with higher scores indicating greater contract management difficulty. Because scores ranged from 1.94 to 3.92, services with scores 3.43 (75%) or higher were considered difficult to manage and/or monitor.³ Again, services were

² The following services were characterized as asset specific: ambulatory service, disposal of hazardous materials, electric utility operation, emergency medical service, fire prevention/suppression, gas utility operation and management, operation of airport, hospitals, police/fire communications, prisons/jails, sewage collection and treatment, water treatment, water distribution, crime prevention/patrol, inspection/code enforcement, and legal services.

³ The following services were considered difficult to manage and/or monitor: child welfare programs, crime prevention/patrol, operation of hospitals, operation of public health facilities, operation of mental health facilities and programs, inspection/code enforcement, operation of airports, water distribution, water treatment, sewage collection, disposal of hazardous materials, electric utility operation, gas utility operation, police/fire communications, fire prevention/suppression, and prisons/jails.

aggregated by local government for the preceding survey year. Similarly, the expectation is that contracting more of these services will lead to a greater probability of reverse contracting.

Market Competition. When local governments replace government monopoly with private monopoly, privatization is expected to result in failure. Therefore, contracting services with limited market competition is expected to result in more failures than contracting services with greater market competition. To control for market competition, this research employed Hefetz and Warner's (2011) scores from city managers' who responded their survey. Competition was measured using the following scale: 0 = government only, 1 = one alternative provider, 2 = two alternative providers, 3 = three alternative providers, and 4 = four or more alternative providers. Responses for services ranged from 0.23 to 3.44. To remain consistent with our assumptions regarding market competition, this research considered any service with a score of 1.03 (25%) or lower to have limited competition.⁴ Again, because data were at the local level, the percentage of services contracted in the preceding survey year that have limited market competition as a proportion of total service delivery was included in each model.

Nonprofit Failure. Theory suggests that while nonprofit organizations can offer local governments leverage against opportunistic behaviors of for-profit providers. However, most nonprofits often lack the scale and financial resources to provide reliable service delivery (Frumkin, 2005). To determine whether contracting with nonprofit organizations is as stable and/or advantageous as contracting with other providers, this research included a measure of the percentage of services contracted to nonprofit organizations as a proportion of total service delivery in each model for the preceding survey year. The expectation is that greater contracting

⁴ The following services were considered to have limited market competition: title records/plat maintenance, tax assessing, libraries operation, welfare eligibility, operation and management of mental health facilities and programs, animal control, traffic control, fire prevention/suppression, crime prevention/patrol, police/fire communications, sewage collection, water treatment, water distribution, and operation of airports.

with nonprofit organizations will lead a greater probability of reverse contracting. Data for this measure were derived from city managers' responses to the ICMA Alternative Delivery Surveys.

The IAD Framework and Organizational Change

Constitutional Rules

State Tax and Expenditure Limits. Comparison of state TELs is not easy because limits differ considerably in design, scope, and restrictiveness. Still, this research expects the presence of TELs to weigh heavily in state and local governments' decision making. For example, if state economies are volatile and state budget costs are higher than average inflation, then states with TELs might experience increased pressures when these forces and fiscal limitations come into contact (National Council of State Legislatures, 2010). Consistent with this notion, this research expects states with TELs in their constitutions will have a greater probability of reverse contracting than states that do not have these limits in their constitutions. To gauge the impact of tax and expenditure limits on service delivery arrangements, a binary variable was included in each model for the presence of a limit in a state's constitution.⁵

Substantive Rules

Local Government Discretion. The ability of local governments to engage in activities as they see fit, free from constraints by state governments, is expected to weigh heavily in decisions to restructure. Assuming that state legal impositions on local government structure and functions can serve as impetuses or constraints for restructuring, this research expects local governments with more discretion will have a greater probability of reverse contracting than local

⁵ States with TELs in their constitutions are Alaska, Arizona, Colorado, Connecticut, Delaware, Florida, Hawaii, Louisiana, Michigan, Missouri, Oklahoma, Rhode Island, Tennessee, and Texas (National Council of State Legislatures, 2010).

governments with less discretion.⁶ To test this assumption, this research uses Wolman, McManmon, Bell, and Brunori (2008)'s measure of local governments' discretion in 2003 (the midpoint of our observation). The measure accounts for both the degree of home rule autonomy granted by states to their local governments. Because data for this measure were created during the time period under observation, this measure is expected to be valid. Although scores are the same for each time period, this usage is justified in that local government discretion is not expected to change dramatically from year to year. Table 4.2 illustrates each state's discretion score.

State	Score	State	Score
Alaska	2.355	Wyoming	-0.133
Utah	1.784	New York	-0.133
Massachusetts	1.517	Missouri	-0.133
New Mexico	1.517	Kentucky	-0.133
Ohio	1.251	Arizona	-0.337
Montana	1.251	Georgia	-0.538
Kansas	1.225	Minnesota	-0.602
Colorado	1.162	Wisconsin	-0.602
Iowa	1.148	Oklahoma	-0.604
New Jersey	1.048	South Dakota	-0.679
South Carolina	0.984	Alabama	-0.718
Louisiana	0.959	West Virginia	-0.807
California	0.895	Pennsylvania	-0.871
Oregon	0.779	North Carolina	-0.871
Illinois	0.692	Rhode Island	-0.871
Texas	0.667	Indiana	-0.882
Tennessee	0.488	Virginia	-1.072
Florida	0.426	Delaware	-1.072
Maine	0.4	Nebraska	-1.073
Arkansas	0.4	Washington	-1.073
North Dakota	0.134	Hawaii	-1.137
Mississippi	-0.069	Idaho	-1.441
Connecticut	-0.071	Vermont	-1.543
Michigan	-0.133	Nevada	-1.543
Maryland	-0.133	New Hampshire	-1.809

⁶ The assumption is that these local governments will also engage in greater levels of contracting because of their discretion.

Operational Rules

Local Governance Structure. Previous research on government restructuring suggests that council managers experiment with alternative forms of service delivery at increased rates even when local politics advocates for direct provision (Hefetz and Warner, 2004). Consistent with this finding, this research expects local governments with council managers to have a greater probability of reverse contracting than local governments without council managers. This assumption is consistent with Osborne and Gaebler (1992) who suggest that entrepreneurial managers, or council-managers, experiment with contracting out and employ internal process improvements which result in higher rates of contracting back-in. To test this assumption, separate models were generated for local governments with council managers and those with other managers. Data for governance structure were derived from ICMA's Alternative Delivery Surveys.

Characteristics of the Local Government of Interest

Contracting Proclivities. Government policy decisions for the most part are static. While changes occur, they often are not dynamic. Similarly, service delivery is expected to operate in this manner. Local governments' reliance on particular modes of service delivery is expected to stem, in part, from a perception regarding which mode(s) provide the greatest benefits. Consistent with this view, this research expects local governments who have contracted at high levels to have a more favorable view toward privatization and thus have a lower probability of reverse privatizing. Although contracting at lower rates could indicate greater capacity to provide services internally or services for which private delivery would not seem optimal, a favorable perception of privatization is likely to determine the duration of any contractual agreement. To determine if previous contracting rates influence reverse contracting rates, this

research included a measure for the previous level of contracting for the percentage of services contracted to for-profit firms and the percentage of services contracted to other government authorities as a proportion of total service delivery in each outcome model. In addition, this research included a measure for the percentage of new services contracted as proportion of total service delivery for the outcome year. The assumption is that these rates will be inversely related to the probability of reverse contracting. Data for each measure were derived from ICMA's Alternative Delivery Surveys for each year.

Local Government Size. Research suggests that the size of a local government determines its propensity to contract and/or reverse contract (Warner and Hebdon, 2001; Hefetz and Warner, 2004, 2011). Similarly, research has found that suburban governments contracted at higher rates than local governments in metropolitan or rural areas (Warner and Hebdon; Hefetz and Warner, 2004, 2011). Consistent with these findings, this research expects metropolitan and rural local governments have a greater probability of reverse contracting than their suburban counterparts. To analyze these potential variations, this research includes binary measures for being in a metropolitan statistical area, suburb, or county. Data for each measure was derived from the Alternative Delivery Surveys for each year.

Attributes of the Physical Environment

Contract Management Capacity. Research indicates that successful contracting depends on internal management capacity to monitor and evaluate those contracts (Joaquin and Greitens, 2012). Consistent with this finding, this research assumes that greater contract management capacity will be inversely related to the probability of reverse privatizing (i.e., internal delivery). This expectation is consistent with Brown and Brudney's (1998) research which found contract management capacity to reduce internal capacity to produce those services directly. To test this

assumption, this research employs a unique operationalization of contract management capacity based on responses for the outcome year.⁷ Although the operationalization is similar to Yang, Hsieh, and Li (2009), who define capacity in terms of agenda setting, formulation, implementation, and evaluation, it differs subtly in that it accounts for degrees of formulation and evaluation that neither Yang, Hsieh, and Li (2009) nor Joaquin and Greitens (2012) consider. Capturing degree of formulation and evaluation, local governments' contract management capacity scores ranged from 0 to 26 for each survey year. Higher scores were indicative of greater contract management capacity, while lower scores denoted less contract management capacity. Table 4.3 illustrates how capacity was measured.

⁷ The expectation is that local governments' contract management capacity scores in the outcome will influence their decisions to both contract and reverse contract. Scores from the previous survey period were expected to influence previous service delivery decisions.

Table 4.3. Components of Contract Management Capacity	
Capacity Components	Core Questions from the ICMA 1997 to 2007 Surveys
<i>Agenda Setting</i>	<p>“Has your local government studied the feasibility of adopting private service delivery within the past five years?”</p> <p>Response code: No – 0 Yes – 1</p> <p>(Although respondents were asked to specify the factors which spurred this analysis, this research does not include these measures here. Some factors are analyzed separately to purport with theory.)</p>
<i>Formulation</i>	<p>“Has your local government undertaken any activities to ensure success in implementing private service delivery?”</p> <p>Response code: No – 0 Yes – 1</p> <p>“If yes, which of the following activities has your government undertaken to ensure success in implementing private delivery?” (Check all that apply.)</p> <p>*Included the number of activities undertaken.</p> <ol style="list-style-type: none"> 1. Identified successful uses of private alternatives in other jurisdictions. 2. Established a citizen’s advisory committee on private alternatives. 3. Hired consultants to analyze feasibility of private alternatives. 4. Allowed government departments to compete with the private sector in the bidding process. 5. Developed programs to minimize the effect on displaced public employees. 6. Recommended changes in state laws. 7. Recommended changes in local laws. 8. Proposed implementation of private alternatives on a trial basis. 9. Applied private alternatives to new services. 10. Applied private alternatives to growing services. 11. Surveyed citizens. 12. Kept the service complaint mechanism in-house. 13. Other. Specify.
<i>Implementation</i>	<p>“Has your local government encountered any obstacle in adopting private service delivery?”</p> <p>Response code: No – 1 Yes – 0</p> <p>(This operationalization is based off the assumption that greater obstacles should lead to reduced contract management capacity. Moreover, some of the obstacles are tested separately in this research. To avoid redundancy, this research only tallies the initial response.)</p>
<i>Evaluation</i>	<p>“Does your local government use any techniques to systematically evaluate its private service delivery?”</p> <p>Response code: No – 0 Yes – 1</p> <p>“If yes, which of the following aspects of service delivery are evaluated?” (Check all that apply.)</p> <p>*Included the number of services evaluated.</p> <ol style="list-style-type: none"> 1. Citizen satisfaction. 2. Cost. 3. Compliance. 4. Other. Specify. <p>“What techniques are used to evaluate the above aspects of service delivery?” (Check all that apply.)</p> <p>*Included the number of techniques used.</p> <ol style="list-style-type: none"> 1. Conducting citizen surveys. 2. Monitoring citizens’ complaints. 3. Conducting field observations. 4. Analyzing data/records (i.e., demographic/finance data) 5. Other

Local Governments' Readiness for Change

Task Demands: Joint (Mixed) Delivery. Shifts in service delivery represent significant changes in an organization's structure. Research suggests that organizations that are able to change are more suitable for survival (Daft, 2010). However, organizations are unequal in their capacity to change. Acknowledging this verity, this research maintained that local governments that have maintained a role in providing a service were more capable of both entering total contracts and internalizing a service than local governments which had not maintained a role in providing a service (Brown et al. 2008). Consequently, this research expects joint delivery to be positively associated with the probability of reverse contracting. To control for this expected finding, the percentage of services provided by joint delivery as a proportion of total service delivery was included in each model for the preceding survey year.

Resource Availability: Internal Capacity. Individuals are critical to any organization's change strategy and capacity. Having an adequate number of well-trained, skilled individuals can make any change strategy easier to implement. Although little is known regarding the skills of the employees in the observed local governments, data are available regarding the number of full-time employees employed at the county level. While not all local governments are counties, this is the best data available to capture internal capacity.⁸ This research treats increases in the number of full-time county employees as increases in local governments' internal capacities to provide services internally. Similarly, it concedes that reductions in the number of full-time county employees will decrease the probability of internalization and increase the probability of external delivery. Consequently, this research controlled for changes in the number of full-time employees for each local government from one survey year to the next and calculates those

⁸ For counties whose cities, boroughs, and/or towns that are included as observations, the data is coded the same across localities.

changes as differences in internal capacity. Data for these estimates were derived from the U.S. Census Local Government Employment and Payroll database, 1997-2007.

Situational Factors: Financial and Political. An organization's readiness for change is also contingent on how its members perceive factors in the organization's internal and external environments (Weiner, 2009). As a result, local governments' fiscal concerns are expected to weigh heavy in their service delivery calculus. Supporting this contention, research has found moderate support for increases in private delivery when characterized by fiscal stress. Other research has found that fiscal stress is not as important as previously assumed (Zullo, 2009). Yet, differences might lie in how fiscal stress is operationalized. To determine if fiscal stress matters, this research employed three measures thought to gauge fiscal stress: 1) the presence of mandates tied to intergovernmental financing, 2) the difference in state and local tax burden as a proportion of per capita income from one survey year to the next, and 3) the number of additional (or new) services provided by each local government from one survey year to the next. The expectation is that local governments characterized by fiscal stress will strategically shift, reverse privatizing, to reduce their financial burden. To assess the potential influence of fiscal stress on service delivery changes, measures for each factor were created for each observed year. Data on mandates and additional services were derived from the ICMA's Alternative Delivery Surveys, while data concerning tax burdens were derived from the Tax Foundation.

In the external environment, political factors such as opposition to privatization have been found to serve as both a catalyst for reverse contracting (Hefetz and Warner, 2004, 2011). Therefore, this research expects opposition from laborers and citizens to increase the probability of reverse contracting. This research isolates the impact of opposition from laborers and citizens to determine whether each has an effect, or similar effect, on local governments' decisions to

reverse contract. Data for these measures were derived from the ICMA's Alternative Delivery Surveys and were treated as binary measures for each observed year.

Additional Controls

Research on local government service delivery arrangements suggests that in local governments with a greater number of residents citizen preferences are more heterogeneous and thus more difficult to contract (Warner and Hebdon, 2001). To control for the effect of population, this research included several measures. In the analyses of the 1997 and 2002 surveys, the percentage increase in population from 1990 to 2000 was included. The expectation is growth will serve as added pressure to provide more complex services, and thus, will motivate local governments to entertain the idea of alternative delivery. In each model, the log transformation of population growth was included to bring the data closer. In addition, binary measures were included that capture growth at certain ranges. Because the U.S. Census Bureau only conducts its census every 10 years, only the log transformation of the 2000 population rate was included in the analyses of the 2002 and 2007 surveys. Similarly, binary measures were included to capture the effects of population at certain ranges.

In addition to population, this research employed binary measures for contracting back-in. Question 8 of the ICMA survey asked city managers if they had chosen to reverse privatize and why. To prevent multicollinearity among variables of interest, this research only includes binary controls for whether a local government cited service quality concerns, problems with contract specifications, insufficient cost savings, or improvements in government efficiency as motivations to reverse contract previously contracted services. These items were selected because their effects were not gauged by other controls.

Finally, the physical environment with which local governments operate is also expected to influence the probability of restructuring service delivery. Consequently, this research included measures for region to determine if variations exist among certain geographical areas of the United States regarding service delivery. Data for this measure were derived from the ICMA Alternative Delivery Surveys. ICMA divides the U.S. into the following census regions: Northeast, Southeast, Mountain Plains, Midwest, and West Coast.⁹ Table 4.4 summarizes the expected findings of this research.

⁹ The Northeast region comprises of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, Delaware, District of Columbia, Maryland, New Jersey, New York, and Pennsylvania. The Southeast region consists of Florida, North Carolina, Kentucky, South Carolina, Tennessee, West Virginia, Alabama, Georgia, Mississippi, Louisiana, and Virginia. The Mountain Plains region consists of Arizona, New Mexico, Arkansas, Colorado, Idaho, Kansas, Montana, Nebraska, North Dakota, Oklahoma, South Dakota, Texas, Wyoming, and Utah. The Midwest region consists of Iowa, Minnesota, Ohio, Wisconsin, Illinois, Indiana, Michigan, and Missouri. Finally, the West Coast region consists of Alaska, California, Hawaii, Nevada, Oregon, and Washington.

Table 4.4 Formal Hypotheses	
1	<i>Local governments contracting more asset specific services as a proportion of their total service delivery will have a greater probability of reverse contracting than local governments contracting fewer of these services.</i>
2	<i>Local governments contracting more services characterized by contract management difficulty as a proportion of their total service delivery will have a greater probability of reverse contracting than local governments contracting fewer of these services.</i>
3	<i>Local governments contracting more services for which markets are limited as a proportion of their total service delivery will have a greater probability of reverse contracting than local governments contracting fewer of these services.</i>
4	<i>Local governments contracting more services to nonprofit organizations as a proportion of their total service delivery will have a greater probability of reverse contracting than local governments contracting fewer services to nonprofit organizations.</i>
5	<i>States with tax and expenditure limits in their constitutions will have a greater probability of reverse contracting than states that do not have these limits in their constitutions.</i>
6	<i>Local governments with greater discretion will have a greater probability of reverse contracting than local governments with less discretion.</i>
7	<i>Local governments with council managers will have a greater probability of reverse contracting than local governments without council managers and for different reasons.</i>
8	<i>Local governments with higher new contracting rates will have a lower probability of reverse contracting than local governments with fewer services newly contracted. Moreover, local governments with a greater percentage of services as a proportion of total service delivery contracted to for-profit firms or other governments will have a lower probability of reverse contracting than local governments with fewer of these services contracted.</i>
9	<i>Suburban local governments will have a lower probability of reverse contracting than local governments that are counties or are in metropolitan areas.</i>
10	<i>Local governments with greater contract management capacity will have a greater probability of reverse contracting than local governments with less capacity.</i>
11	<i>Local governments contracting more services via joint delivery as a proportion of their total service delivery will have a greater probability of reverse contracting than local governments contracting fewer of these services.</i>
12	<i>Local governments experiencing increases in internal capacity (i.e., full-time public employees) will have a greater probability of reverse contracting than local governments experiencing reductions in internal capacity.</i>
13	<i>Local governments under fiscal stress will have a greater probability of reverse contracting than local governments not under fiscal stress.</i>
14	<i>Local governments experiencing opposition to privatization from laborers will have a greater probability of reverse contracting than local governments that have not experienced opposition to privatization from laborers.</i>
15	<i>Local governments experiencing opposition to privatization from citizens will have a greater probability of reverse contracting than local governments that have not experienced opposition to privatization from citizens.</i>

CHAPTER 5

DESCRIPTIONS OF THE DATA

Descriptive Statistics

Local governments from 1997 to 2002, reverse contracted at an average rate of 9.9 percent. New contracting rates were lower averaging at 8.8 percent. In terms of transaction costs, local governments, on average, contracted about 8 percent of services with asset specificity scores above 3.84. At the same time, these governments contracted about 7 percent of services that were difficult to manage under contract and 6.5 percent of services for which there was limited market competition. The average percent of services contracted to nonprofits in 1997 was 2.6 percent (i.e., about 1 service for a government that provided 36 services).

Approximately 33 percent of local governments had tax and expenditure limits in their state constitution. Moreover, the average local government had a positive discretion score of 0.25. Nearly 75 percent of local governments responding to both surveys had council manager governance structures. The average contracting rate for all local governments in 1997 was 37.2 percent. Of that, 8 percent of services were contracted to for-profit organizations, while approximately 9 percent were contracted to other government authorities.

About 76 percent of local governments that responded to both surveys were located in metropolitan areas. 54 percent of local governments were located in suburban areas. Only 20 percent of local governments were counties.

The average local government possessed a contract management capacity score of about 6. The average percent of joint ventures accounted for about 18.5 percent of total service provision. In addition, the average local government experienced nearly a 13 percent increase from 1997 to 2002 in the number of full-time public employees, but a 25 percent reduction in local and state tax burden as a proportion of per capita income.

5 percent of local governments reported having a mandate tied to intergovernmental financing. For the observed period, the average local government experienced an increase of 3.65 services. Reported opposition to privatization from both laborers and citizens was low 24 percent of local governments reported opposition to privatization from laborers, while only 11 percent reported opposition to privatization from citizens.

Moreover, the average local government experienced an 18 percent increase in its population from 1990 to 2000. Similarly, 57 percent of local governments experienced a growth of 1 to 10,000 residents compared to 6 percent who experienced a growth of 60,000 or more residents. In terms of reasons cited for contracting back-in, 16 percent of local governments cited service quality concerns as a motivation. About 4 percent of local governments cited problems related to contract specifications as a motivation, while 11 percent cited insufficient cost savings as their motivation. Government efficiency increases were cited as a motivation by nearly 7 percent of local governments.

The majority, or 48 percent, of local governments responding to the both the 1997 and 2002 surveys were in the Midwest and Southeast regions. 38 percent of local governments reported being in the Mountain Plains and West Coast regions. The remaining 14 percent were located in the Northeast region. Table 5.1 illustrates these statistics.

Table 5.1 Descriptive Statistics for 1997-2002 Data

Variable	Number of Observations	Mean	Standard Deviation	Minimum	Maximum
Total Service Provision, 1997	540	39.73333	11.03793	0	64
Total Service Provision, 2002	540	35.61667	13.5727	0	67
Reverse Contracting Rate	540	.0992973	.1158462	0	.6666667
New Contracting Rate	540	8.845399	10.60086	0	72.72727
Percent Asset Specificity	540	8.16749	6.263216	0	28.26087
Percent Contract Management Difficulty	540	7.025206	5.883532	0	26.31579
Percent Limited Market Competition	540	6.493093	5.373983	0	26.31579
Percent Nonprofit Delivery, 1997	540	2.618561	4.078693	0	20.51282
TEL	540	.3296296	.4705145	0	1
Discretion	540	.2509907	.7841357	-1.809	1.784
Council Manager	540	.7462963	.4355335	0	1
Contracting Rate (all modes of delivery), 1997	540	37.2	20.83983	0	96.9697
Percent For-Profit, 1997	540	8.183126	8.416485	0	75
Percent Other Government, 1997	540	8.879605	10.98205	0	60.41667
Metropolitan	540	.7592593	.4279296	0	1
Suburban	540	.5407407	.4987995	0	1
County	540	.1962963	.3975635	0	1
Contract Management Capacity, 2002	540	5.940741	5.391897	0	20
Percent Joint Delivery, 1997	540	18.53211	16.57219	0	76.47059
Difference in Internal Capacity	540	.1278224	.1344374	-.3147103	.7961889
Mandates Tied to Intergovernmental Financing	540	.0537037	.2256411	0	1
Percentage Difference in State and Local Tax Burden as a Proportion of Per Capita Income, 1997-2002	540	-24.5037	29.44417	-111	16
Additional Services, 1997-2002	540	3.65	4.083736	0	25
Labor Opposition, 2002	540	.2351852	.4245078	0	1
Citizen Opposition, 2002	540	.1111111	.3145611	0	1
Percent Population Growth, 1997-2002	540	17.83581	29.79466	-16.11053	428.499
Log(Population Growth)	540	7.165846	3.427401	0	12.52858
Population Growth between 1-10,000	540	.5664207	.4960265	0	1
Population Growth above 60,000	540	.0590406	.2359184	0	1
Service Quality Concerns	540	.1592593	.366257	0	1
Contract Specification	540	.0351852	.1844185	0	1

Problems					
Table 5.1 Descriptive Statistics for 1997-2002 Data Cont'd..					
Variable	Number of Observations	Mean	Standard Deviation	Minimum	Maximum
Insufficient Cost Savings	540	.112963	.316841	0	1
Increases in Government Efficiency	540	.0666667	.2496751	0	1
Mountain Plains	540	.187037	.3903028	0	1
Midwest	540	.2425926	.4290482	0	1
West Coast	540	.1907407	.3932494	0	1
Southeast	540	.2351852	.4245078	0	1
Northeast	540	.1444444	.3518658	0	1

Both new and reverse contracting rates for 2002 to 2007 were lower than those reported from 1997 to 2002. During this time, local governments reverse contracted 8 percent of their total service delivery and additionally contracted 7 percent. Local governments responding to the 2002 and 2007 surveys contracted fewer services for which the transaction costs were perceived higher. For the time under observation, the average local government contracted 7 percent of services that were considered asset specific, 6 percent of services that were difficult to manage under contract, and 6 percent of services for which there was limited market competition. In addition, fewer services, on average, were contracted to nonprofit organizations (i.e., 1.82 percent of total service delivery).

Approximately 31 percent of local governments reported having a tax and expenditure limit in their state constitution. Different from the previous observed period, local governments from 2002 to 2007, on average, enjoyed a positive discretion score of 0.14 from their respective state. 65 percent of local governments reported having a council manager governance structure.

The average contracting rate for all local governments in 2002 was 34.4 percent. Of that, approximately 6 percent of services were contracted both to for-profits and other governments. About 47 percent of local governments that responded to both surveys were located in

metropolitan areas. 20 percent of local governments were located in suburban areas. Only 19 percent were counties.

Similar to the results from 1997 to 2002, local governments, on average, reported a contract management capacity score of about 6. However, 22 percent of services, on average, were delivered as joint ventures. In addition, the average local government experienced a 9 percent increase in the number of full-time employees and a 27 percent increase in local and state tax burden as a proportion of per capita income.

Again, only 5 percent of local governments reported having mandates tied to intergovernmental financing. Moreover, the average local government provided 6 additional services. Opposition to privatization from laborers and citizens mirrored the results from 1997 to 2002. 24 percent of local governments reported experiencing opposition to privatization from laborers, while 13 percent reported experiencing opposition from citizens.

The majority, or 61 percent, of local governments responding to both the 2002 and 2007 surveys had populations under 50,000 residents compared to 14 percent who had populations of 200,000 or more residents. In addition, 16 percent of local governments reported service quality concerns as a motivation for reverse contracting. 3 percent of local governments reported contract specification problems as a motivation, while approximately 11 percent reported insufficient cost savings as a motivation. Again, only 7 percent of governments reported efficiency increases as a motivation.

The majority, or 27 percent, of local governments responding to both surveys were in the Midwest. 22 percent of local governments were in the Southeast, while 21 percent were in the Mountain Plains. 18 percent of local governments were in the West Coast region. The remaining 13 percent were in the Northeast. Table 5.2 illustrates these statistics.

Table 5.2 Descriptive Statistics for 2002-2007 Data					
Variable	Number of Observations	Mean	Standard Deviation	Minimum	Maximum
Total Service Provision, 2002	511	35.79452	13.19502	0	66
Total Service Provision, 2007	511	40.80822	11.91812	0	66
Reverse Contracting Rate	511	.0818839	.0933909	0	.4642857
New Contracting Rate	511	7.307435	8.265026	0	45
Percent Asset Specificity	511	7.338863	6.478977	0	50
Percent Contract Management Difficulty	511	6.035294	6.009143	0	50
Percent Limited Market Competition	511	5.797289	6.005584	0	66.66666
Percent Nonprofit Delivery, 2002	511	1.824612	3.537249	0	20
TEL	511	.3091977	.4626157	0	1
Discretion	511	.1388434	.8257894	-1.809	2.355
Council Manager	511	.6516634	.4769102	0	1
Contracting Rate (all modes of delivery), 2002	511	34.44218	21.70806	0	100
Percent For-Profit, 2002	511	5.847776	7.451362	0	66.66666
Percent Other Government, 2002	511	5.782038	8.880885	0	47.91666
Metropolitan	511	.4657534	.4993146	0	1
Suburban	511	.197417	.3984173	0	1
County	511	.1937378	.3956131	0	1
Contract Management Capacity, 2007	511	5.88454	5.119396	0	21
Percent Joint Delivery, 2002	511	21.74573	17.33318	0	72.72727
Difference in Internal Capacity	511	.0936504	.4315991	-.4486763	9.288633
Mandates Tied to Intergovernmental Financing	511	.0450098	.2075288	0	1
Percentage Difference in State and Local Tax Burden as a Proportion of Per Capita Income, 2002-2007	511	27.4775	33.76434	-208	185
Additional Services, 1997-2002	511	5.911937	7.103029	0	41
Labor Opposition, 2007	511	.2382813	.4264487	0	1
Citizen Opposition, 2007	511	.1311155	.3378573	0	1
Population Under 50,000	511	.6070111	.4888656	0	1
Log(Population Growth)	511	10.6224	1.102935	7.900637	14.54604
Population of 200,000 or more	511	.1381215	.3453457	0	1
Service Quality Concerns	511	.1529412	.3602842	0	1
Contract Specification Problems	511	.0293542	.1689627	0	1

Insufficient Cost Savings	511	.1076321	.3102189	0	1
Table 5.2 Descriptive Statistics for 2002-2007 Data Cont'd.					
Variable	Number of Observations	Mean	Standard Deviation	Minimum	Maximum
Increases in Government Efficiency	511	.0684932	.2528378	0	1
Mountain Plains	511	.2074364	.4058681	0	1
Midwest	511	.2661448	.442374	0	1
West Coast	511	.1800391	.3845966	0	1
Southeast	511	.2152642	.4114082	0	1
Northeast	511	.1311155	.3378573	0	1

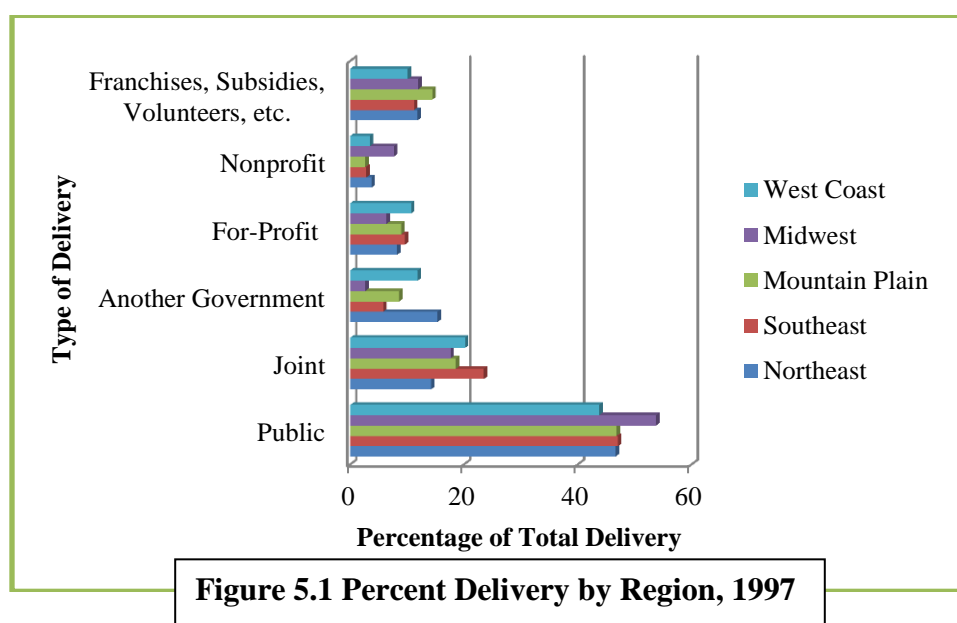
Variations in Local Governments' Service Delivery Arrangements over Time

Analyzing local governments' service delivery arrangements from 1997 to 2007, we see the majority of services were delivered directly or jointly. Some local governments never provided or no longer provided services. In addition, some services were delivered by other means such as via volunteers, subsidies, some combination of providers, etc. Tables A and B Appendices illustrate differences in service provision for each initial observation year.

Variations in Service Delivery by Governance Structure, Region, and Time

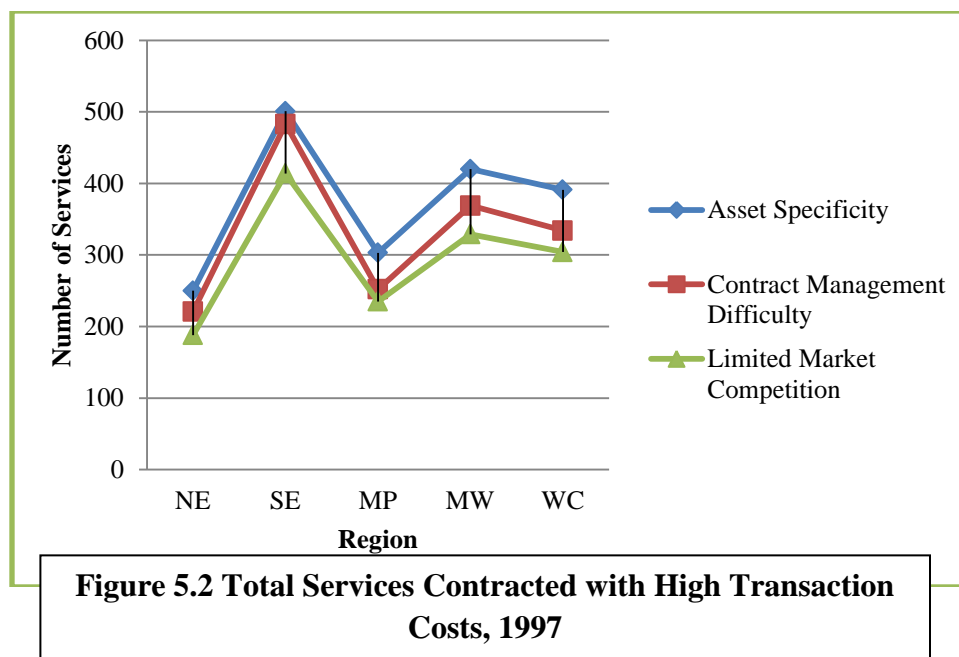
Local governments' service delivery arrangements differed substantially by governance structure, region, and time. In 1997, local governments provided nearly 40 percent or more of services in-house. Local governments in the Midwest provided nearly 54 percent of their services in-house, while local governments in the West Coast region delivered approximately 44 percent of these services directly. The second highest mode of delivery was joint delivery, whereby local governments provided services in-part with at least one additional provider. Local governments in the Southeast provided nearly 23 percent of their services via joint delivery, while local governments in the Northeast provided only 14 percent (the smallest share) of services via joint delivery. Contrastingly, local governments in the Northeast provided the largest share, or 15 percent, of services via other government authorities, while local governments in the Midwest provided the smallest share of these services, contracting

approximately 3 percent of services to other governments. For-profit delivery ranged from 6 to 11 percent in each region, with local governments in the Midwest contracting the smallest share of services to for-profit providers and local governments in the West Coast region contracting the largest share of services. Nonprofit providers were rarely used in all regions with approximately 3 to 8 percent of services contracted to this sector. Local governments in the Mountain Plains and Southeast regions utilized nonprofits the least, while local governments in the Midwest utilized the nonprofit sector the most. Governments in all regions utilized franchises, subsidies, volunteers, and other combinations of delivery at nearly—10 percent. Figure 5.1 illustrates these variations.



Local governments also exhibited regional variations in their tenacity to contract. For example, local governments in the Southeast contracted nearly 400-500 services that were asset specific, difficult to manage under contract, and services for which limited markets exist. However, local governments in the Northeast contracted between 188 and 220 of these services. On one hand, this finding suggests that local governments in some regions perceive transaction costs to be less risky than local governments in other regions. On the other hand, these

variations suggest that some regions are more adept at providing services to larger, growing populations than other regions. In the last few decades, the South's population has grown dramatically. It is likely that this growth has added pressure on local governments to provide more services, faster, and cheaper—all which are promised by contracting out. Figure 5.2 illustrates these variations.



In terms of governance structure, local governments with council managers provided the largest share of services, while local governments with non-council managers provided the smallest share of services. Local governments with council managers provided the majority of services via joint delivery or other government authorities. However, these governments provided the fewest services via public and nonprofit delivery. Contrastingly, local governments with non-council managers provided the majority of services directly and via nonprofit delivery. These governments provided the fewest number of services via joint delivery. These variations might signify differences in preferred modes of delivery by local governments with different types of governance structures. Figure 5.3 illustrates these variations.

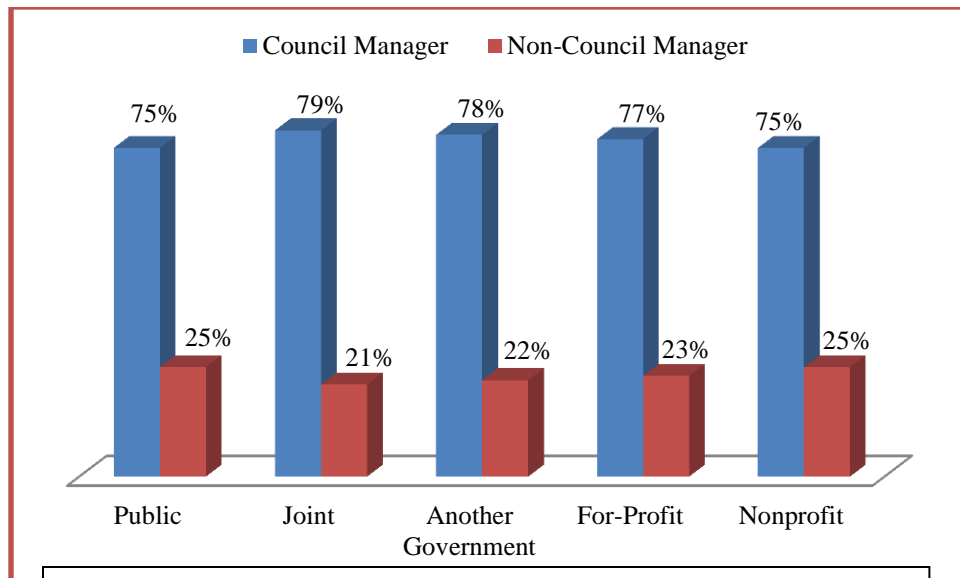


Figure 5.3 Percent Delivery by Government Structure, 1997

Local governments from 2002 to 2007 contracted services characterized by high transaction costs at similar levels to 1997 to 2002. Consistent with the previous observed findings, local governments in the Southeast contracted the majority of these services, while local governments in the Northeast contracted the fewest of these services. Figure 5.4 illustrates these findings.

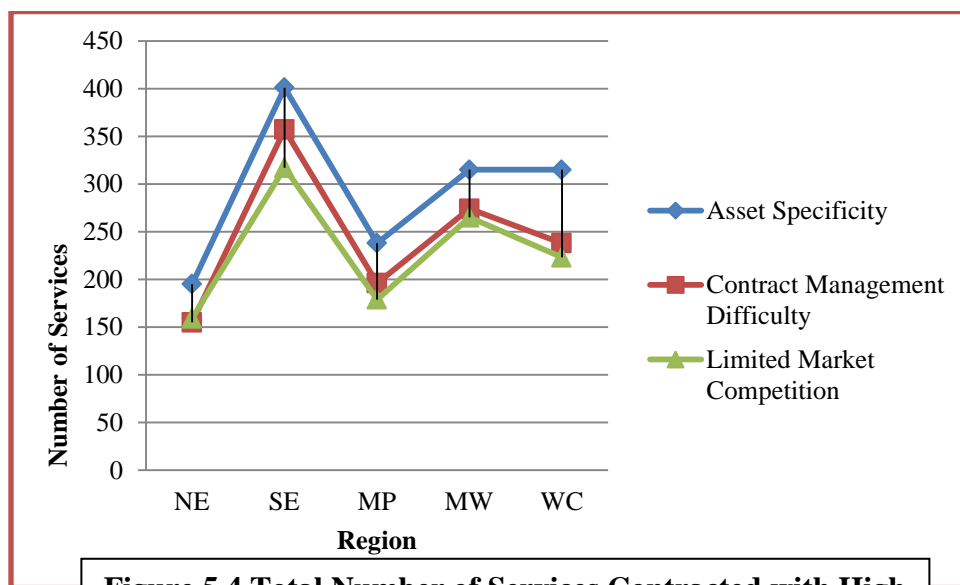
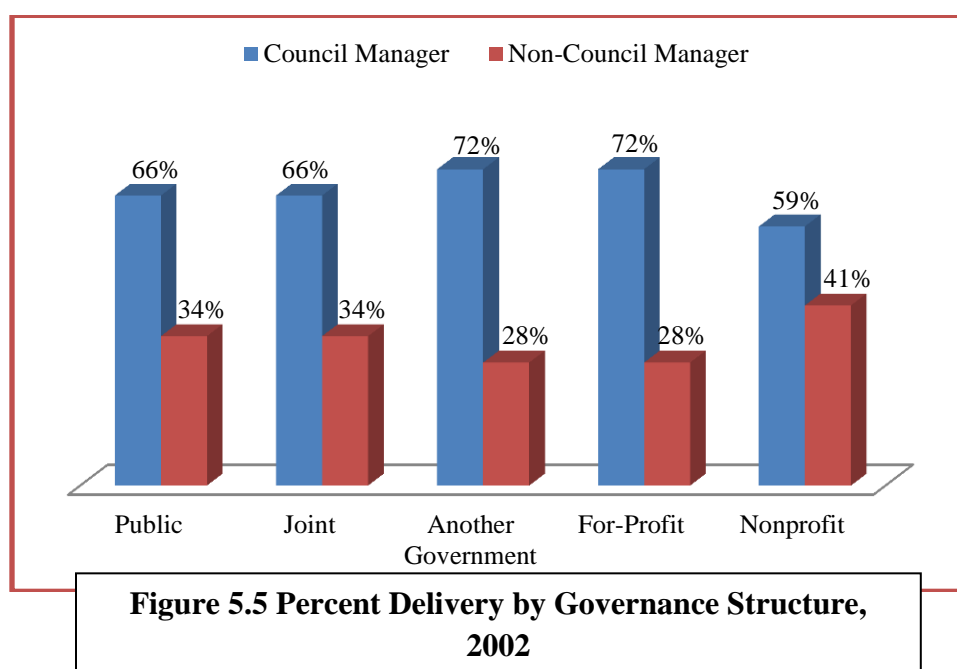


Figure 5.4 Total Number of Services Contracted with High Transaction Costs by Region, 2002

Local governments in 2002 with council managers contracted at larger rates to other government authorities and for-profit providers but contracted fewer services to nonprofit organizations. Similarly, local governments without council managers contracted a larger share of services to nonprofits, but contracted a smaller share of services to other governments and for-profit providers. This finding differed from 1997 in that local governments without council managers contracted at lower rates with for-profit providers than in the past. This shift might stem from a process of organizational learning, whereby local governments discover their competencies and use them to adapt to environmental changes. Figure 5.5 illustrates these findings.

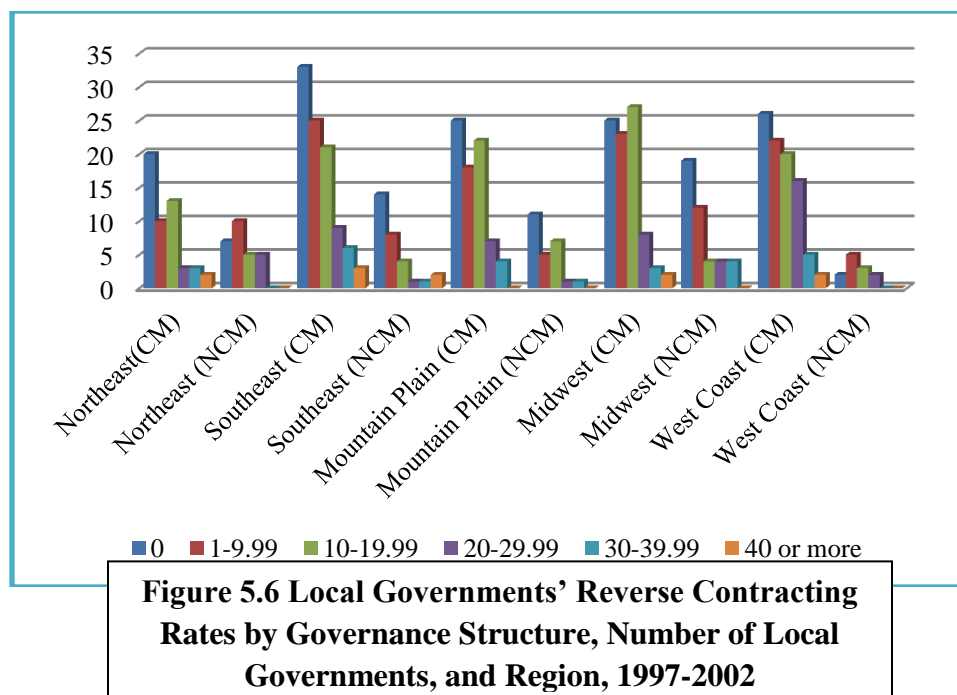


Understanding Reverse Contracting Patterns over Time

Examining reverse contracting patterns, this research found from 1997 to 2002, nearly 34 percent of local governments did not reverse contract any of their contracted services. However, the majority of local governments reverse contracted at least 1 service. Of those that did reverse contracted, nearly 39 percent or 138 local governments reverse contracted between 0.01 and 9.99

percent of their total service delivery, while 35 percent or 126 local governments reverse contracted between 10 and 19.99 percent. Sixteen percent of local governments that reverse contracted did so at a rate between 20 and 29.99 percent, while nearly 8 percent reverse contracted between 30 and 39.99 percent of their total services. As expected, only 2 percent or 11 local governments reverse contracted 40 percent or more their total service delivery.

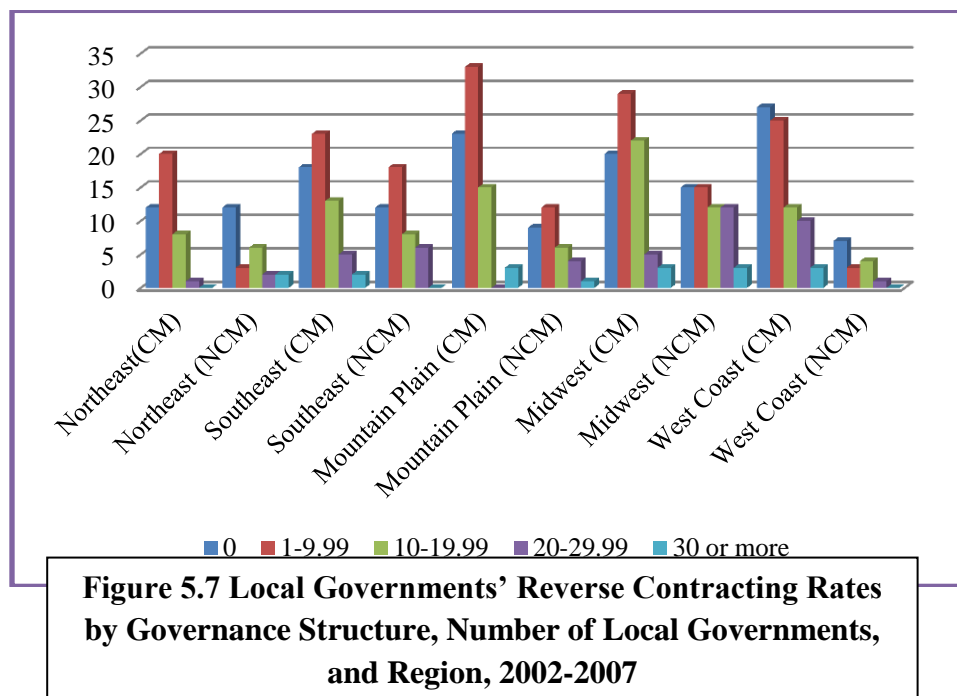
As expected, local governments' reverse contracting patterns also differed by governance structure. On average, local governments without council managers reverse contracted at lower rates than local governments with council managers. This finding may be in part due to the fact that these governments contracted at lower rates. Surprisingly, more local governments without council managers in the Northeast reverse contracted between 20 and 29.99 percent of their total service delivery than local governments in the Northeast with council managers. A similar finding was discovered for local governments without council managers in the Midwest with reverse contracting rates between 30 and 39.99 percent. The results also show that more local governments in the Southeast with council managers did not reverse contract a service than local governments in other region. Contrastingly, the fewest number of local governments that did not reverse contract a service were local governments without council managers in the Mountain Plains region. Moreover, more council manager local governments in the Southeast reverse contracted more than 40 percent of their total service delivery. Yet, reverse contracting rates were highest among local governments in the Midwest region. Although reverse contracting rates were lowest among local governments without council managers in the West Coast region, local governments in the Northeast, irrespective of governance structure, had the lowest rates of any region. Figure 5.6 illustrates these findings.



The findings of the 2002 and 2007 data were similar to those of 1997 and 2002. Nearly 31 percent of local governments during this period did not reverse contract a single service. However, of the 181 local governments or 55 percent that did reverse contract, they did so at a rate of 0.01 to 9.99 percent. 30 percent of local governments reverse contracted between 10 and 19.99 percent of their total service delivery, while 13 percent reverse contracted between 20 and 29.99 percent of their total delivery. The remaining 5 percent reverse contracted at a rate of 30 percent or greater.

Different from 1997 to 2002, more local governments in the West Coast region did not reverse contract a service than in any other region. Moreover, more local governments in the Northeast, Southeast, Mountain Plain, and Midwest regions with non-council managers reverse contracted between 20 and 29.99 percent of their total service delivery than local governments with council managers in these regions. A similar finding was discovered for local governments with non-council managers in the Northeast reverse contracting 30 percent or more of their total service delivery. Both local governments in the Midwest with council managers and those

without reverse contracted 30 percent or more of their total service delivery. Similar to the findings from 1997 to 2002, local governments in the West Coast region without council managers reverse contracted at the lowest rates, while local governments in the Northeast had lower reverse contracting rates than any region. Figure 5.7 illustrates these findings.



These findings suggest that local governments' service delivery arrangements are more dynamic than previously expected. While roughly 30 percent of local governments did not reverse contract, the majority, or 70 percent, did. In addition, the findings suggest that local governments with council managers have more fluid service delivery arrangements than local governments without council manager forms of government. This finding might result from the tenacity of council managers to contract and the strategic drive by these managers to provide a greater number of quality services with fewer resources.

Reverse Contracting by Type of Service

The 1997 to 2007 ICMA Alternative Delivery Surveys asked city managers whether their local government provided 62 to 67 services.¹⁰ Services were grouped into 7 distinct categories. These categories were public works/transportation, public utilities, public safety, health and human services, parks and recreation, cultural and arts programs, and support services. From 1997 to 2002, the 540 local governments under observation internalized 2,114 services. Among the choices for delivery, shifts from mixed or joint delivery were most recurrent. For example, 1,329 services delivered via joint delivery were reverse contracted. The second highest number of shifts in contracts was from other government authorities. Reverse contracts from other government authorities accounted for 420 shifts. Shifts from for-profit providers were third. 334 services were reverse contracted from for-profit providers. Nonprofit delivery experienced the fewest shifts. Only 31 services contracted to nonprofits from 1997 to 2002 were reverse contracted.

Analyzing reverse contracting rates by service, this research found that the majority of services internalized from joint delivery were support services. For example, 576 support services were reverse contracted from joint delivery. Services reverse contracted from other government authorities were public works/transportation services. From 1997 to 2002, 103 public works/transportation services were reverse contracted from other government authorities. Similar to shifts from other government authorities, shifts from for-profit providers occurred mostly from public works/transportation services. During the period under analysis, 126 services were reverse contracted. The majority of services reverse contracted from nonprofit providers

¹⁰ The 1997 ADS only includes 62 services. However, the 2002 and 2007 surveys include 67 services. Services not included in the 1997 survey but in the 2002 survey are treated as new services and not newly contracted services.

were health and human services. 10 services were internalized during the period under observation.

Shifts from 2002 to 2007 differed slightly from those from 1997 to 2002. From 2002 to 2007, the 511 local governments under observation internalized 1,684 services. Again, the most popular contractual arrangement was joint delivery which accounted for 1,393 reverse contracts. Different from 1997 to 2002, for-profit providers experienced the largest reversals. 143 services were internalized from these providers. Shifts from other government authorities came in third, accounting for 120 reverse contracts. Again, nonprofit delivery experienced the fewest with only 28 services reverse contracted. Table 5.3 illustrates these findings.

Table 5.3. Frequency of Reverse Contracting by Provision and Service, 1997-2007								
Service	Reverse Contracted, 1997-2002				Reverse Contracted, 2002-2007			
	Joint	Another Government	For-Profit	Nonprofit	Joint	Another Government	For-Profit	Nonprofit
<i>Public Works/Transportation</i>								
1. Residential solid waste collection	9 (0.68%)	2 (0.48%)	28 (8.38%)	0 (0.00%)	12 (0.86%)	0 (0.00%)	5 (3.50%)	1 (3.57%)
2. Commercial solid waste collection	4 (0.30%)	2 (0.48%)	11 (3.29%)	0 (0.00%)	9 (0.65%)	0 (0.00%)	2 (1.40%)	0 (0.00%)
3. Solid waste repair	4 (0.30%)	13 (3.10%)	11 (3.29%)	0 (0.00%)	10 (0.72%)	2 (1.67%)	1 (0.70%)	0 (0.00%)
4. Street repair	73 (5.49%)	1 (0.24%)	5 (1.50%)	0 (0.00%)	55 (3.95%)	0 (0.00%)	0 (0.00%)	1 (3.57%)
5. Street/parking lot cleaning	35 (2.63%)	1 (0.24%)	11 (3.29%)	0 (0.00%)	27 (1.94%)	2 (1.67%)	11 (7.69%)	0 (0.00%)
6. Snow plowing/sanding	35 (2.63%)	2 (0.48%)	3 (0.90%)	0 (0.00%)	29 (2.08%)	1 (0.83%)	0 (0.00%)	0 (0.00%)
7. Traffic sign/signal installation/maintenance	44 (3.31%)	2 (0.48%)	7 (2.10%)	0 (0.00%)	40 (2.87%)	5 (4.17%)	5 (3.50%)	0 (0.00%)
8. Parking meter maintenance and collection	2 (0.15%)	1 (0.24%)	1 (0.30%)	0 (0.00%)	6 (0.43%)	0 (0.00%)	8 (5.59%)	0 (0.00%)
9. Tree trimming and planting on public rights of way	57 (4.29%)	2 (0.48%)	9 (2.70%)	0 (0.00%)	47 (3.37%)	0 (0.00%)	5 (3.50%)	0 (0.00%)
10. Maintenance and administration of cemeteries	9 (0.68%)	1 (0.24%)	3 (0.90%)	0 (0.00%)	10 (0.72%)	0 (0.00%)	2 (1.40%)	0 (0.00%)
11. Inspection/code enforcement	56 (4.21%)	0 (0.00%)	1 (0.30%)	0 (0.00%)	40 (2.87%)	2 (1.67%)	0 (0.00%)	0 (0.00%)
12. Operation of parking lots and garages	6 (0.45%)	2 (0.48%)	5 (1.50%)	1 (3.23%)	11 (0.79%)	0 (0.00%)	1 (0.70%)	0 (0.00%)
13. Operation/maintenance of bus transit systems	0 (0.00%)	3 (0.71%)	3 (0.90%)	0 (0.00%)	4 (0.29%)	2 (1.67%)	2 (1.40%)	1 (3.57%)
14. Operation/maintenance of paratransit systems	3 (0.23%)	0 (0.00%)	1 (0.30%)	0 (0.00%)	3 (0.22%)	1 (0.83%)	0 (0.00%)	1 (3.57%)
15. Operation of airports	4 (0.30%)	5 (1.19%)	0 (0.00%)	0 (0.00%)	12 (0.86%)	3 (2.50%)	2 (1.40%)	0 (0.00%)

Service	Reverses Contracted, 1997-2002				Reverse Contracted, 2002-2007			
	Joint	Another Government	For-Profit	Nonprofit	Joint	Another Government	For-Profit	Nonprofit
16. Water distribution	16 (1.20%)	11 (2.62%)	4 (1.20%)	0 (0.00%)	22 (1.58%)	2 (1.67%)	1 (0.70%)	0 (0.00%)
17. Water treatment	10 (0.75%)	21 (5.00%)	2 (0.60%)	0 (0.00%)	17 (1.22%)	1 (0.83%)	1 (0.70%)	0 (0.00%)
18. Sewage collection and treatment	25 (1.91%)	18 (4.29%)	8 (2.40%)	0 (0.00%)	20 (1.44%)	4 (3.33%)	3 (2.10%)	0 (0.00%)
19. Disposal of sludge	8 (0.60%)	14 (3.33%)	10 (2.99%)	0 (0.00%)	16 (1.15%)	0 (0.00%)	6 (4.20%)	0 (0.00%)
20. Disposal of hazardous materials	6 (0.45%)	2 (0.48%)	3 (0.90%)	0 (0.00%)	6 (0.43%)	0 (0.00%)	5 (3.50%)	0 (0.00%)
Public Utilities								
21. Electric utility operation and management	0 (0.00%)	1 (0.24%)	3 (0.90%)	0 (0.00%)	5 (0.36%)	1 (0.83%)	1 (0.70%)	0 (0.00%)
22. Gas utility operation and management	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
23. Utility meter reading	7 (0.53%)	5 (1.19%)	15 (4.49%)	1 (3.23%)	10 (0.72%)	3 (2.50%)	8 (5.59%)	1 (3.57%)
24. Utility billing	5 (0.38%)	4 (0.95%)	9 (2.70%)	0 (0.00%)	18 (1.29%)	3 (2.50%)	8 (5.59%)	1 (3.57%)
Public Safety								
25. Crime prevention/patrol	27 (2.03%)	10 (2.38%)	0 (0.00%)	0 (0.00%)	29 (2.08%)	3 (2.50%)	0 (0.00%)	0 (0.00%)
26. Police/fire communications	20 (1.50%)	29 (6.90%)	1 (0.30%)	1 (3.23%)	37 (2.66%)	8 (6.67%)	0 (0.00%)	0 (0.00%)
27. Fire prevention/suppression	22 (1.66%)	12 (2.86%)	2 (0.60%)	1 (3.23%)	20 (1.44%)	3 (2.50%)	1 (0.70%)	0 (0.00%)
28. Emergency medical service	28 (2.11%)	16 (3.81%)	9 (2.70%)	3 (9.68%)	27 (1.94%)	2 (1.67%)	4 (2.80%)	1 (3.57%)
29. Ambulance service	4 (0.30%)	9 (2.14%)	18 (5.39%)	3 (9.68%)	18 (1.29%)	1 (0.83%)	5 (3.50%)	1 (3.57%)
30. Traffic control/parking enforcement	21 (1.58%)	9 (2.14%)	2 (0.60%)	0 (0.00%)	16 (1.15%)	1 (0.83%)	0 (0.00%)	0 (0.00%)
31. Vehicle towing and storage	0 (0.00%)	0 (0.00%)	4 (1.20%)	0 (0.00%)	1 (0.07%)	0 (0.00%)	3 (2.10%)	0 (0.00%)
Health and Human Services								
32. Sanitary inspection	11 (0.83%)	19 (4.52%)	2 (0.60%)	1 (3.23%)	13 (0.93%)	11 (9.17%)	0 (0.00%)	0 (0.00%)
33. Insect/rodent control	6 (0.45%)	7 (1.67%)	5 (1.50%)	0 (0.00%)	9 (0.65%)	5 (4.17%)	0 (0.00%)	0 (0.00%)
34. Animal control	24 (1.81%)	23 (5.48%)	6 (1.80%)	3 (9.68%)	19 (1.36%)	3 (2.50%)	0 (0.00%)	3 (10.71%)
35. Operation of animal shelters	5 (0.38%)	21 (5.00%)	2 (0.60%)	1 (3.23%)	7 (0.50%)	3 (2.50%)	1 (0.70%)	3 (10.71%)
36. Operation of daycare facilities	1 (0.08%)	1 (0.24%)	1 (0.30%)	3 (9.68%)	2 (0.14%)	0 (0.00%)	1 (0.70%)	1 (3.57%)
37. Child welfare programs	2 (0.15%)	4 (0.95%)	0 (0.00%)	0 (0.00%)	7 (0.50%)	1 (0.83%)	0 (0.00%)	0 (0.00%)
38. Programs for the elderly	21 (1.58%)	6 (1.42%)	1 (0.30%)	1 (3.23%)	26 (1.87%)	2 (1.67%)	0 (0.00%)	4 (14.29%)
39. Operation/management of hospitals	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
40. Public health programs	5 (0.38%)	2 (0.48%)	2 (0.60%)	0 (0.00%)	14 (1.01%)	2 (1.67%)	0 (0.00%)	0 (0.00%)
41. Drug and alcohol treatment programs	2 (0.15%)	1 (0.24%)	1 (0.30%)	0 (0.00%)	1 (0.07%)	0 (0.00%)	1 (0.70%)	1 (3.57%)
42. Operation of mental health/mental retardation programs and facilities	3 (0.23%)	1 (0.24%)	0 (0.00%)	1 (3.23%)	1 (0.07%)	0 (0.00%)	1 (0.70%)	1 (3.57%)

Service	Reverse Contracted, 1997-2002				Reverse Contracted, 2002-2007			
	Joint	Another Government	For-Profit	Nonprofit	Joint	Another Government	For-Profit	Nonprofit
43. Prisons/jails	8 (0.60%)	15 (3.57%)	0 (0.00%)	0 (0.00%)	16 (1.15%)	5 (4.17%)	0 (0.00%)	0 (0.00%)
44. Operation of homeless shelters	1 (0.08%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (0.07%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
45. Workforce development/job training programs	.	.	.	.	2 (0.14%)	1 (0.83%)	0 (0.00%)	0 (0.00%)
46. Intake/eligibility determination for welfare programs	.	.	.	.	3 (0.22%)	2 (1.67%)	0 (0.00%)	0 (0.00%)
Parks and Recreation								
47. Operation and maintenance of recreation facilities	46 (3.46%)	16 (3.81%)	2 (0.60%)	0 (0.00%)	57 (4.09%)	2 (1.67%)	0 (0.00%)	0 (0.00%)
48. Parks landscaping and maintenance	57 (4.29%)	9 (2.14%)	5 (1.50%)	0 (0.00%)	55 (3.95%)	3 (2.50%)	3 (2.10%)	0 (0.00%)
49. Operation of convention centers and auditoriums	2 (0.15%)	2 (0.48%)	1 (0.30%)	1 (3.23%)	3 (0.22%)	1 (0.83%)	1 (0.70%)	1 (3.57%)
Cultural and Arts Programs								
50. Operation of cultural and arts programs	6 (0.45%)	2 (0.48%)	0 (0.00%)	1 (3.23%)	16 (1.15%)	2 (1.67%)	0 (0.00%)	3 (10.71%)
51. Operation of libraries	12 (0.90%)	24 (5.71%)	1 (0.30%)	0 (0.00%)	15 (1.08%)	8 (6.67%)	0 (0.00%)	1 (3.57%)
52. Operation of museums	1 (0.08%)	1 (0.24%)	0 (0.00%)	1 (3.23%)	7 (0.50%)	0 (0.00%)	1 (0.70%)	1 (3.57%)
Support Functions								
53. Buildings and grounds maintenance	81 (6.09%)	0 (0.00%)	6 (1.80%)	1 (3.23%)	69 (4.95%)	0 (0.00%)	3 (2.10%)	1 (3.57%)
54. Building security	24 (1.81%)	2 (0.48%)	26 (7.78%)	0 (0.00%)	18 (1.29%)	2 (1.67%)	3 (2.10%)	0 (0.00%)
55. Fleet management/vehicle maintenance: Heavy equipment	74 (5.57%)	1 (0.24%)	7 (2.10%)	1 (3.23%)	75 (5.38%)	0 (0.00%)	3 (2.10%)	0 (0.00%)
56. Fleet management/vehicle maintenance: Emergency vehicles	57 (4.29%)	2 (0.48%)	9 (2.70%)	1 (3.23%)	62 (4.45%)	0 (0.00%)	8 (5.59%)	0 (0.00%)
57. Fleet management/vehicle maintenance: All other vehicles	69 (5.19%)	2 (0.48%)	15 (4.49%)	1 (3.23%)	70 (5.03%)	0 (0.00%)	7 (4.90%)	0 (0.00%)
58. Payroll	11 (0.83%)	2 (0.48%)	9 (2.70%)	0 (0.00%)	7 (0.50%)	0 (0.00%)	1 (0.70%)	0 (0.00%)
59. Tax bill processing	.	.	.	.	17 (1.22%)	7 (5.83%)	2 (1.40%)	0 (0.00%)
60. Tax assessing	14 (1.06%)	18 (4.29%)	0 (0.00%)	0 (0.00%)	11 (0.79%)	2 (1.67%)	0 (0.00%)	0 (0.00%)
61. Data processing	43 (3.24%)	4 (0.95%)	9 (2.70%)	0 (0.00%)	49 (3.52%)	2 (1.67%)	0 (0.00%)	0 (0.00%)
62. Collection of delinquent taxes	15 (1.12%)	19 (4.52%)	5 (1.50%)	1 (3.23%)	20 (1.44%)	2 (1.67%)	7 (4.90%)	0 (0.00%)
63. Title records/plat map maintenance	22 (1.66%)	17 (4.05%)	2 (0.60%)	0 (0.00%)	9 (0.65%)	2 (1.67%)	1 (0.70%)	0 (0.00%)
64. Legal services	38 (2.86%)	0 (0.00%)	19 (5.59%)	1 (3.23%)	38 (2.73%)	0 (0.00%)	14 (9.79%)	0 (0.00%)
65. Secretarial services	37 (2.78%)	0 (0.00%)	1 (0.30%)	0 (0.00%)	24 (1.72%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
66. Personnel services	38 (2.86%)	0 (0.00%)	2 (0.60%)	0 (0.00%)	32 (2.30%)	1 (0.83%)	0 (0.00%)	0 (0.00%)

Service	Reverse Contracted, 1997-2002				Reverse Contracted, 2002-2007			
	Joint	Another Government	For-Profit	Nonprofit	Joint	Another Government	For-Profit	Nonprofit
67. Public relations/public information	53 (3.99%)	1 (0.24%)	3 (1.80%)	2 (6.45%)	41 (2.94%)	1 (0.83%)	3 (2.10%)	0 (0.00%)
Numeric Total	1329	420	334	31	1393	120	143	28
Percent Total*	~100%	~100%	~100%	~100%	~100%	~100%	~100%	~100%

*Totals are approximate due to rounding.

Examining shifts by service type, this research found that services most reverse contracted from joint delivery were support services. 542 support services were reverse contracted from joint ventures. Again, for-profit delivery was most popular among public works/transportation services. From 2002 to 2007, 60 public works/transportation services were reverse contracted. Surprisingly, reverse contracts from other government authorities occurred mostly from health and human services. During the period under observation, 35 health and human services were reverse contracted. Nonprofit providers experienced the majority of internalizations from health and human services. During this period, 12 health and human services were reverse contracted.

Contrary to previous findings, this research illustrates that local governments are exiting contractual arrangements at lower rates than previously observed. Although this reduction could result from negative experiences with contracting, it could also result from learning and strategizing. For example, in both periods, the preferred form of alternative delivery was joint delivery. In maintaining partial responsibility for service provision, local governments might use this form of delivery to obtain capital, technical skills, manpower, and other resources that might not be at their disposal. However, in keeping partial responsibility, local governments under joint delivery might find ways to build their core capacities to provide services directly.

Services Most Reverse Contracted

From 1997 to 2007, local governments, for the most part, reverse contracted similar services at the highest levels. For example, in both periods, fleet management and maintenance of heavy equipment and all other vehicles along with buildings and grounds maintenance was reverse contracted from joint delivery. Similarly, police/fire communications and operation of libraries were reverse contracted from other governments. Legal services were reverse contracted from for-profit providers, while animal control was reverse contracted from nonprofit organizations. Table 5.4 illustrates these findings.

#	Services Reverse Contracted, 1997-2002				Services Reverse Contracted, 2002-2007			
	Joint	Another Government Authority	For-Profit	Nonprofit	Joint	Another Government Authority	For-Profit	Nonprofit
1	Buildings and grounds maintenance	Police/fire communications	Residential solid waste collection	Emergency medical service	Fleet management/ vehicle maintenance: Heavy equipment	Sanitary inspection	Legal services	Programs for the elderly
2	Fleet management / vehicle maintenance : Heavy equipment	Operation of libraries	Building security	Ambulance service	Fleet management/ vehicle maintenance: All other vehicles	Police/fire communications	Street/parking lot cleaning	Animal control
3	Street repair	Animal control	Legal services	Animal control	Buildings and grounds maintenance	Operation of libraries	Fleet management / Vehicle maintenance : Emergency vehicles	Operation of animal shelters
4	Fleet management / Vehicle maintenance : All other vehicles	Water treatment	Ambulance service	Operation of daycare facilities	Fleet management/ Vehicle maintenance: Emergency vehicles	Tax bill processing	Utility billing	Operation of cultural and arts programs
5	Tree trimming and planting on public rights of way	Operation of animal shelters	Fleet maintenance/ vehicle maintenance: All other vehicles	Public relations/ public information	Operation and maintenance of recreation facilities	Prisons/jails	Utility meter reading	.
6	.	.	.	.	.	Insect/rodent control	Parking meter maintenance and collection	.

#	Services Reverse Contracted, 1997-2002				Services Reverse Contracted, 2002-2007			
	Joint	Another Government Authority	For-Profit	Nonprofit	Joint	Another Government Authority	For-Profit	Nonprofit
7						Traffic sign/signal installation/maintenance		

Reversals across Local Governments

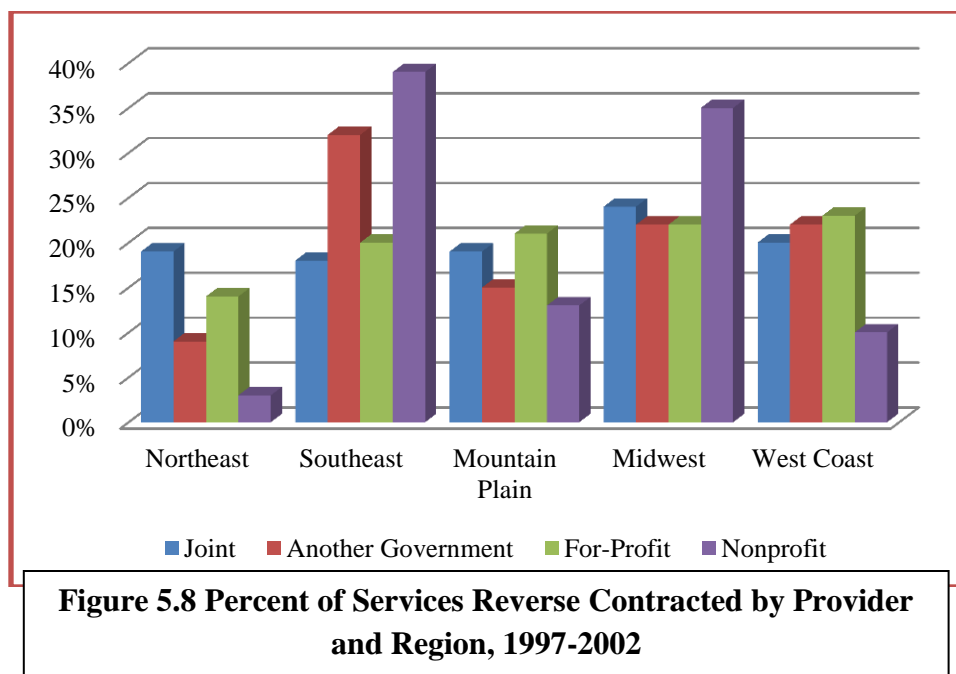
The aforementioned findings lead one to ask whether the same local governments are responsible for the majority of reverse contracts. The answer is for the most part no. Local governments with the highest reverse contracting rates in both time periods differ significantly. However, the city of Galion, Ohio, has one of the highest reverse contracting rates in both time periods. Table 5.5 illustrates the findings.

1997-2002			2002-2007	
Reverse Contracting			Reverse Contracting	
No	Local Government	Rate	Local Government	Rate
1	Sylacauga, AL	66.67	Town of Avon, CT	46.43
2	Bettendorf, IA	62.50	Missouri City, TX	42.86
3	Laguna Niguel, CA	57.14	Village of Glendale Heights, IL	40.00
4	Mauldin, SC	55.56	Corpus Christi, TX	40.00
5	Manchester, CT	52.00	Kissimmee, FL	38.90
6	Palm Beach Gardens, FL	50.00	Birmingham, AL	38.71
7	Town of Davie, FL	46.88	Oak Forest, IL	37.93
8	Stockton, CA	45.00	Glendale, AZ	36.59
9	Galion, OH	44.00	Forest Grove, OR	35.71
10	Bowie, MD	42.86	Galion, OH	35.29
11	Broadview Heights, OH	39.29	Sunnyvale, CA	34.88
12	Ranch Palos Verdes, CA	39.13	Ionia, MI	34.38
13	Town of Wareham, MA	38.89	Cumberland County, PA	33.33
14	Los Alamitos, CA	38.10	Virginia Beach, VA	33.33
15	Gahanna, OH	37.84	Pekin, IL	33.33
16	Bay County, FL	37.50	Fremont, IL	33.33
17	Monroe, MI	37.14	San Leandro, CA	32.26

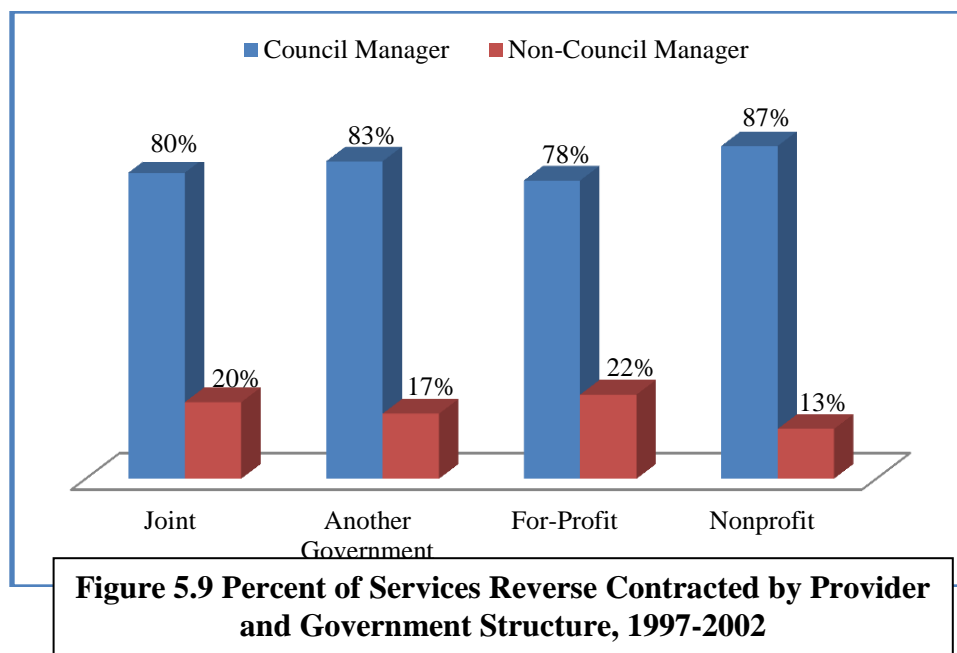
Table 5.5 Local Governments with the Highest Reverse Contracting Rates by Year Cont'd				
1997-2002			2002-2007	
Reverse Contracting			Reverse Contracting	
No	Local Government	Rate	Local Government	Rate
18	Kansas City, KS	36.84	Bethlehem, CA	31.71
19	Friendswood, TX	36.17	Chesterfield, PA	29.41
20	Wake County, NC	36.11	Horicon, WI	29.41

Reversals across Governance Structure, Region, and Time

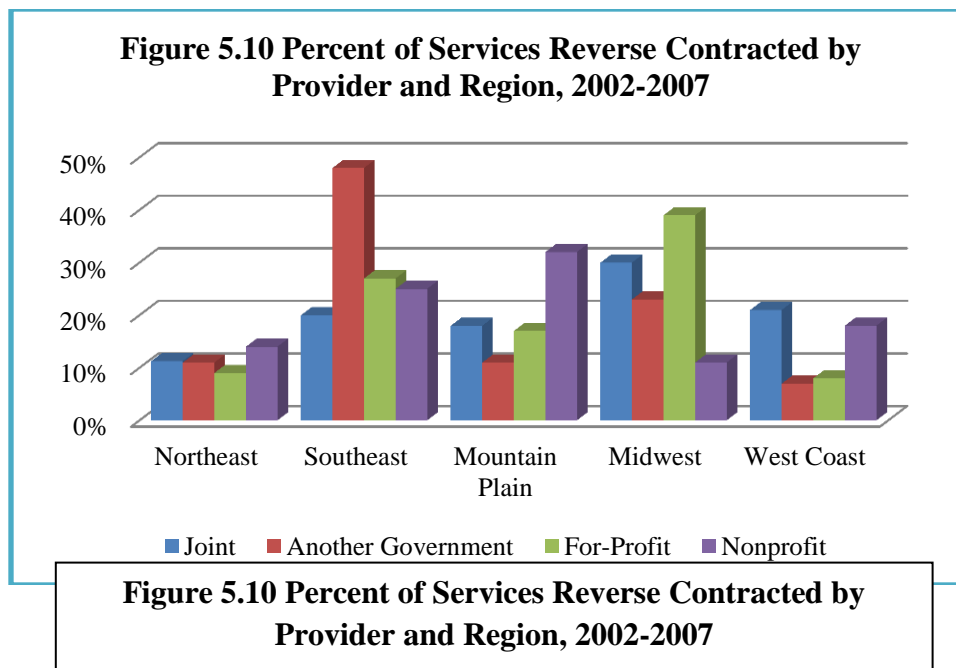
Analyzing shifts in delivery from 1997 to 2002, the data illustrate that local governments in the Midwest reverse contracted the largest share of services. The Southeast followed closely behind reverse contracting the second largest share of services. Similarly, more local governments in the Southeast reverse contracted more than 40 percent of their total service delivery than in any other region. Despite its high reverse contracting rates, the Southeast also had the largest share of local governments that did not reverse contract a single service. Different from Southeastern local governments, local governments in the Northeast reverse contracted the smallest share of services. This finding is not surprising given that local governments in this region contracted the smallest share of services. Although services provided via joint delivery accounted for the most numeric contract reversals, services provided via nonprofit delivery were reverse contracted at the highest rate followed by services provided by other governments. The reverse contracting rate for for-profit providers in all local governments ranged from 14-23 percent with local governments in the West Coast reverse contracting the largest share of these services. Figure 5.8 illustrates these variations.



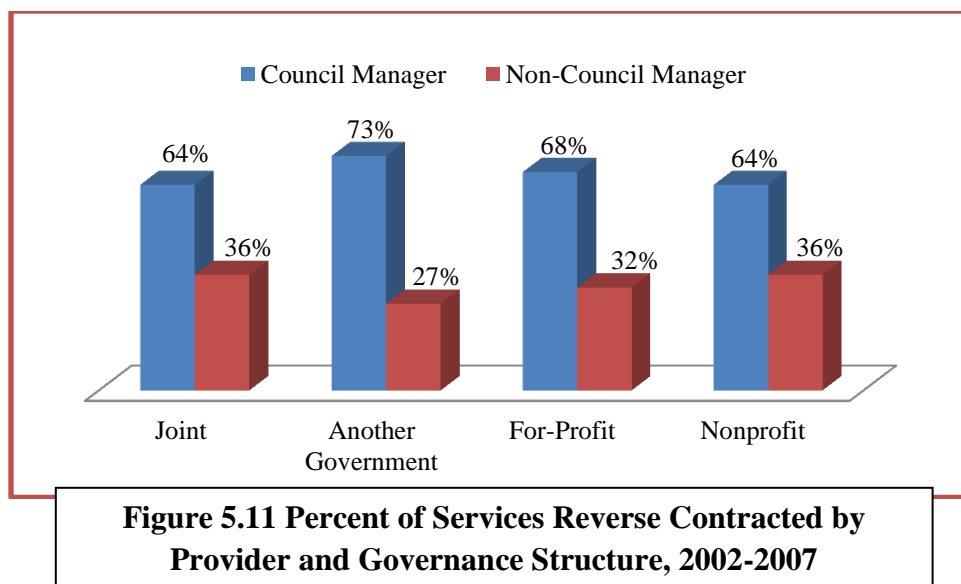
Local governments with council managers reverse contracted nonprofit delivery at higher rates than other types of delivery. Services contracted to other government authorities received the second highest proportionate share of reversals by local governments with council managers. Different from local governments with council managers, local governments without council managers reverse contracted services from nonprofit providers the least. However, these governments reverse contracted services to for-profit providers more. Figure 5.9 presents these findings.



Similar to the results from 1997 to 2002, local governments in the Midwest reverse contracted the largest share of services from 2002 to 2007. Local governments in this region reverse contracted 39 percent of all services reverse contracted from for-profit providers and 30 percent of all services reverse contracted from joint ventures. The latter of which is similar to the results found from 1997 to 2002. However, the former finding differs from the previous observed years. For example, local governments in the West Coast region formerly reverse contracted the largest share of services from for-profit providers. From 2002 to 2007, local governments in the Southeast reverse contracted the largest share of services from other government authorities, contracting back-in 48 percent of these services. In addition, the highest percentage of services reverse contracted from nonprofit organizations was reverse contracted in the Mountain Plains region rather than in the Southeast as in 1997. Similar to the preceding era, local governments in the Northeast reverse contracted the fewest services. Figure 5.10 illustrates these findings.



Local governments with council managers, from 2002 to 2007, reverse contracted at the highest rate services that had been previously contracted to other governments. Services contracted to for-profit providers were next. The lowest percentages of services were reverse contracted from joint and nonprofit delivery. Contrastingly, local governments without council managers reverse contracted more services from nonprofit and joint delivery. These local governments reverse contracted from other government authorities less. Figure 5.11 illustrates these variations.



Variations in the Characteristics of Local Governments' Reverse Contracting from All Providers by Year

From 1997 to 2002, local governments, for the most part, engaged in numerous forms of delivery. While most governments reverse contracted services, some local governments refrained. This causes one to wonder how these local governments compare to those that alternated between deliveries. Table 5.6 illustrates these variations by activity, provider, and governance structure.

Variables of Interest	Reverse Contracts, 1997-2002										Reverse Contracts, 2002-2007									
	No Reversals		Nonprofit		For Profit		Other Govt.		Joint		No Reversals		Nonprofit		For-Profit		Other Govt.		Joint	
	CM	NCM	CM	NCM	CM	NCM	CM	NCM	CM	NCM	CM	NCM	CM	NCM	CM	NCM	CM	NCM	CM	NCM
<i>Transaction Costs</i>																				
Percent of Services Contracted with High Asset Specificity, 1997/2002	6.57	5.28	10.14	11.62	10.55	8.42	11.48	9.28	9.58	8.59	4.75	3.05	10.18	8.91	8.43	7.96	10.78	11.67	8.86	9.09
Percent of Services Contracted with Contract Management Difficulty, 1997/2002	4.89	5.03	8.03	10.60	8.63	8.61	9.66	9.04	7.90	8.42	3.77	3.14	7.76	10.52	6.31	7.87	9.61	10.46	6.42	8.56
Percent of Services Contracted with Limited Market Competition, 1997/2002	4.26	4.22	8.95	5.39	8.39	7.51	9.47	8.27	7.71	7.68	3.79	3.12	8.03	8.67	5.77	6.59	8.80	8.83	6.46	7.54
<i>Constitutional Rule</i>																				
Tax and Expenditure Limit	49	8	6	2	43	15	53	9	89	19	3.79	3.12	8.03	8.67	5.77	6.59	8.80	8.83	6.46	7.54
<i>Substantive Rule</i>																				
Discretion	0.24	0.04	0.24	-0.11	0.38	0.19	0.29	0.12	0.30	0.26	0.12	-0.03	0.39	-0.38	0.31	-0.29	0.13	-0.12	0.27	-0.05
<i>Characteristics of Local Government</i>																				
Contracting Rate	5.96	4.80	9.61	7.36	7.89	7.59	8.26	10.31	9.37	10.53	6.97	4.03	6.36	7.34	6.40	7.43	6.45	7.47	8.37	7.48
Reverse Contracting Rate	—	—	17.32	22.79	18.18	17.95	18.15	15.43	14.94	14.73	—	—	17.40	14.89	13.38	14.15	14.21	13.36	11.80	14.31
<i>Local Government Size</i>																				
County	15	22	4	1	13	15	18	9	35	28	0	28	0	6	0	20	4	6	0	64
Metropolitan Area	106	35	16	3	103	31	112	24	202	47	12	9	3	2	9	8	8	3	32	22
Suburb	80	24	9	10	69	23	78	17	143	29	16	21	2	4	9	14	12	10	35	27
<i>Readiness for Change</i>																				
Contract Management Capacity	4.88	3.87	8.15	4.25	7.26	4.43	6.57	3.71	6.96	4.40	6.55	3.57	7.5	7.38	6.55	6.81	5.71	5.42	6.26	5.98
Percent of Services via Joint Delivery, 1997/2002	13.95	9.09	18.88	20.55	20.62	18.47	18.52	14.84	25.79	23.18	12.87	8.90	23.63	20.41	8.34	7.81	19.95	25.03	27.67	31.82
Internal Capacity Changes	4567	1921.7	1821.35	769	6275.8	1531.16	5313	1154.5	5238.6	1380.4	2871	488.5	2747.6	769	1426.7	1151.8	917.68	600.5	2459	730
<i>Situational Factors: Financial</i>																				
Mandates Tied to Intergovernmental Financing	2	6	1	0	5	1	8	1	16	4	0	4	0	0	4	2	6	1	12	10
Difference in State and Local Tax Burden	-0.19	-0.32	-0.21	-0.51	-0.21	-0.32	-0.22	-0.30	-0.26	-0.28	0.27	0.33	0.33	0.31	0.23	0.24	0.28	0.09	0.31	0.21

Table 5.6 Average Characteristics of Local Governments' Reverse Contracting Patterns across Providers, 1997-2007 Cont'd.																				
Variables of Interest	Reverse Contracts, 1997-2002										Reverse Contracts, 2002-2007									
	No Reversals		Nonprofit		For Profit		Other Govt.		Joint		No Reversals		Nonprofit		For-Profit		Other Govt.		Joint	
	CM	NCM	CM	NCM	CM	NCM	CM	NCM	CM	NCM	CM	NCM	CM	NCM	CM	NCM	CM	NCM	CM	NCM
Number of Additional Services	3.90	3.62	2.50	2.75	2.94	3.32	2.90	3.29	3.06	3.68	3.62	4.97	5.31	6	8.53	7.31	6.32	6.58	7.11	5.58
<i>Situational Factors: Political</i>																				
Citizen Opposition to Privatization	11	6	4	0	14	3	17	1	31	6	19	10	0	1	6	4	6	3	23	14
Labor Opposition to Privatization	19	10	6	0	32	14	32	6	63	19	26	5	6	3	16	10	12	3	57	28
<i>Additional Controls</i>																				
Population Growth	15599	13584	14620	16607	11170	8002	12367	6801	13883	12774										
Population Growth between 1-10,000	158	53	11	1	60	29	79	24	133	44										
Population Growth of 60,000 or more	8	2	2	1	5	1	7	0	14	6										
Population 2000											100527	581323	187532	164923	185273	166608	181321	153539	181729	172430
Population under 50,000											69	41	9	4	46	16	36	14	138	52
Population of 200,000 or more											2	4	2	3	1	4	3	5	11	24
<i>Region</i>																				
Northeast	20	7	1	1	16	11	14	8	31	20	12	12	2	1	5	5	10	3	26	11
Southeast	33	14	9	0	24	10	39	6	52	11	18	17	3	4	14	13	22	4	37	26
Mountain Plains	25	11	2	1	26	9	27	6	49	11	23	9	4	2	5	5	8	2	45	22
Midwest	25	19	5	2	24	11	35	10	62	21	20	15	2	1	20	10	16	3	52	38
West Coast	26	2	3	0	37	3	30	5	60	9	27	7	5	0	9	0	6	0	49	8

Local governments that did not reverse contract from 1997 to 2002 contracted fewer services characterized by high transaction costs than local governments that reverse contracted. Moreover, these local governments engaged in alternative delivery at lower rates. In addition, these local governments possessed less contract management capacity—a finding which suggests that contract management capacity is developed via experience. Interestingly, local governments that did not reverse contract, on average, experienced more added services and high population growth compared to those that did reverse contract. The majority of these local governments were in Southeast.

Local governments that reverse contracted from nonprofit providers, on average, contracted more services characterized as asset specific than local governments that did not reverse contract from these organizations. In addition, these local governments, on average, reverse contracted at higher rates. Despite their reversals, these local governments possessed greater contract management capacity than local governments that did not reverse contract from nonprofits. However, these local governments experienced the smallest increases in their full-time workforce which suggests that capacity might not increase with a larger workforce. Of these local governments, those with non-council managers had the greatest reduction in their state and local tax burdens than all other governments for the observed period. Unlike other local governments, local governments with non-council managers that reverse contracted from nonprofit organizations did not experience any opposition to privatization from citizens or laborers. Population growth was also greatest in these local governments. Similarly, more local governments in the Southeast reverse contracted from nonprofit providers than local governments from other regions.

Local governments that reverse contracted from for-profit providers, on average, contracted at lower rates than all local governments that contracted. In addition, these local governments, on average, experienced the greatest increases in their full-time workforce. Local governments in the West Coast region reverse contracted more than local governments in other regions. Analyzing reverse contracting from other governments, this research found, on average, these local governments contracted more services with characterized by contract management difficulty and limited market competition. Local governments in the Southeast and Midwest reverse contracted at higher rates than local governments in other regions.

Local governments reverse contracting from joint ventures, on average, were more likely to have tax and expenditure limits in their state constitutions. In addition, these local governments possessed greater discretion from their state governments. These local governments also engaged in greater contracting. Moreover, local governments reverse contracting from joint delivery also contracted joint ventures at higher rates than local governments that did not reverse contract from joint ventures. Citizen and labor opposition were also greatest in these localities. More governments in the Midwest reverse contracted from these ventures than local governments in other regions.

The data from 2002 to 2007, this research found that local governments that did not reverse contract from 2002 to 2007 contracted fewer services characterized by high transactions costs. This finding along with the finding that these governments had lower average contracting rates is consistent with the results from 1997 to 2002. However, different from those results, these local governments had the second highest average increase in total state and local taxes. The majority of these local governments were in the Southeast and Midwest regions.

Local governments reverse contracting from nonprofit organizations reverse contracted, on average, at higher rates than local governments not contracting with these organizations. This was also found in the results from 1997 to 2002. Moreover, these local governments were again found to have higher average contract management capacity scores than all other local governments. Different from previous findings, local governments reverse contracting from nonprofits in both council and non-council manager governments did not have any mandates tied to intergovernmental financing and experienced greater increases in their full-time public workforce. Moreover, citizen opposition to contracting was lower in these governments. Local governments in the Southeast reverse contracted from these organizations more.

Local governments reverse contracting from for-profit providers, on average, contracted fewer services as joint ventures. In addition, these governments had more added services than all other governments. Different from 1997 to 2002, the majority of these governments were in the Midwest and Southeast regions.

Local governments reverse contracting from other governments, on average, contracted more services characterized by high transaction costs. Moreover, these local governments possessed less discretion from their state governments and had lower contract management scores than local governments that did not reverse contract from other governments. In addition, these local governments experienced smaller increases in state and local taxes. Consistent with the results from 1997 to 2002, the majority of these local governments were in the Southeast. The characteristics of local governments reverse contracting from joint delivery mirror the findings from 1997 to 2002. No distinct differences were found.

In all periods under observation, the majority of local governments from counties or metropolitan areas and those experiencing citizen and labor opposition were local governments

reverse contracting services from joint ventures. One reason for this finding is that the majority of local governments used this form of alternative delivery more than any other type. Therefore, the frequencies are higher. All together, the results from the table illustrate local governments that contract with different providers share similar characteristics. They also illustrate that these characteristics differ across governance structure, region, and time.

CHAPTER 6

MODELS AND RESULTS

Models

The goal of this research is to discover the factors which compel local governments to bring previously contracted services in-house. Comparing service delivery responses from city managers responding to ICMA's Alternative Delivery Surveys from 1997 to 2007, this research is able to analyze shifts over time by local government. Thus, the dependent variable for each model is the reverse contracting rate of each local government. Because local governments with council managers have significantly different propensities to reverse contract, separate models were ran for governance structures with and without these managers. A total of four models were developed. To determine variations across governments and time, this research utilizes complementary log-log regression analysis. Complementary log-log analysis is an alternative to logit and probit analysis, but is unlike these estimators in that the transformation is not symmetric to 0 but is skewed to the right (Williams, 2009). Thus, the likelihood of observing a positive outcome is considered a rare event. The decision to use this model was predicated on reverse contracting rates being below 10 percent for both observed periods. Complementary log-log models can be written as $\ln(-\ln(1-\mu))$ (Williams, 2009). For individual level data such as that used in this research, changes in the value of $X\beta$ produce nonlinear changes in the probability of success and the parameters have a similar interpretation to those from the logistic regression model (Williams, 2009). Table 6.1 presents the results of each model.

Table 6.1. Determinants of the Probability of Reverse Contracting, 1997-2007

Models	1997-2002		2002-2007	
	Reverse Contracting w/o Council Managers	Reverse Contracting w/Council Managers	Reverse Contracting w/o Council Managers	Reverse Contracting w/Council Managers
Variable	Average Marginal Effects (SE)	Average Marginal Effects (SE)	Average Marginal Effects (SE)	Average Marginal Effects (SE)
<i>Transaction Costs</i>				
High Asset Specificity	-.033*** (.01)	-.009 (.01)	.026*** (.01)	.017* (.01)
Contract Management Difficulty	.022* (.01)	-.006 (.01)	-.013 (.01)	-.002 (.01)
Limited Market Competition	.026** (.01)	.016*** (.01)	.002 (.01)	-.013 (.01)
Percent Nonprofit Delivery	.001 (.00)	.023*** (.01)	.007* (.00)	-.005 (.01)
<i>Constitutional Rules</i>				
Tax and Expenditure Limits	.187*** (.07)	-.079 (.06)	-.054 (.08)	.048 (.06)
<i>Substantive Rules</i>				
Local Government Discretion	.032 (.07)	-.006 (.08)	-.049 (.05)	-.043 (.07)
<i>Characteristics of the Local Government of Interest</i>				
New Contracting Rate	.013*** (.00)	.011*** (.00)	.006* (.00)	.004* (.00)
Percent For-Profit Delivery	.023*** (.01)	.001 (.00)	.011*** (.00)	.007* (.00)
Percent Intergovernmental Delivery	-.005 (.00)	.010*** (.00)	-.001 (.00)	.003 (.00)
<i>Local Government Size</i>				
Metro	-.136 (.09)	-.143*** (.05)	.146** (.06)	.154** (.07)
Suburban	-.018 (.09)	.050 (.05)	-.136* (.07)	-.081 (.09)
County	-.048 (.08)	-.034 (.07)	.163*** (.07)	-----
<i>Attributes of the Physical Environment</i>				
Contract Management Capacity	.012 (.01)	.013*** (.00)	.010** (.01)	-.006 (.00)
<i>Local Governments' Readiness for Change</i>				
Task Demands: Percent Joint Delivery	.009*** (.00)	.007*** (.00)	.009*** (.00)	.007*** (.00)
Resource Availability: Percent Difference in Internal Capacity	.003 (.00)	.001 (.00)	.002 (.00)	.000 (.00)
<i>Situational Factors: Financial</i>				
Mandates Tied to Intergovernmental Financing	-.041 (.21)	.131* (.07)	-.288*** (.08)	-.005 (.14)

Table 6.1. Determinants of the Probability of Reverse Contracting, 1997-2007 Cont'd.

	1997-2002		2002-2007	
Difference in State and Local Tax Burden as a Proportion of Per Capita Income	.003*** (.00)	-.002*** (.00)	-.002** (.00)	.000 (.00)
Models	Reverse Contracting w/o Council Managers	Reverse Contracting w/Council Managers	Reverse Contracting w/o Council Managers	Reverse Contracting w/Council Managers
Variable	Average Marginal Effects (SE)	Average Marginal Effects (SE)	Average Marginal Effects (SE)	Average Marginal Effects (SE)
Number of New Services	.007 (.01)	.002 (.00)	.001 (.01)	.014*** (.00)
Situational Factors: Political				
Labor Opposition	.215** (.09)	.093* (.05)	.178*** (.06)	.092 (.06)
Citizen Opposition	-.328*** (.09)	-.020 (.06)	-.224*** (.07)	-.220*** (.08)
Additional Controls				
Log of Population Growth (Difference from 1990 to 2000)	-.001 (.01)	-.001 (.01)	-----	-----
Population Growth 1-10,000	.113 (.07)	-.106*** (.04)	-----	-----
Population Growth Above 60,000		-.168* (.10)	-----	-----
Log (2000 Population)			-.090*** (.04)	.008 (.04)
Population under 50,000				.102 (.08)
Population Above 200,000			.242*** (.05)	-----
Reverse Contracting Factors				
Service Quality Concerns	-.417** (.09)	-.011 (.07)	.038 (.09)	.048 (.07)
Problems with Contract Specifications	.286** (.10)	.120 (.09)	.063 (.11)	.100 (.15)
Insufficient Cost Savings	.326*** (.06)	.071 (.07)	.131* (.07)	-.023 (.08)
Local Government Efficiency Improved	-.518*** (.05)	-.065 (.09)	.029 (.08)	.105 (.11)
Region				
Mountain Plain	-.036 (.13)	.147*** (.07)	.177*** (.06)	.093 (.09)
Midwest	-.157* (.08)	.123*** (.06)	.142* (.08)	.092 (.08)
Southeast	-.179* (.10)	.019 (.07)	.093 (.06)	.009 (.09)
West Coast	.270*** (.08)	.055 (.07)	-.020 (.08)	-.075 (.09)
Adjusted McFadden R ²	0.467	0.295	.0361	0.273

***Significant at the 0.01 level; **Significant at the 0.05 level; *Significant at the 0.10 level.

Results

Because no person can actually have the mean values of all independent variables, this research used average marginal effects to illustrate the effects of a one unit change in the independent variables on the probability of a local government reverse contracting. With average marginal effects, a marginal effect is computed for each case, and then all the computed effects are averaged.

Examining the probability of reverse contracting from 1997 to 2002, this research found that local governments with council managers and those without council managers reverse contracted under different circumstances. For instance, in local governments without council managers, the findings were mixed for the hypotheses regarding transaction costs. For example, contracting services that were asset specific was negatively associated with the probability of reverse contracting, while contracting services that were difficult to monitor and/or manage and services with limited market competition were positively associated with the probability of reverse contracting. These findings suggest that services that are asset specific might not be as risky as previous research have assumed. For example, Lamothe, Lamothe, and Feiock (2009) maintained that services that were asset specificity were less conducive to reverse privatization for two reasons. First, the buyer and seller were bilaterally interdependent, leading to a long-term contractual relationship (Lamothe et al. 2009). Second, asset specific services require large investments of fixed assets (Lamothe et al. 2009). Internalization is only more efficient when the transaction costs for monitoring exceed cost savings from external production (Lamothe et al. 2009). Moreover, these findings suggest that local governments without council managers were more capable of reverse contracting when the percentage of these services as a proportion of total service delivery was lower.

Similarly, the results support the hypothesis regarding tax and expenditure limits in the state constitutions. In local governments without council managers, the presence of a tax and expenditure limit in the state constitution was positively associated with the probability of reverse contracting. Characteristics of the physical environment also mattered. The percentage of services contracted to for-profit providers was positively associated with the probability of reverse contracting. In addition, the percentage of new contracts was positively associated with the probability of reverse contracting. These findings refute expectations that these rates were inversely related with the probability of reverse contracting. Moreover, these findings suggest that the more services a local government contracts, the greater its probability of reverse contracting. In addition, local governments' readiness for change influenced their probability of reverse contracting. For example, the percentage of services contracted as joint ventures was positively associated with the probability of reverse contracting.

Surprisingly, the only financial factor found influential in local governments without council managers was the variation in state and local tax burden as a proportion of per capita income. As expected, variations in tax burden were positively associated with the probability of reverse contracting. Support for political factors was mixed. For instance, in local governments without council managers, the presence of opposition to privatization from laborers was positively associated with the probability of reverse contracting, while the presence of opposition to privatization from citizens was negatively associated with the probability of reverse contracting. This finding contradicts previous research by Warner and Hefetz (2004, 2011) which suggest that citizen opposition matters more in service delivery restructurings.

Although all motivations for reverse contracting were expected to be positively associated with the probability of reverse contracting, only two were positively associated with

the probability of reverse contracting. These were the insufficient cost savings and problems with contract specifications. Negatively associated with the probability of reverse contracting were service quality concerns and improvements in government's efficiency. These findings show that singly quality concerns or improvements in government's efficiency do not increase the probability of reverse contracting. Yet, in conjunction with other factors, they might have a positive effect. However, interactive effects were not explored in this research. Moreover, significant regional variations were found. In local governments without council managers, being in the Midwest or Southeast regions was negatively associated with the probability of reverse contracting, while being in the West Coast region was positively associated with the probability of reverse contracting in comparison to being in the Northeast or base regional category.

The marginal effects illustrate that in local governments without council managers with tax and expenditure limits in their state's constitution the probability of reverse contracting was 18.7 percent greater than local governments in with other managers that did not have these limits. Local governments that recorded having opposition from laborers to privatization exhibited nearly 22 percent greater probability of reverse contracting than local governments without council managers not reporting opposition from laborers. Local governments reporting problems with contract specifications had a 28.6 percent greater probability of reverse contracting than local governments without council managers not reporting this problem, while local governments reporting insufficient cost savings possessed a 32.6 percent greater probability of reverse contracting than local governments not reporting insufficient cost savings without council managers. Moreover, local governments in the West Coast region had 27 percent greater

probability of reverse contracting than local governments without council managers in the Northeast or base regional category.

Contrastingly, local governments without council managers reporting opposition from citizens to privatization had a 32.8 percent lower probability of reverse contracting than local governments without council managers not reporting opposition from citizens. Ironically, local governments reporting service quality concerns as motivations for reverse contracting had almost a 41.7 percent lower probability of reverse contracting than local governments without council managers not reporting service quality concerns as a motivation for contracting back-in. Similarly, local governments reporting improvements in governments' efficiency as motivations for reverse contracting had a 51.8 percent lower probability of reverse contracting than local governments without council managers not reporting this motivation. Regional variations were also found. For example, local governments in Midwest had a 15.7 percent lower probability of reverse contracting while local governments in the Southeast had an 17.9 percent lower probability of reverse contracting than local governments without council managers in the Northeast or base regional category.

The interpretation for continuous variables differed from that of binary variables. In these cases, the reported average marginal effect was the average change in the probability of reverse contracting for a one unit change in the Xs. For local governments without council managers, the probability of reverse contracting increased, on average, by 1.3 percent as the percent of new contracts as a proportion of total service delivery increased. However, this increase was not constant. For example, a local government that had a new contracting rate of 30 percent had a 21.6 percent greater probability of reverse contracting than a local government

that had a new contracting rate of 10 percent. In this case, the average marginal increase was not 1.3 percent but was 1.1 percent. Figure 6.1 shows this increase.

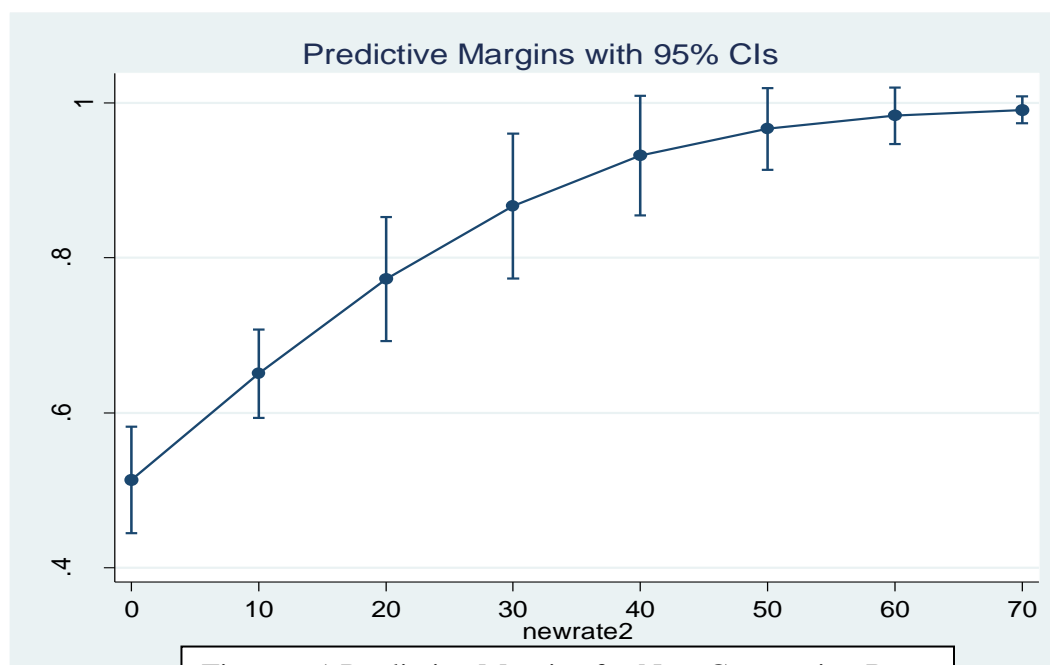


Figure 6.1 Predictive Margins for New Contracting Rate

On average, local governments without council managers experienced a 2.2 percent increase in the probability of reverse contracting as the percent of services contracted with contract management difficulty as a proportion of total service delivery increased. However, the difference in probability was 1.7 percent for a local government with a manager that was not a council manager that contracted 20 percent of these services as their total service delivery compared to a local government without a council manager that contracted 10 percent of these services as their total service delivery. Similarly, on average, local governments without council managers experienced a 2.5 percent increase in the probability of reverse contracting as the percentage of services contracted with limited market competition as a proportion of total service delivery increased.

Contrastingly, local governments without council managers, on average, experienced a 3.3 percent reduction in the probability of reverse contracting as the percentage of asset specific services contracted as a proportion of total service delivery increased. Again, this effect was not constant across values of x . For example, when we compare a local government without a council manager that contracted 25 percent of services as their total service delivery to a local government that contracted 15 percent of these services as their total service delivery, the average reduction is 2.02 percent. Figure 6.2 illustrates this decrease.

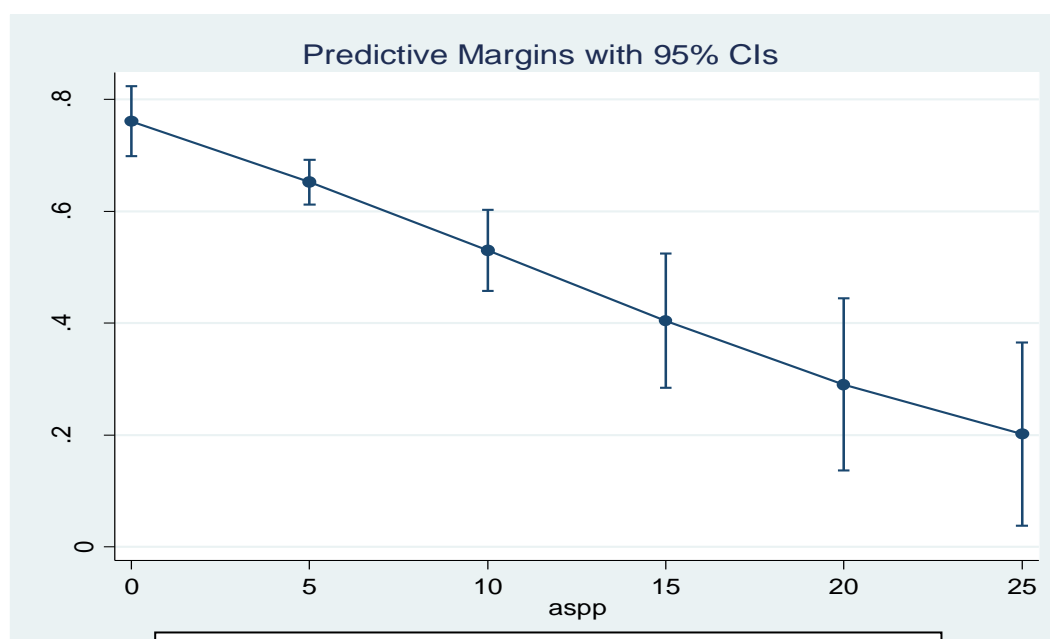


Figure 6.2 Predictive Margins for Asset Specific Services

In addition, increases in the percentage of services contracted as joint ventures and those contracted to for-profit organizations as a proportion of total service delivery increased the probability of reverse contracting, on average, by approximately 0.9 and 2.3 percent respectively. As mentioned before, these effects varied by the value of x . For example, a local government without a council manager that contracted 40 percent of its services as joint ventures in comparison to a local government without a council manager that contracted 30 percent of its

services as joint ventures had a average increase of 0.73 percent in the probability of reverse contracting. Figure 6.3 illustrates this increase.

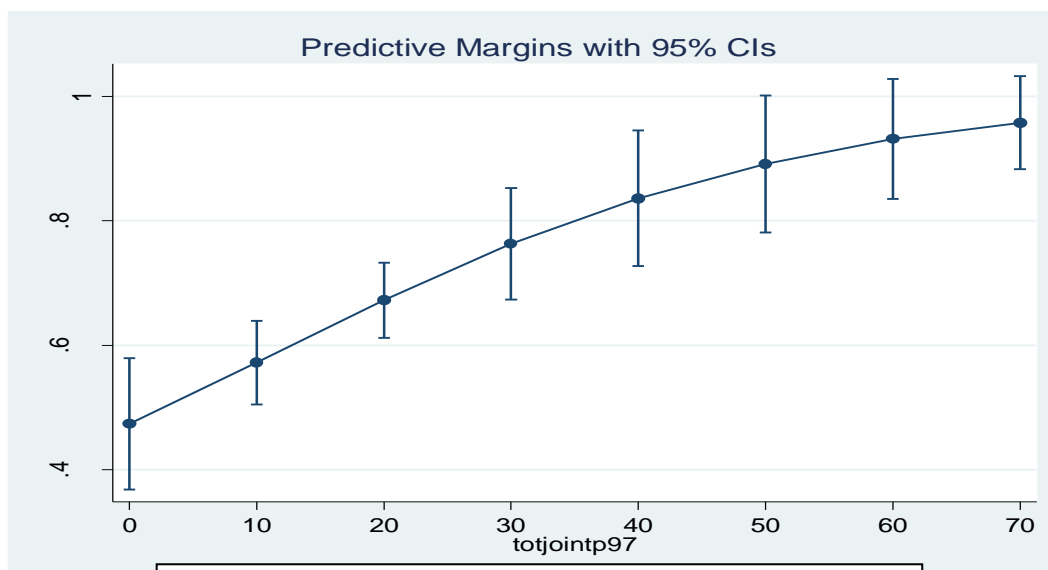
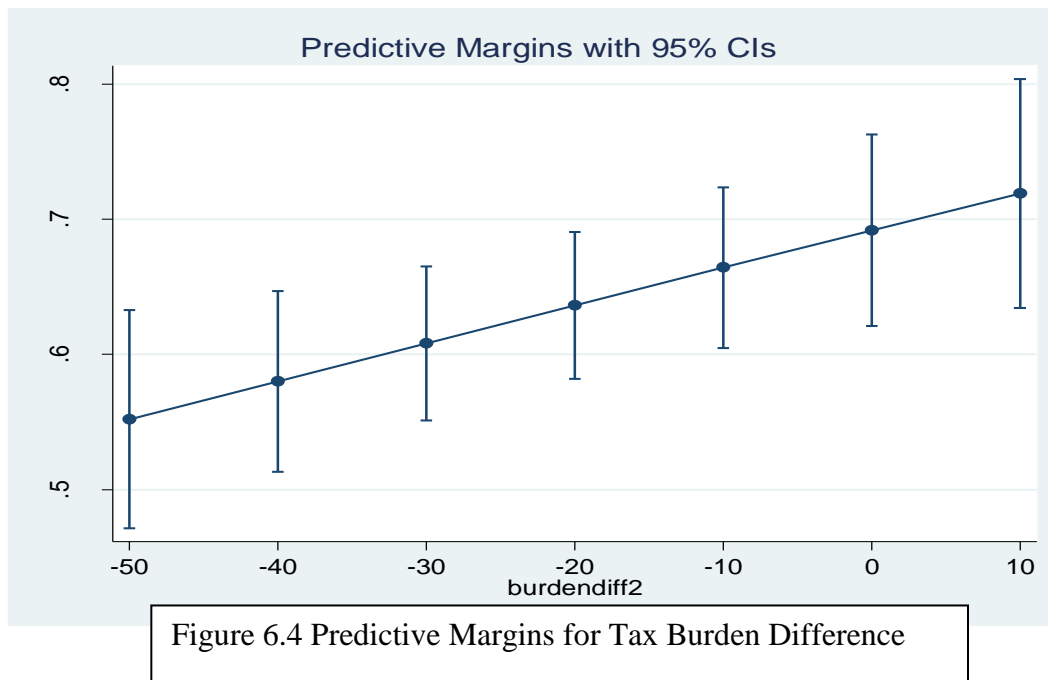


Figure 6.3 Predictive Margins for Total Joint Delivery

Moreover, the results illustrated that a one percent increase in the state and local tax burdens as a proportion of per capita income increased the probability of reverse contracting, on average, by 0.29 percent. Again, these effects differed by values of x . For example, the average increase was 0.27 percent for a local government without a council manager that did not experience a difference in state and local tax burden as a proportion of per capita income compared to a local government without a council manager that experienced a 10 percent increase in state and local tax burden as proportion of per capita income. Figure 6.4 illustrates this increase.



Analyzing the probability of local governments with council managers reverse contracting, this research found support for two hypotheses regarding transaction costs. For example, the probability of reverse contracting in these governments was positively associated with the percentage of services contracted with limited market competition and those contracted to nonprofit organizations as a proportion of total service delivery. Support was also found regarding characteristics of the local government of interest. For example, the percentage of services contracted to other government authorities as a proportion of total service delivery was positively associated with the probability of reverse contracting. In addition, the probability of reverse contracting was positively associated with rate of new contracting as a proportion of total service delivery. Consistent with expectation, being in a metropolitan area was negatively associated with the probability of reverse contracting. Moreover, contract management capacity was positively associated with the probability of reverse contracting. Similar to local governments without council managers, the probability of reverse contracting was positively

associated with the percentage of services contracted as joint ventures as a proportion of total service delivery. Different from local governments without council managers, the probability of reverse contracting was negatively associated with variations in state and local tax burden as a proportion of per capita income.

Moreover, the results indicated that the presence of opposition to privatization from laborers and mandates tied to intergovernmental financing were positively associated with the probability of reverse contracting. Controls for population growth were also found significant. Having a population growth between 1 and 10,000 residents and a growth of 60,000 or more residents were both negatively associated with the probability of reverse contracting. Regional variations were also found. For example, being in either the Midwest or Mountain Plains regions was positively associated with the probability of reverse contracting in comparison to being in the Northeast or base regional category.

The marginal effects indicate that local governments with council managers in metropolitan areas exhibited a 14 percent reduction in the probability of reverse contracting than local governments not in metropolitan areas. In addition, local governments with council managers in the Midwest and Mountain Plains regions exhibited a 13 and 14.7 percent greater probability of reverse contracting than local governments with council managers in the Northeast or base regional category. Population growth was negatively associated with the probability of reverse contracting. For instance, local governments that experienced a population growth between 1 and 10,000 persons also experienced nearly an 11 percent reduction in the probability of reverse contracting than local governments that did not experience this growth. Moreover, local governments that experienced a growth above 60,000 persons experienced almost a 17 percent reduction in the probability of reverse contracting than local governments that did not

experience this growth. Furthermore, local governments with council managers that experienced opposition to privatization from laborers had 9.3 greater probability of reverse privatizing. The presence of mandates tied to intergovernmental financing increased the probability of reverse privatizing in local governments with council managers by 13 percent.

On average, local governments with council managers experienced a 1.1 percent increase in the probability of reverse contracting as their new contracting rate increased. Contracting a larger percentage of services for which there was limited competition had a similar effect. On average, local governments experienced a 1.6 percent increase in the probability of reverse contracting as the percentage of these contracted services increased. Again, these effects differed by values of x . For example, when we compare a local government that contracted 10 percent of services for which there was limited market competition as their total service delivery to a local government that contracted 20 percent of these services as their total service delivery, the average marginal increase in the probability of reverse contracting was 1.37 percent. Figure 6.5 illustrates this increase.

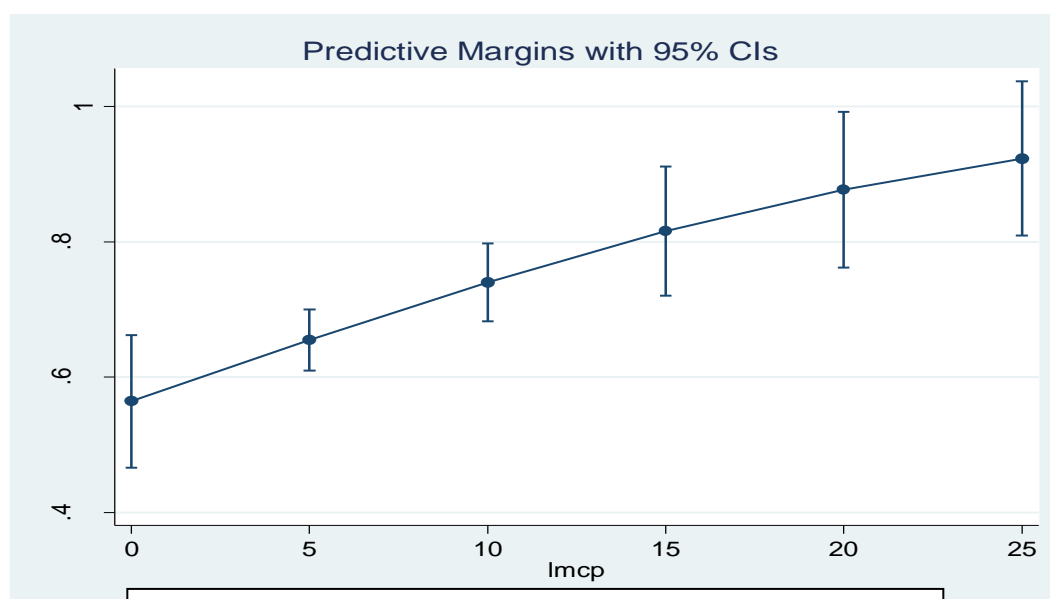


Figure 6.5 Predictive Margins for Limited Market Services

Local governments, on average, experienced a 0.75 percent increase in the probability of reverse contracting as the percentage of services contracted as joint ventures as a proportion of total service delivery increased. Similarly, local governments with council managers experienced a 2.3 percent increase in the probability of reverse contracting as the percentage of services contracted to nonprofit organizations as a proportion of total service delivery increased. As the percentage of services contracted to other governments as a proportion of total service delivery increased, local governments with council managers, on average, experienced a 1 percent increase in the probability of reverse contracting. Yet, these effects were not uniform across different values of x . For example, when we compare local governments with council managers, one having contracted 30 percent of its service delivery to other government authorities and the other having contracted 40 percent of its service delivery to other government authorities, the average increase in the probability of reverse contracting is 0.58 percent. Figure 6.6 illustrates this increase.

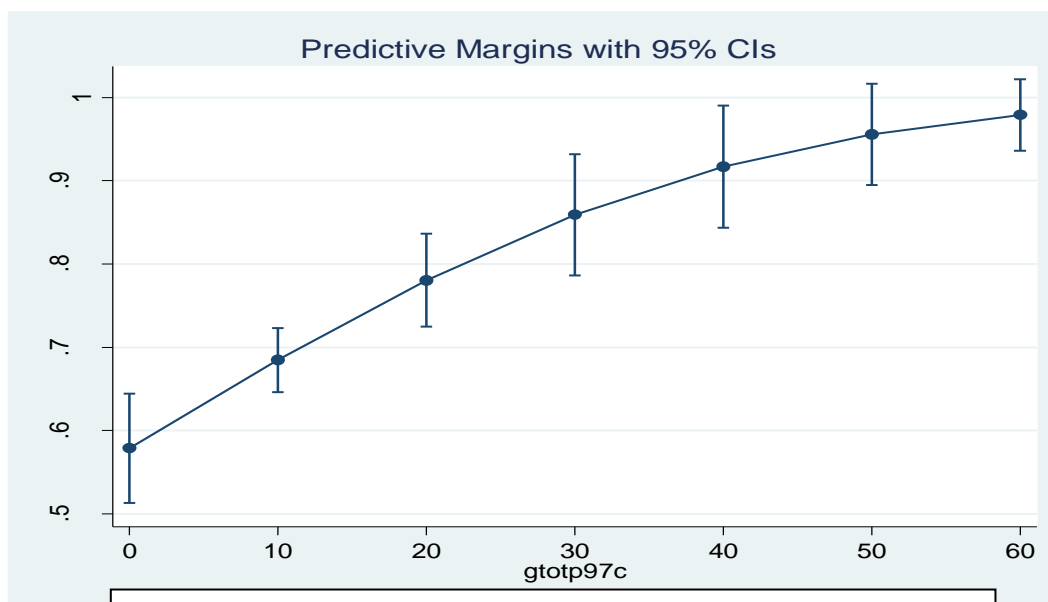
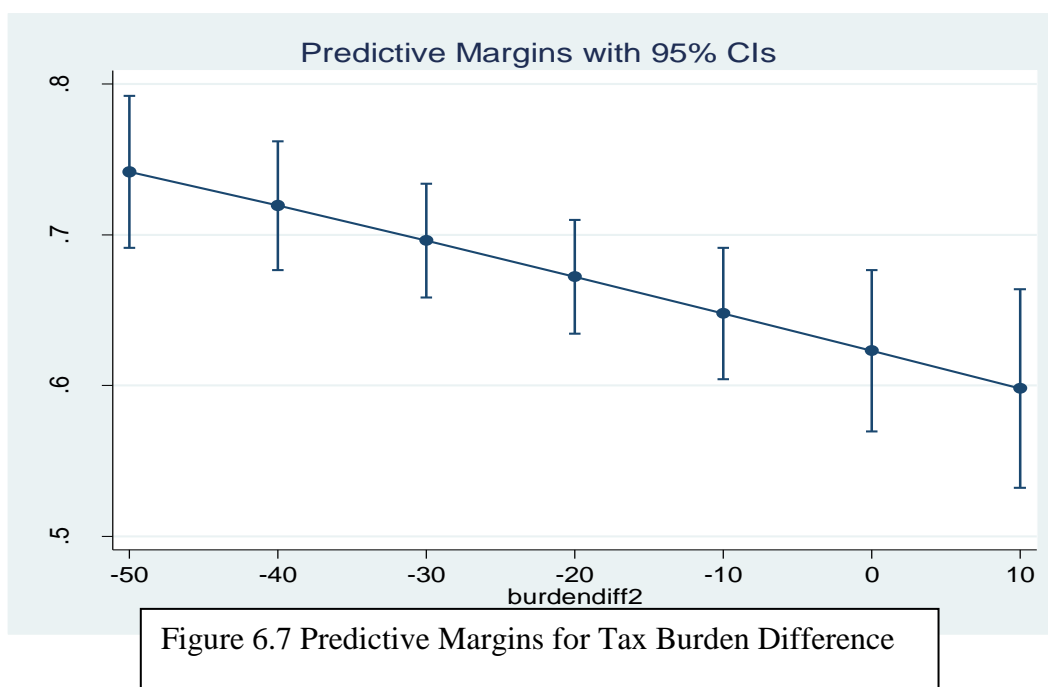


Figure 6.6 Predictive Margins for Other Government Authorities

Moreover, local governments, on average, experienced a 1.3 percent increase in the probability of reverse contracting as their contract management capacity score increased. Contrastingly, local governments experienced a 0.24 percent reduction in the probability of reverse contracting as their state and local tax burden as a proportion of a per capita income increased. Again, the effects were not uniform across values of x . For example, when we compare a local government with a council manager that experienced a 10 percent reduction in state and local tax burden as a proportion of per capita income with a local government with a council manager that experienced a 10 percent increase in state and local tax burden, we see that the average reduction is 0.25 percent. Figure 6.7 illustrates this reduction.



Again distinct differences between local governments with council managers and those without council managers were found in the results from 2002 to 2007. Contrary to the previous findings in local governments without council managers, the direction of influence of transaction cost factors purported with expectation. For instance, the percentage of asset specific services

contracted as a proportion of total service delivery was positively associated with the probability of reverse contracting. Moreover, the percentage of services contracted to nonprofit organizations as a proportion of total service delivery was positively associated with the probability of reverse contracting. In addition, characteristics of the local government of interest were influential. For example, contracting to for-profit organizations was positively associated with the probability of reverse contracting. Furthermore, the percentage of services newly contracted as a proportion of total service delivery was also positively associated with the probability of reverse contracting. Consistent with the hypotheses regarding local government size, being in a metropolitan area or county was positively associated with the probability of reverse contracting, while being in a suburb was negatively associated with the probability of reverse contracting. These findings differ from the findings of Hefetz and Warner (2011).

The results support the hypothesis that contract management capacity would be positively associated with the probability of reverse contracting. Moreover, the percentage of services contracted via joint delivery as a proportion of total service delivery was positively associated with the probability of reverse contracting. Interestingly, financial factors had the opposite effect. For example, both variations in state and local tax burden as a proportion of per capita income and the presence of mandates tied to intergovernmental financing were negatively associated with the probability of reverse contracting. These findings suggest that when local governments without council managers are under fiscal stress, rather than restructure their service delivery, they maintain existing modes of delivery.

The results for political factors mirror those found from 1997 to 2002. Labor opposition to privatization was positively associated with the probability of reverse contracting. Yet, citizen opposition was negatively associated with this probability. Consistent to expectation, the

logarithm of population was negatively associated with the probability of reverse contracting. However, having a population of 200,000 residents or more was positively associated with the probability of reverse contracting. As expected, insufficient cost savings was positively associated with the probability of reverse contracting as well. Different from 1997 to 2002, being in a local government without a council manager in the Mountain Plains or Midwest regions was positively associated with the probability of reverse contracting in comparison to being in the Northeast or base regional category.

Marginal effects indicate that local governments without council managers in metropolitan areas, on average, had a 15 percent greater probability of reverse contracting than local governments without council managers that were not in metropolitan areas. Similarly, local governments in counties, on average, had a 16 percent higher probability of reverse contracting than local governments without council managers that were not counties. Different from being a county, being in a suburb reduced the probability of a local government reverse contracting, on average, by nearly 14 percent. The presence of labor opposition to privatization, on average, increased that a local government would reverse contract by 18 percent, while contrastingly, the presence of citizen opposition reduced this probability, on average, by 22 percent.

In local governments without council managers, the presence of mandates tied to intergovernmental financing reduced the probability of reverse contracting, on average, by nearly 29 percent. Reporting insufficient cost savings as a motivation for reverse contracting was associated with a 13 percent greater probability of reverse contracting. Again, regional variations were observed. Local governments in the Mountain Plains region had a 18 percent greater probability of reverse contracting, while local governments in the Midwest had a 14

percent greater probability of reverse contracting than local governments without council managers in the Northeast or base regional category. Moreover, having a population of 200,000 or more, on average, increased the probability of a local government reverse contracting by 24 percent.

On average, local governments without council managers experienced nearly a 0.60 percent increase in the probability of reverse contracting as the percentage of new contracts as a proportion of total service delivery increased. However, when we compare a local government without a council manager that had a new contracting rate of 30 percent compared to a local government that had a new contracting rate of 40 percent, we find the average marginal increase in the probability of reverse contracting is 0.40 percent. Figure 6.8 illustrates this increase.

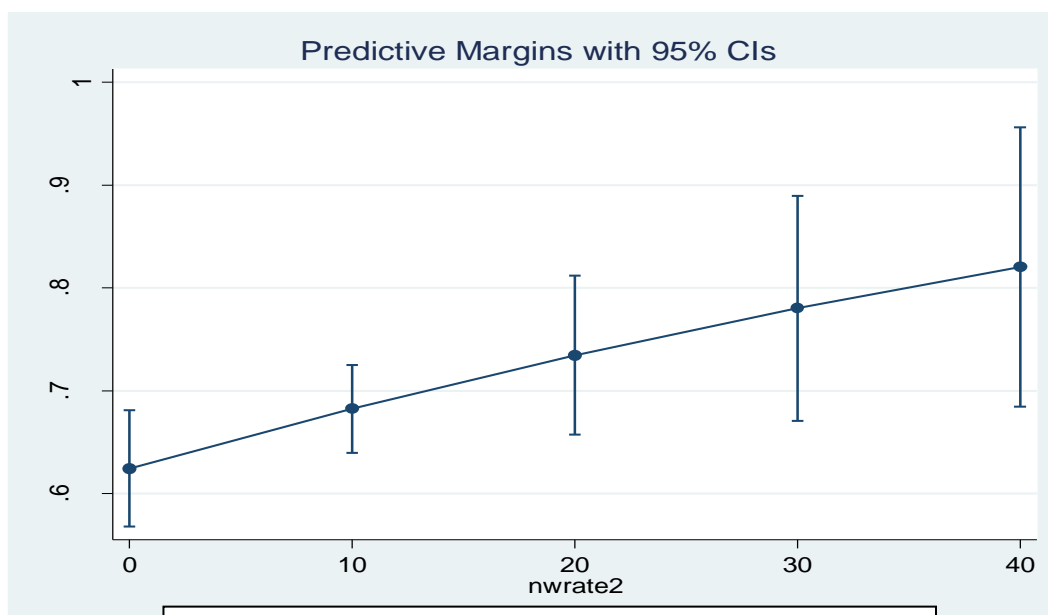


Figure 6.8 Predictive Margins for New Contracting Rate

On average, local governments without council managers experienced a 2.6 percent increase in the probability of reverse contracting as the percentage of asset specific services contracted as a proportion of total service delivery increased. Again, this effect was not uniform across values of x . For example, the average marginal increase for a local government that

contracted 20 percent of its service delivery compared to a local government that contracted 10 percent of its service delivery was 1.87 percent. Figure 6.9 illustrates this increase.

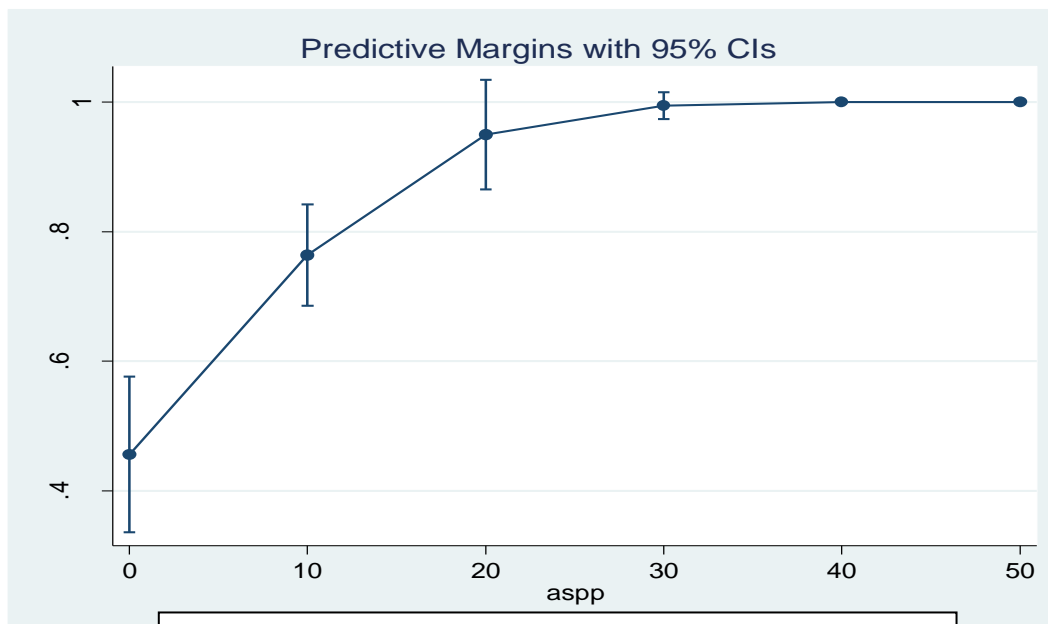


Figure 6.9 Predictive Margins for Asset Specific Services

Moreover, local governments without council managers, on average, experienced a 0.90 percent increase in the probability of reverse contracting as the percentage of services contracted as joint ventures as a proportion of total service delivery increased and a 0.70 percent increase as the percentage of services contracted to nonprofit organizations as a proportion of total service delivery increased. Similarly, the percentage of services contracted to for-profit providers as a proportion of total service delivery was associated with an average increase of 1.1 percent in the probability of reverse contracting. Finally, increases in contract management capacity were associated with an average increase of 1 percent increase in the probability of reverse contracting.

Factors found to reduce the probability of reverse contracting were differences in state and local tax burden as a proportion of per capita income and the logarithm of population. For

example, local governments without council managers experienced a 0.20 percent reduction in the probability of reverse contracting as their state and local tax burden as a proportion of per capita income increased. Moreover, as population increased by 312,017, the probability of reverse contracting increased, on average, by 9 percent. Figure 6.10 illustrates changes in this increase across different values of population.

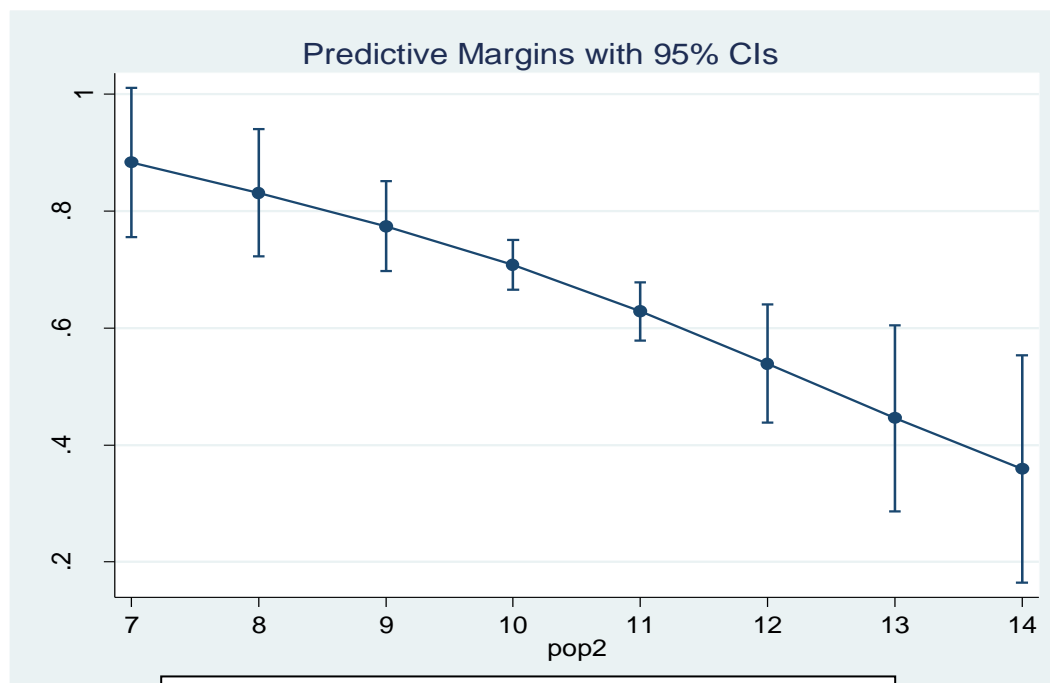


Figure 6.10 Predictive Margins for Log(Population)

Similar to the results for local governments without council managers, positively associated with the probability of reverse contracting in local governments with council managers was the percentage of asset specific services contracted as a proportion of total service delivery. Moreover, the percentage of services contracted to for-profit providers as a proportion of total service delivery was also positively associated with the probability to reverse contract. Furthermore, being in a metropolitan area was positively associated with the probability of reverse contracting. As in all models, the percentage of services contracted as joint ventures was positively associated with the probability of reverse contracting.

Different from previous findings, local governments with council managers from 2002 to 2007 experienced an increase in the probability of reverse contracting as the number of new services increased. Consistent with previous findings, citizen opposition was negatively associated with the probability of reverse contracting.

Marginal effects indicate that local governments with council managers in metropolitan areas exhibited a 15 percent greater probability of reverse contracting than local governments with council managers not in metropolitan areas. However, local governments with council managers reporting opposition to privatization by citizens had a 22 percent lower probability of reverse contracting than local governments with council managers not reporting opposition to privatization from citizens. As the percentage of new contracts increased, local governments with council managers, on average, experienced a 0.40 percent increase in the probability of reverse contracting. On average, local governments with council managers experienced a 1.7 percent increase in the probability of reverse contracting as the percentage of asset specific services contracted as a proportion of total service delivery increased. A similar finding was discovered for the percentage of services contracted as joint ventures and those contracted to for-profit organizations. For example, on average, local governments with council managers experienced a 0.70 percent increase in the probability of reverse contracting as the percentage of services contracted as joint ventures or to for-profit organizations as a proportion of service delivery increased. The average effect was the same for both providers. Finally, the results indicated that as the number of additional services in local governments with council managers increased, the probability of reverse contracting increased, on average, by 1.4 percent. Figure 6.11 illustrates these increases.

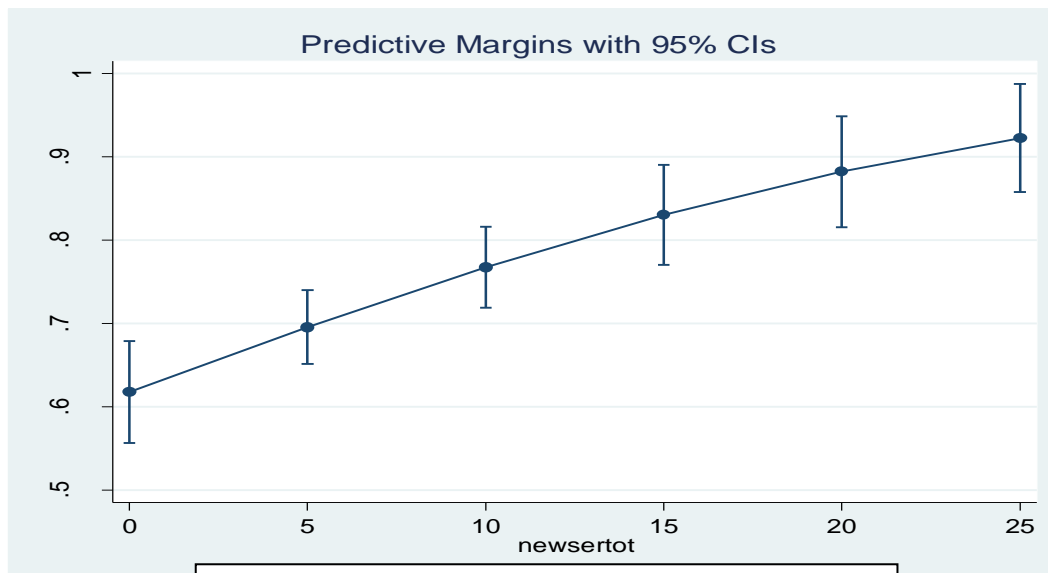


Figure 6.11 Predictive Margins for New Services

Collectively these findings suggest that the probability that a local government will choose to internalize previously contracted services is based on a multitude of factors. The findings also suggest that these factors differ by local governance structure, geographic region, and time. Moreover, the results indicate that transaction costs, nonprofit failure, rules, previous contracting rates, new contracting rates, local government size, attributes of the physical environment, readiness, and situational factors, and population size (and growth) have explanatory power. Furthermore, the results indicate that the IAD framework and organizational change theories are useful for analyzing service delivery shifts.

CHAPTER 7

CONCLUSION

Research on service delivery restructurings has framed the decision to reverse contract as being motivated by government, market, or contract failure (Hefetz and Warner, 2004, 2011). Yet, that same research has found that services with the highest reverse contracting rates also have the highest new contracting rates (Hefetz and Warner, 2004, 2011). However, the findings of this research suggest that it is time to move beyond failure frameworks and instead look at the full array of factors that influence reverse contracting behavior. Privatization is not a one way street. What happens to services once they are outsourced has not been extensively analyzed. Left unanalyzed in the literature is the extent to which additional factors play a role in these decisions. The findings of this research indicate that local governments' service delivery arrangements are predicated on a host of factors. These factors include previous mode of delivery, previous provider, experiences with each mode, characteristics of the service, constitutional rules, substantive rules, operational rules, financial and political factors, potential readiness, region, and time.

More specifically, the findings reported in this dissertation support the hypothesis that transaction costs (i.e., asset specificity, contract management difficulty, limited market competition, and nonprofit delivery) are positively associated with the probability of reverse contracting. Moreover, the results support the hypothesis that local governments with tax and expenditure limits in their state constitutions have a higher probability of exiting contractual

arrangements than local governments that do not have these limits. In contrast, the results did not support the hypothesis that previous contracting rates and new contracting rates were inversely associated with the probability of reverse contracting. Instead, the findings suggest that as the percentage of services contracted increases, a local governments' probability of reverse contracting increases.

The results provided mixed support for the hypotheses regarding local government size. For example, being in a metropolitan area was both negatively and positively associated with the probability of reverse contracting. Yet, being in a suburb was negatively associated with the probability of reverse contracting. Contrastingly, being in a county was positively associated with the probability of reverse contracting. These findings suggest that both large and small local governments have a higher probability of reverse contracting than mid-sized governments.

Support for local governments' readiness for change was only found for the percentage of services contracted as joint ventures as a proportion of total service delivery. In all models, this percentage was positively associated with the probability of reverse contracting. The results did not support the hypothesis regarding changes in internal capacity. The insignificant effect for this regressor suggests that local governments do not weigh these changes in their calculus for restructuring.

In addition, the results found mixed support for the hypothesis regarding fiscal stress. For example, the presence of mandates tied to intergovernmental financing was both negatively and positively associated with the probability of reverse contracting. However, the direction of influence varied by governance structure. In local governments without council managers, the effect was negative, whereas the effect was positive in local governments with council managers.

Similarly, variations in state and local tax burden as a proportion of per capita income was both negatively and positively associated with the probability of reverse contracting. Consistent with the hypothesis, the number of additional services provided was positively associated with the probability of reverse contracting.

Different from previous research, the findings suggest that local governments pay more attention to opposition to privatization from employees than opposition from citizens (Hefetz and Warner, 2004, 2011). For example, in all models, the presence of opposition from laborers was positively associated with the probability of reverse contracting. However, the presence of opposition from citizens was negatively associated with the probability of reverse contracting.

The effects of population, for the most part, were inversely related to the probability of reverse contracting. For example, growth between 1 and 10,000 residents, growth above 60,000 residents, the logarithm of growth, and the logarithm of the 2000 population were negatively associated with the probability of reverse contracting. However, having a population of 200,000 residents or more was positively associated with the probability of reverse contracting.

Surprisingly, reporting service quality concerns or improvements in local government efficiency was negatively associated with the probability of reverse contracting.¹¹ On the other hand, reporting problems with contract specifications or insufficient cost savings was positively associated with the probability of reverse contracting. Given that this difference was only found in local governments without council managers, it suggests that, in these governments from 1997 to 2002, cost savings and contract specifications were weighed more heavily in the decision to reverse contract. Furthermore, the findings suggest that improvements in efficiency and service quality concerns might, in conjunction with other factors, positively influence this probability.

¹¹ This means that local governments that reported service quality concerns or improvements in local government efficiency had lower reverse contracting rates than local governments that did not report these factors.

Finally, this research found support for regional variations. However, the findings varied across governance structure and time.

Moreover, the results illustrate that local governments utilize distinct arrangements for different types of services. For example, local governments, on average, utilized joint delivery for support services, for-profit delivery for public works/transportation services, other governments for health and human services, and nonprofit organizations for arts and cultural programs.

Unlike existing empirical analyses, this research highlights the significance of exploring alternative theories and frameworks concerning decisions to internalize previously contracted services. Developed to explain common pool resources, the IAD Framework provides an insightful way to analyze shifts. Because internalization is likely to have an effect on existing production and management systems, institutional factors can serve as constraints or impetuses for organizational change. Understanding which factors are important and the direction of their influence can help local governments prepare for needed changes. Moreover, knowing which factors allow for greater fluidity of delivery can help local governments to better serve their citizens.

This research's contribution to the literature is three-fold. First, it highlights the importance of institutional factors in reverse privatization decisions. Second, this research utilizes a statistical approach that has not been applied in internalization research. Although contracting has typically been a norm in local governments, reverse contracting has been less of a norm. Treating the decision to reverse contract as a rare event, increases the likelihood that the marginal effects of the regressors explored are unbiased. Future research analyzing these decisions should utilize this and other approaches that model rare events. Third, the findings

illustrate that contracting with nonprofit organizations is associated with a greater probability of reverse contracting. Unanswered by this research is why? As a result, local governments contracting with these organizations should prepare for increased risks if these shifts are in fact motivated by failure. If contracting with nonprofit organizations increases internal capacity to provide services directly or adds flexibility, then local governments seeking to strategically improve service delivery should look to these providers if the goals of contracting are not long-term.

Moreover, future research analyzing service delivery restructurings should examine how other institutional variations explain shifts in delivery. In addition, research should analyze the potential influence of interactions between factors previous research has already found. In addition, future research should combine qualitative and quantitative methods to enhance our understanding of delivery decisions. While current theories explain some variation among local governments, additional theories might have more predictive power.

Despite its intentions, this research is not without its limitations. First, this research uses indices of asset specificity, contract management difficulty, and market competition developed by Hefetz and Warner (2011) that are based on the perceptions of local government managers. Hence, the statistical reliability and validity of these constructs might not be as accurate as assumed. Perhaps factor analysis could be used to produce more reliable scales. Second, this research uses a measure of discretion that is relatively stable across state and time. However, in using this measure, this research might not actually capture true variances in discretion among local governments in the observed years. Third, this research does not control for a lot of the revenue tactics that local governments might ensue in order to cope with increased demands. For instance, some local governments have implemented user and accident fees for many

services to garner additional revenues. Because no comprehensive data set exists on which local governments have adopted these fees and how much revenue these fees have generated, we cannot empirically measure their influence. Furthermore, this research focuses exclusively on characteristics of local governments and their services. Yet, restructuring shifts might be predicated on specifications of contracts and network dynamics. No assessment of these features is made in this research. Additionally, this research does not gauge the potential influence of a local government being either a contract or independent city on the probability of reverse contracting. Because contract cities contract the majority of their cities services, these cities are likely to have higher probabilities of reverse contracting than cities which are independent and provide the majority of government services directly. Although every attempt was made to ensure proper specification, the results of this research are only as good as the predictors assessed. If important variables are missing from this research, the results will be biased. However, because many of the predictors selected are consistent with what is known in the literature to be associated with the outcome of interest, this is not hypothesized to be a great problem.

As stated above, analyses of reverse contracting at the municipal level are rare, and empirical inquiries aimed at explaining this phenomenon are rarer. The present study offers a solid beginning at framing these decisions from a different perspective. It is my hope that the findings and questions raised in this research will motivate further scholarly attention to these issues.

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APPENDICES

APPENDIX A. PERCENT DELIVERY BY PROVISION AND SERVICE, 1997									
Service	Public Delivery	Joint Delivery	Nonprofit Delivery	For-Profit Delivery	Intergovernmental Delivery	Franchise/Concession	Other	Never Provided	No Longer Provided
Public Works/Transportation									
1. Residential solid waste collection	21.68%	7.29%	0.00%	24.48%	0.75%	8.42%	1.87%	27.66%	7.85%
2. Commercial solid waste collection	9.74%	6.93%	0.00%	21.54%	0.56%	8.43%	0.18%	41.01%	11.61%
3. Solid waste repair	15.73%	5.43%	0.00%	19.10%	10.11%	3.93%	4.13%	27.34%	14.23%
4. Street repair	28.57%	47.18%	0.00%	3.57%	0.94%	0.00%	2.97%	15.64%	1.13%
5. Street/parking lot cleaning	46.34%	15.38%	0.19%	8.07%	0.94%	0.19%	0.13%	27.26%	1.50%
6. Snow plowing/sanding	39.66%	14.66%	0.00%	0.75%	1.32%	0.00%	0.71%	32.52%	10.38%
7. Traffic sign/signal installation/maintenance	36.28%	30.08%	0.00%	5.83%	4.70%	0.00%	1.83%	19.40%	1.88%
8. Parking meter maintenance and collection	17.89%	2.82%	0.19%	1.13%	1.69%	0.19%	3.02%	60.08%	12.99%
9. Tree trimming and planting on public rights of way	28.89%	37.52%	0.19%	8.82%	0.56%	0.38%	0.70%	19.94%	3.00%
10. Maintenance and administration of cemeteries	19.96%	5.08%	2.26%	2.64%	0.94%	0.00%	5.86%	60.44%	2.82%
11. Inspection/code enforcement	66.42%	14.63%	0.00%	1.13%	0.56%	0.19%	8.51%	8.00%	0.56%
12. Operation of parking lots and garages	22.03%	5.84%	0.75%	3.58%	1.69%	0.56%	4.16%	59.32%	2.07%
13. Operation/maintenance of bus transit systems	6.03%	3.39%	2.07%	4.90%	13.18%	0.38%	0.54%	65.73%	3.78%
14. Operation/maintenance of paratransit systems	5.66%	4.91%	3.77%	4.15%	8.68%	0.38%	1.51%	67.17%	3.77%
15. Operation of airports	9.76%	7.13%	0.00%	1.69%	10.51%	0.56%	5.44%	62.66%	2.25%
16. Water distribution	41.73%	6.58%	0.56%	2.44%	6.20%	0.38%	7.52%	32.52%	2.07%
17. Water treatment	37.03%	3.95%	0.38%	1.69%	12.03%	0.38%	7.99%	32.98%	3.57%
18. Sewage collection and treatment	36.98%	12.83%	0.19%	3.21%	11.70%	0.38%	8.67%	23.21%	2.83%
19. Disposal of sludge	22.26%	6.79%	0.19%	11.13%	13.96%	0.38%	5.67%	35.28%	4.34%
20. Disposal of hazardous materials	7.55%	7.36%	0.38%	12.26%	12.26%	0.75%	4.35%	63.77%	3.58%
Public Utilities									
21. Electric utility operation and management	7.89%	1.13%	0.19%	9.21%	3.38%	3.95%	0.75%	72.56%	0.94%

APPENDIX A. PERCENT DELIVERY BY PROVISION AND SERVICE, 1997									
CONT'D.									
Service	Public Delivery	Joint Delivery	Nonprofit Delivery	For-Profit Delivery	Intergovernmental Delivery	Franchise/Concession	Other	Never Provided	No Longer Provided
22. Gas utility operation and management	3.20%	0.19%	0.38%	9.42%	1.88%	3.95%	0.00%	79.85%	1.13%
23. Utility meter reading	37.41%	3.20%	0.19%	7.14%	2.63%	0.94%	6.57%	40.98%	0.94%
24. Utility billing	41.54%	4.32%	0.00%	5.08%	2.26%	0.56%	7.90%	37.78%	0.56%
Public Safety									
25. Crime prevention/patrol	70.79%	6.93%	0.00%	0.00%	3.00%	0.00%	11.29%	5.62%	2.37%
26. Police/fire communications	59.85%	9.19%	0.38%	0.56%	11.07%	0.00%	5.08%	7.56%	6.31%
27. Fire prevention/suppression	53.93%	8.43%	0.75%	0.56%	4.49%	0.00%	9.42%	19.36%	3.06%
28. Emergency medical service	33.33%	14.79%	3.56%	5.62%	7.49%	0.56%	6.31%	23.91%	4.43%
29. Ambulance service	21.39%	6.75%	4.13%	15.57%	7.13%	1.31%	4.38%	35.21%	4.13%
30. Traffic control/parking enforcement	66.04%	6.19%	0.00%	0.75%	2.63%	0.00%	9.25%	14.76%	0.38%
31. Vehicle towing and storage	3.19%	4.69%	0.94%	38.84%	1.13%	2.44%	2.43%	43.90%	2.44%
Health and Human Services									
32. Sanitary inspection	26.93%	5.84%	0.38%	1.13%	17.51%	0.00%	3.76%	40.87%	3.58%
33. Insect/rodent control	17.51%	7.91%	0.75%	6.59%	12.62%	0.00%	3.21%	46.70%	4.71%
34. Animal control	40.98%	11.65%	6.39%	2.63%	13.91%	0.00%	7.71%	12.22%	4.51%
35. Operation of animal shelters	18.98%	5.83%	14.47%	3.76%	15.04%	0.00%	4.14%	33.27%	4.51%
36. Operation of daycare facilities	3.57%	2.26%	6.02%	9.59%	3.57%	0.00%	0.00%	72.55%	2.44%
37. Child welfare programs	6.02%	7.52%	2.63%	1.13%	12.22%	0.00%	0.93%	67.86%	1.69%
38. Programs for the elderly	14.66%	24.44%	5.64%	1.69%	9.59%	0.00%	6.95%	35.90%	1.13%
39. Operation/management of hospitals	0.94%	0.56%	6.58%	7.33%	4.51%	0.00%	0.00%	78.08%	2.00%
40. Public health programs	9.77%	10.15%	2.26%	1.69%	15.41%	0.38%	1.51%	56.95%	1.88%
41. Drug and alcohol treatment programs	2.07%	7.71%	8.46%	5.64%	9.77%	0.00%	0.00%	64.92%	1.43%
42. Operation of mental health/mental retardation programs and facilities	2.26%	6.58%	4.51%	3.01%	13.53%	0.00%	0.00%	68.98%	1.13%
43. Prisons/jails	22.89%	7.32%	0.19%	0.56%	15.95%	0.00%	4.12%	40.90%	8.07%
44. Operation of homeless shelters	0.00%	1.50%	14.10%	0.38%	6.58%	0.19%	0.37%	75.19%	1.69%
45. Workforce development/job training programs	.	.	.	.	.	.	.	.	.
46. Intake/eligibility determination for welfare programs	.	.	.	.	.	.	.	.	.
Parks and Recreation									
47. Operation and maintenance of	54.14%	19.17%	0.56%	0.56%	5.45%	1.31%	8.47%	9.02%	1.32%

recreation facilities									
APPENDIX A. PERCENT DELIVERY BY PROVISION AND SERVICE, 1997 CONT'D.									
Service	Public Delivery	Joint Delivery	Nonprofit Delivery	For-Profit Delivery	Intergovernmental Delivery	Franchise / Concession	Other	Never Provided	No Longer Provided
47. Operation and maintenance of recreation facilities	54.14%	19.17%	0.56%	0.56%	5.45%	1.31%	8.47%	9.02%	1.32%
48. Parks landscaping and maintenance	47.37%	22.93%	0.00%	3.01%	5.08%	1.31%	9.03%	9.14%	2.13%
49. Operation of convention centers and auditoriums	15.09%	3.40%	2.08%	3.40%	5.09%	0.38%	1.50%	67.55%	1.51%
<i>Cultural and Arts Programs</i>									
50. Operation of cultural and arts programs	10.17%	15.07%	8.86%	0.94%	5.27%	0.00%	8.65%	49.53%	1.51%
51. Operation of libraries	27.17%	6.60%	2.26%	0.19%	18.11%	0.00%	5.01%	36.58%	4.08%
52. Operation of museums	3.77%	7.16%	10.73%	1.32%	7.53%	0.38%	6.02%	61.58%	1.51%
<i>Support Functions</i>									
53. Buildings and grounds maintenance	44.57%	34.83%	0.19%	2.81%	0.19%	0.38%	14.78%	1.50%	0.75%
54. Building security	38.09%	9.38%	0.00%	8.63%	0.38%	0.00%	9.93%	32.46%	1.13%
55. Fleet management/vehicle maintenance: Heavy equipment	36.59%	36.21%	0.75%	4.69%	0.56%	0.38%	12.38%	6.94%	1.50%
56. Fleet management/vehicle maintenance: Emergency vehicles	35.53%	33.65%	0.75%	5.64%	1.32%	0.56%	11.09%	9.77%	1.69%
57. Fleet management/vehicle maintenance: All other vehicles	41.73%	33.65%	0.75%	5.26%	0.94%	0.56%	5.34%	11.02%	0.75%
58. Payroll	78.84%	3.75%	0.00%	1.87%	0.56%	0.00%	14.24%	0.37%	0.37%
59. Tax bill processing	.	.	.	.	.	.	.	.	.
60. Tax assessing	29.83%	6.75%	0.19%	0.75%	21.76%	0.00%	6.20%	30.02%	4.50%
61. Data processing	62.66%	14.45%	0.19%	2.25%	1.13%	0.00%	9.25%	7.32%	2.75%
62. Collection of delinquent taxes	29.51%	11.84%	0.56%	3.76%	17.29%	0.00%	7.91%	25.56%	3.57%
63. Title records/plat map maintenance	30.51%	10.92%	0.00%	1.32%	14.31%	0.00%	6.79%	34.46%	1.69%
64. Legal services	24.44%	23.87%	2.07%	22.56%	0.56%	0.38%	8.52%	15.72%	1.88%
65. Secretarial services	68.80%	9.59%	0.00%	0.19%	0.00%	0.56%	12.59%	7.52%	0.75%
66. Personnel services	71.99%	9.02%	0.00%	0.38%	0.19%	0.00%	12.96%	5.08%	0.38%
67. Public relations/public information	61.02%	13.56%	0.38%	1.51%	0.56%	0.00%	12.80%	9.42%	0.75%
*Services 45 and 46 were not included in the 1997 ICMA Alternative Delivery Survey.									

APPENDIX B. PERCENT DELIVERY BY PROVISION AND SERVICE, 2002									
Service	Public Delivery	Joint Delivery	Nonprofit Delivery	For-Profit Delivery	Intergovernmental Delivery	Franchises/Concessions	Other	Never Provided	No Longer Provided
Public Works/Transportation									
1. Residential solid waste collection	24.63%	7.58%	0.42%	16.00%	0.63%	7.58%	0.84%	34.74%	7.58%
2. Commercial solid waste collection	11.23%	7.63%	0.21%	12.08%	0.42%	6.14%	1.06%	50.64%	10.59%
3. Solid waste repair	14.83%	8.26%	0.42%	12.50%	6.57%	4.03%	1.06%	38.35%	13.98%
4. Street repair	31.50%	48.84%	0.21%	2.11%	0.85%	0.00%	8.25%	7.82%	0.42%
5. Street/parking lot cleaning	47.22%	14.96%	0.21%	6.41%	0.85%	0.43%	7.06%	20.30%	2.56%
6. Snow plowing/sanding	46.81%	16.48%	0.00%	0.88%	0.44%	0.00%	6.6%	28.57%	0.22%
7. Traffic sign/signal installation/maintenance	33.19%	33.83%	0.21%	5.29%	4.05%	0.21%	4.83%	16.28%	2.11%
8. Parking meter maintenance and collection	19.55%	3.11%	0.00%	0.44%	0.22%	0.00%	3.35%	59.11%	14.22%
9. Tree trimming and planting on public rights of way	27.64%	44.51%	0.42%	7.81%	0.63%	0.21%	5.49%	10.34%	2.95%
10. Maintenance and administration of cemeteries	25.00%	6.58%	0.44%	2.63%	0.44%	0.22%	4.60%	56.58%	3.51%
11. Inspection/code enforcement	70.58%	15.57%	0.00%	0.64%	1.28%	0.00%	8.09%	3.84%	0.00%
12. Operation of parking lots and garages	25.98%	7.86%	0.87%	4.59%	0.44%	0.22%	5.02%	51.53%	3.49%
13. Operation/maintenance of bus transit systems	9.09%	6.06%	1.30%	4.11%	8.01%	0.43%	0.87%	65.80%	4.33%
14. Operation/maintenance of paratransit systems	9.11%	5.64%	2.60%	2.82%	6.07%	0.22%	1.74%	68.33%	3.47%
15. Operation of airports	11.50%	8.24%	0.22%	2.39%	5.86%	0.22%	2.80%	66.38%	2.39%
16. Water distribution	50.96%	10.23%	0.00%	1.28%	3.41%	0.00%	6.40%	24.73%	2.99%
17. Water treatment	42.43%	8.74%	0.21%	1.28%	5.97%	0.00%	4.69%	32.20%	4.48%
18. Sewage collection and treatment	42.49%	18.39%	0.00%	1.90%	6.77%	0.00%	5.08%	21.14%	4.23%
19. Disposal of sludge	23.02%	13.43%	0.43%	9.60%	7.25%	0.00%	3.42%	36.67%	6.18%
20. Disposal of hazardous materials	7.64%	12.74%	0.64%	10.40%	6.58%	1.06%	0.64%	57.54%	2.76%
Public Utilities									
21. Electric utility operation and management	6.70%	2.16%	0.22%	3.24%	3.02%	1.94%	0.00%	80.99%	1.73%
22. Gas utility operation and management	2.59%	0.86%	0.22%	3.89%	1.51%	1.73%	0.00%	87.90%	1.30%
23. Utility meter reading	45.02%	5.84%	0.43%	4.33%	2.38%	0.43%	2.61%	36.36%	2.60%
24. Utility billing	46.44%	8.42%	0.22%	3.46%	2.81%	0.43%	4.82%	33.26%	1.94%
Public Safety									
25. Crime prevention/patrol	76.69%	8.47%	0.00%	0.00%	3.39%	0.21%	8.70%	2.54%	0.00%
26. Police/fire communications	58.51%	14.26%	0.00%	0.00%	7.66%	0.00%	7.02%	5.74%	6.81%
27. Fire prevention/suppression	56.96%	7.92%	0.43%	0.43%	4.50%	0.00%	9.63%	17.56%	2.57%
28. Emergency medical service	35.55%	19.49%	1.93%	3.43%	5.14%	0.64%	5.77%	23.98%	4.07%
29. Ambulance service	26.24%	10.75%	2.15%	8.82%	4.09%	1.08%	4.50%	36.99%	5.38%
30. Traffic control/parking enforcement	68.66%	7.25%	0.00%	0.43%	1.49%	0.43%	7.02%	13.65%	1.07%

APPENDIX B. PERCENT DELIVERY BY PROVISION AND SERVICE, 2002									
CONT'D.									
Service	Public Delivery	Joint Delivery	Nonprofit Delivery	For-Profit Delivery	Intergovernmental Delivery	Franchises/Concessions	Other	Never Provided	No Longer Provided
31. Vehicle towing and storage	3.28%	5.69%	0.44%	33.92%	0.44%	1.97%	1.53%	49.67%	3.06%
Health and Human Services									
32. Sanitary inspection	27.59%	8.41%	0.00%	0.43%	10.13%	0.00%	3.01%	46.55%	3.88%
33. Insect/rodent control	13.73%	10.24%	0.00%	2.83%	8.93%	0.00%	1.52%	59.26%	3.49%
34. Animal control	46.80%	10.04%	3.85%	1.92%	9.83%	0.21%	4.27%	17.95%	5.13%
35. Operation of animal shelters	21.20%	4.50%	8.14%	3.00%	9.85%	0.21%	2.78%	42.83%	7.49%
36. Operation of daycare facilities	3.72%	3.50%	1.53%	3.28%	1.31%	0.00%	0.00%	84.68%	1.98%
37. Child welfare programs	5.60%	9.27%	2.37%	0.86%	5.82%	0.00%	1.51%	72.41%	2.16%
38. Programs for the elderly	14.25%	31.97%	6.05%	1.08%	6.05%	0.00%	1.72%	37.15%	1.73%
39. Operation/management of hospitals	0.88%	0.00%	2.41%	2.41%	2.63%	0.22%	0.00%	87.28%	4.17%
40. Public health prog.	8.97%	11.38%	1.97%	0.66%	9.63%	0.00%	0.21%	65.21%	1.97%
41. Drug and alcohol treatment programs	1.30%	8.48%	7.61%	1.96%	5.87%	0.00%	0.00%	71.26%	1.52%
42. Operation of mental health/mental retardation programs and facilities	2.61%	5.87%	4.13%	1.30%	7.61%	0.22%	0.00%	76.52%	1.74%
43. Prisons/jails	23.64%	9.33%	0.00%	0.22%	7.81%	0.00%	3.25%	45.77%	9.98%
44. Operation of homeless shelters	0.22%	2.61%	6.74%	0.65%	1.74%	0.00%	0.65%	86.09%	1.30%
45. Workforce development/job training programs	5.27%	9.01%	4.40%	0.66%	7.91%	0.00%	0.22%	70.33%	2.20%
46. Intake/eligibility determination for welfare programs	10.26%	3.71%	1.53%	0.00%	6.11%	0.00%	1.53%	75.33%	1.53%
Parks and Recreation									
47. Operation and maintenance of recreation facilities	56.23%	23.89%	0.42%	0.00%	2.33%	0.00%	6.56%	8.67%	1.90%
48. Parks landscaping and maintenance	52.23%	26.54%	0.00%	3.61%	1.49%	0.00%	6.79%	8.07%	1.27%
49. Operation of convention centers and auditoriums	15.65%	4.13%	1.52%	2.61%	3.70%	0.22%	1.08%	68.70%	2.39%
Cultural and Arts Programs									
50. Operation of cultural and arts programs	10.46%	22.44%	6.32%	0.65%	2.18%	0.00%	4.57%	50.98%	2.40%
51. Operation of libraries	32.47%	5.63%	3.03%	0.22%	14.07%	0.00%	3.89%	35.93%	4.76%
52. Operation of museums	7.47%	6.15%	8.13%	1.10%	3.96%	0.00%	3.52%	67.25%	2.42%
Support Functions									
53. Buildings and grounds maintenance	47.32%	42.18%	0.43%	1.71%	0.21%	0.00%	7.08%	0.86%	0.21%
54. Building security	51.75%	14.85%	0.00%	5.90%	1.09%	0.44%	5.66%	19.87%	0.44%
55. Fleet management/vehicle maintenance: Heavy equipment	42.80%	40.65%	0.22%	3.23%	0.43%	0.00%	6.43%	5.81%	0.43%
56. Fleet management/vehicle	36.40%	40.47%	0.00%	4.71%	0.64%	0.00%	5.58%	11.13%	1.07%

maintenance: Emergency vehicles									
APPENDIX B. PERCENT DELIVERY BY PROVISION AND SERVICE, 2002									
CONT'D.									
Service	Public Delivery	Joint Delivery	Nonprofit Delivery	For-Profit Delivery	Intergovernmental Delivery	Franchises/Concessions	Other	Never Provided	No Longer Provided
57. Fleet management/vehicle maintenance: All other vehicles	45.88%	38.96%	0.00%	4.11%	0.22%	0.00%	5.85%	3.90%	1.08%
58. Payroll	85.22%	3.85%	0.00%	1.50%	0.43%	0.00%	7.50%	0.64%	0.86%
59. Tax bill processing	39.22%	10.24%	0.00%	1.09%	8.93%	0.00%	3.70%	32.68%	4.14%
60. Tax assessing	26.20%	7.64%	0.22%	1.31%	12.88%	0.00%	3.50%	43.01%	5.24%
61. Data processing	64.72%	20.78%	0.00%	1.08%	1.08%	0.00%	6.06%	5.41%	0.87%
62. Collection of delinquent taxes	30.09%	14.29%	0.43%	4.55%	9.52%	0.00%	2.60%	35.06%	3.46%
63. Title records/plat map maintenance	29.41%	10.46%	0.00%	0.65%	6.97%	0.00%	5.23%	45.32%	1.96%
64. Legal services	24.07%	26.46%	0.22%	26.46%	0.87%	0.00%	5.87%	14.75%	1.30%
65. Secretarial services	79.08%	7.84%	0.00%	0.00%	0.00%	0.00%	7.41%	5.23%	0.44%
66. Personnel services	76.77%	11.18%	0.00%	0.65%	0.43%	0.00%	7.52%	2.80%	0.65%
67. Public relations/public information	68.10%	15.73%	0.00%	1.08%	0.22%	0.00%	7.33%	7.54%	0.00%

APPENDIX C. LINKTEST FOR PR(REVERSE CONTRACTING) W/O COUNCIL MANAGER, 1997-2002						
Complimentary Log-Log Regression				Number of Observations = 137		
				Zero Outcomes = 53		
				Nonzero Outcomes = 84		
				LR chi2(2) = 88.46		
Log likelihood = -47.194867				Prob>chi2 = 0.0000		
rvrate	Coefficient	Standard Error	z	P>|z|	[95% Confidence Interval]	
_hat	1.100227	.2150299	5.12	0.000	.6787764	1.521678
_hatsq	.0935671	.0748496	1.25	0.211	-.0531354	.2402696
_cons	-.0737435	.1763997	-0.42	0.676	-.4194806	.2719937

APPENDIX D. LINKTEST FOR PR(REVERSE CONTRACTING) W/COUNCIL MANAGER, 1997-2002						
Complimentary Log-Log Regression				Number of Observations = 403		
				Zero Outcomes = 129		
				Nonzero Outcomes = 274		
				LR chi2(2) = 145.09		
Log likelihood = -180.11527				Prob>chi2 = 0.0000		
rvrate	Coefficient	Standard Error	z	P>|z|	[95% Confidence Interval]	
_hat	1.107261	.1439033	7.69	0.000	.8252152	1.389306
_hatsq	-.0746236	.0529994	-1.41	0.159	-.1785006	.0292533
_cons	.0693259	.1540788	0.45	0.653	-.2326629	.3713148

APPENDIX E. LINKTEST FOR PR(REVERSE CONTRACTING) W/O COUNCIL MANAGER, 2002-2007						
Complimentary Log-Log Regression				Number of Observations = 178		
				Zero Outcomes = 60		
				Nonzero Outcomes = 118		
				LR chi2(2) = 144.15		
Log likelihood = -41.682059				Prob>chi2 = 0.0000		
rvrate	Coefficient	Standard Error	z	P>|z|	[95% Confidence Interval]	
_hat	1.043244	.2271456	4.59	0.000	.5980471	1.488441
_hatsq	.0330715	.1017388	0.33	0.745	-.1663329	.2324758
_cons	-.0345659	.2001484	-0.17	0.863	-.4268496	.3577179

APPENDIX F. LINKTEST FOR PR(REVERSE CONTRACTING) W/COUNCIL MANAGER, 2002-2007						
Complimentary Log-Log Regression				Number of Observations = 332		
				Zero Outcomes = 99		
				Nonzero Outcomes = 233		
				LR chi2(2) = 92.32		
Log likelihood = -156.13739				Prob>chi2 = 0.0000		
rvrate	Coefficient	Standard Error	z	P>|z|	[95% Confidence Interval]	
_hat	1.080116	1.449163	7.45	0.000	.7960857	1.364147
_hatsq	-.1915464	.1238095	1.55	0.121	-.414609	.0315162
_cons	.064461	.0926837	0.70	0.487	-.1171926	.2461208

APPENDIX G. VARIANCE INFLATION FACTOR TEST FOR PR(REVERSE CONTRACTING) W/O COUNCIL MANAGER, 1997-2002		
Variable	VIF	1/VIF
nwrate2	1.07	0.938572
aspp	5.19	0.192778
cmdp	5.41	0.184805
lmcp	3.41	0.293010
totjointp97	2.16	0.463043
nptotp97	1.28	0.779705
ftotp97	1.47	0.678389
gtotp97c	2.88	0.347068
burdendiff2	1.27	0.788813
county4b	1.25	0.797464
TEL	1.73	0.578357
pop2a	1.48	0.674595
pop1	1.50	0.667843
metro	1.98	0.505100
suburb	2.03	0.493105
county	1.61	0.621779
newsertot	1.12	0.892938
mgmtcap07	1.41	0.709152
laborop07	1.44	0.692096
citizenop07	1.21	0.829417
mandates07	1.19	0.840918
discretionb	1.33	0.752285
cq8a_1	1.78	0.561934
cq8a_4	1.58	0.632535
cq8a_5	1.33	0.751160
cq8a_2	1.26	0.794803
MP	2.67	0.373979
MW	2.16	0.463297
SE	2.87	0.347865
WC	2.34	0.427350
Mean VIF	1.98	

APPENDIX H. VARIANCE INFLATION FACTOR TEST FOR PR(REVERSE CONTRACTING) W/COUNCIL MANAGER, 1997-2002		
Variable	VIF	1/VIF
nwrate2	1.07	0.938556
aspp	5.25	0.190591
cmdp	5.43	0.184119
lmcp	3.41	0.292856
totjointp97	2.16	0.463040
nptotp97	1.28	0.778822
ftotp97	1.48	0.674577
gtotp97c	2.89	0.346185
burdendiff2	1.27	0.785095
county4b	1.26	0.792021
TEL	1.74	0.573320
pop2a	1.54	0.650699
pop7a	1.36	0.733881

APPENDIX H. VARIANCE INFLATION FACTOR TEST FOR PR(REVERSE CONTRACTING) W/COUNCIL MANAGER, 1997-2002 CONT'D.		
Variable	VIF	1/VIF
pop1	1.60	0.624035
metro	2.03	0.492748
suburb	2.08	0.481399
county	1.63	0.613556
newsertot	1.12	0.891534
mgmtcap07	1.41	0.708798
laborop07	1.45	0.691305
citizenop07	1.21	0.829323
mandates07	1.19	0.837891
discretionb	1.33	0.751796
cq8a_1	1.78	0.560431
cq8a_4	1.58	0.632521
cq8a_5	1.33	0.750844
cq8a_2	1.26	0.793995
MP	2.68	0.372962
MW	2.16	0.463290
SE	2.88	0.347586
WC	2.35	0.426364
Mean VIF	1.97	

APPENDIX I. VARIANCE INFLATION FACTOR TEST FOR PR(REVERSE CONTRACTING) W/O COUNCIL MANAGER, 2002-2007		
Variable	VIF	1/VIF
nwrate2	1.09	0.921345
aspp	6.83	0.146338
cmdp	7.19	0.139000
lmcp	3.85	0.259852
totjointp03	1.89	0.528902
nptotp03	1.29	0.777565
ftotp03	1.67	0.600177
gtotp03b	2.02	0.495979
burdendiff2	1.29	0.774787
county4b	1.11	0.903116
TEL	1.51	0.662062
pop6a	1.92	0.520154
pop2	3.26	0.306938
metro	2.37	0.422215
suburb	1.85	0.539594
county	2.47	0.405636
newsertot	1.16	0.858682
mgmtcap07	1.41	0.706903
laborop07	1.41	0.709786
citizenop07	1.23	0.811786
mandates07	1.08	0.925962
discretionb	1.31	0.765451
cq8a_1	1.71	0.586052
cq8a_4	1.60	0.626923
cq8a_5	1.44	0.695901

APPENDIX I. VARIANCE INFLATION FACTOR TEST FOR PR(REVERSE CONTRACTING) W/O COUNCIL MANAGER, 2002-2007 CONT'D.		
Variable	VIF	1/VIF
cq8a_2	1.30	0.769144
MP	2.71	0.368860
MW	2.42	0.412889
SE	2.68	0.373198
WC	2.40	0.415961
Mean VIF	2.18	

APPENDIX J. VARIANCE INFLATION FACTOR TEST FOR PR(REVERSE CONTRACTING) W/COUNCIL MANAGER, 2002-2007		
Variable	VIF	1/VIF
nwrate2	1.07	0.933294
aspp	6.43	0.155576
cmdp	6.52	0.153405
lmcp	3.86	0.259017
totjointp03	1.90	0.527515
nptotp03	1.27	0.789057
ftotp03	1.66	0.600876
gtotp03b	1.97	0.508568
burdendiff2	1.28	0.778707
county4b	1.11	0.899127
TEL	1.51	0.662781
popa	3.18	0.314919
pop2	3.80	0.262812
metro	2.36	0.424323
suburb	2.33	0.429918
newsertot	1.16	0.860919
mgmtcap07	1.40	0.712171
laborop07	1.40	0.711903
citizenop07	1.23	0.812075
mandates07	1.08	0.929396
discretionb	1.31	0.765391
cq8a_1	1.71	0.585586
cq8a_4	1.58	0.632836
cq8a_5	1.42	0.703479
cq8a_2	1.30	0.770001
MP	2.67	0.375115
MW	2.41	0.414283
SE	2.68	0.373774
WC	2.38	0.419704
Mean VIF	2.21	