

**Values Public Managers Hold, Organizational Environments, and Public
Service Characteristics in Explaining the Choice of Public Service Delivery
Modes: Focused on County and City Governments in Virginia**

Jaekwon Ko

Dissertation submitted to the faculty of Virginia Polytechnic Institute and State University
in partial fulfillment of the degree of
Doctor of Philosophy
in
Public Administration and Public Affairs

Brian J. Cook, Committee Chair

Karen M. Hult

Patrick S. Roberts

Susan M. Willis-Walton

February 22, 2013

Blacksburg, VA

Keywords: New Public Management, Public Value Management, contract, public values

Copyright © 2013, Jaekwon Ko

All Rights Reserved

**Values Public Managers Hold, Organizational Environments, and Public
Service Characteristics in Explaining the Choice of Public Service Delivery
Modes: Focused on County and City Governments in Virginia**

Jaekwon Ko

ABSTRACT

Over the past several decades, local governments have provided public services through a dynamic process including direct public delivery and market contracts. These public service delivery modes have been influenced by the dominant paradigms in contemporary public administration such as New Public Management (NPM) and Public Value Management (PVM). This study aims to examine factors influential in choosing public service delivery modes in local governments. Influential factors are divided into three main categories. The first category is public values as perceived by public managers. The second category is related to organizational environments. The third category is associated with characteristics of public services. This study focuses on public service delivery in County and City governments in Virginia. In order to test hypotheses, I use two sets of data: a survey and the U.S. Census. First, the survey measures public values, organizational environments, and public service characteristics. The survey population consists of 95 Counties and 39 Independent Cities in Virginia. The total number of County Administrators and City Managers who responded to the survey was 70. Second, the U.S. Census provides demographic information. In analyzing data to address research questions, I use descriptive analysis and a binary logistical regression model. Findings indicate that the more County Administrators and City Managers perceive the importance of efficiency and customer orientation values from New Public Management in determining public service delivery modes, the more local governments choose contracting out. In contrast, the more County Administrators and City Managers perceive the importance of fairness, political accountability, and employee safety values from Public Value Management in determining public service delivery modes, the more local governments choose delivery by public.

To my parents, my father and mother in law, my wife Heewon,
and my sons Aaron and Sean

Acknowledgements

My dissertation would not have been accomplished without the sincere guidance and unconstrained assistance of many people. Deep appreciation goes to my advisor, Dr. Brian Cook, for his wonderful guidance all the way through this project. His limitless understanding, encouragement, and support made the completion of this project possible.

I would like to thank the members of my dissertation committee, Dr. Karen Hult, Dr. Patrick Roberts, and Dr. Susan Willis-Walton for providing many helpful comments and suggestions on my dissertation.

I also wish to extend my sincere appreciation to my faculty, colleagues, and staff of Center for Public Administration and Policy. Each of them has quietly influenced, in their own unique ways, in shaping my intellectual personality. Specially, I am thankful to Dr. Larkin Dudley for her professional encouragement and support that I received during my years in the program.

Finally, I would like to express my sincere appreciation to my family: my father and mother, my father and mother in law, my wife, and my sons. Specially, I wish to acknowledge the wholehearted love and support that I always received from my wife, Heewon, and my sons, Aaron and Sean which constantly motivated me to keep going for my intellectual and professional advancement.

Table of Contents

CHAPTER 1	1
1.1. Contending Views about Public Service Delivery	1
1.2. Purpose of the Study	6
1.3. Research Questions	8
1.4. Significance of the Study	9
1.5. Outline of the Study	11
CHAPTER 2	13
2.1. New Public Management	13
2.1.1. Microeconomic Theory.....	14
2.1.2. Managerialism	16
2.1.3. Summary of NPM.....	19
2.2. Public Value Management	20
2.2.1. Critiques of NPM	20
2.2.2. New Public Service.....	21
2.2.3. Comparison between NPM and PVM.....	24
CHAPTER 3	26
3.1. Contextual Explanations for the Choice of Public Service Delivery Modes	26
3.2. The Role of City Managers and County Administrators	26
3.3. Public Values	28
3.3.1. NPM Values	30
3.3.2. PVM Values	34
3.4. Organizational Environment	39
3.4.1. Economic Factors.....	39
3.4.2. Political Factor.....	41
3.4.3. Managerial Factor	42

3.4.4. Community Characteristic Factors.....	44
3.5. Characteristics of Public Services	45
3.5.1. Asset specificity	45
3.5.2. Measurability	46
3.6. Summary of Hypotheses	48
CHAPTER 4	50
4.1. Research Design	50
4.2. Research Population and Data Collection	51
4.3. Variables and Measurement	54
4.3.1. Dependent Variables	54
4.3.2. Independent Variables.....	57
4.4. Data Analysis Procedures	59
CHAPTER 5	60
5.1. Descriptive Analysis	60
5.1.1. Dependent Variable	60
5.1.2. Independent Variables.....	64
5.2. Bivariate Correlation Analysis	69
5.3. Logit Regression Analysis	73
5.4. Summary of the Findings	78
CHAPTER 6	80
6.1. Public Values	82
6.1.1. NPM Values	83
6.1.2. PVM Values	86
6.2. Organizational Environment	92
6.2.1. Economic Factors.....	92
6.2.2. Political Factor.....	94
6.2.3. Managerial Factor	95

6.2.4. Community Characteristics.....	96
6.3. Public Service Characteristics	97
6.3.1. Asset Specificity.....	97
6.3.2. Measurability	98
CHAPTER 7	99
7.1. Summary of Findings	100
7.1.1. Public Values	100
7.1.2. Organizational Environment.....	101
7.1.3. Public Service Characteristics	102
7.1.4. Conclusion.....	103
7.2. Implications	104
7.3. Limitations and Suggestions for Future Research.....	105
REFERENCES.....	109
Appendix A: IRB approval	119
Appendix B: Survey Introduction Letter	120
Appendix C: Survey Instrument	122
Appendix D: Local Virginia Governments Surveyed.....	130
Appendix E: Descriptive Statistics of Survey Respondents and Non-respondents.....	131
Appendix F: Response Frequencies	132

List of Figures

Figure 1.1. Dynamics of Local Government Service Delivery, 1992–2002	7
Figure 5.1. Proportion of Service Delivery Modes by Public Service.....	62

List of Tables

Table 2.1. Paradigms of Public Management	25
Table 3.1. Summary of hypotheses	49
Table 4.1. Survey Timeline.....	52
Table 4.2. Profile of Response Rate.....	53
Table 4.3. Survey Respondents' Demographics.....	53
Table 4.4. Modes of Public Service Delivery in Local Governments	55
Table 4.5. Local Government Contracting out of Selected Services	56
Table 4.6. Measures of Independent Variables.....	58
Table 5.1. Number of Respondents Reporting Each Local Government Service Arrangement ..	61
Table 5.2. Public Values	65
Table 5.3. Average Scores by Public Service: Public Values.....	66
Table 5.4. Organizational Environments	67
Table 5.5. Public Service Characteristics	68
Table 5.6. Average Scores by Public Service: Asset Specificity and Measurability.....	69
Table 5.7. Bivariate Correlations	71
Table 5.8. Goodness of Fit for Logit Model: Hosmer and Lemeshow Test	73
Table 5.9. Logit Model Results.....	74
Table 6.1. Summary of Hypothesis Testing: Primary Independent Variables	81

CHAPTER 1

INTRODUCTION

1.1. Contending Views about Public Service Delivery

Over the past several decades, local governments have provided public services through a dynamic process including movements from direct public delivery to market contracts and from market contracts back to in-house delivery. Since the 1980s, the "New Public Management" (NPM) has encouraged local governments to employ market approaches to public service delivery, because market competition and adopting business-style management can make local governments more efficient and responsive (Dunleavy and Hood 1994; Kettl 1997; Osborne and Gaebler 1992; Savas 2000). In particular, contracting out of public services has become a popular arrangement through which governments, especially local governments, are delivering services to their citizens. Local governments are contracting out not only support functions to private entities, but essential services as well. However, many scholars and practitioners have criticized contracting out based on NPM approaches on the grounds that "the social values inherent in public services may not be adequately addressed by the economic efficiency calculus of markets" (Hefetz and Warner 2004, p. 174). In addition, Terry (1993, 1998) maintains that NPM approaches undermine democratic and constitutional values such as fairness, justice, representation, participation, and so on. In response to such concerns, public service delivery modes in local governments have shown mixed modes such as new contracting, reverse contracting, and so on.

Likewise, public service delivery modes have sparked considerable controversy.

Privatization has been an essential component of the New Public Management reforms in the United States and other Anglo-American countries (Kettl 2002). In particular, the most pervasive form of privatization in the U.S. is contracting out, an agreement between a government agency and a private for-profit or not-for-profit organization to deliver local services (Martin 1999). Early public choice theorists and other economists advocated contracting out on the grounds that it leads to improvements in efficiency and economy (Niskanen 1971; Savas 2000).¹ These theorists argued that because public managers operate in a bureaucratic setting, they may engage in utility-maximizing behavior such as budget maximization and oversupply of public services, which leads to inefficiency in the public sector (Fernandez, Smith, and Wenger 2006). In addition, some scholars who advocate contracting out contended that potential benefits may occur when local governments operate in monopoly settings (Niskanen 1971). Under these conditions, to overcome bureaucratic inefficiencies, public organizations try to access economies of scale, avoid costly labor and supply requirements, and yield efficiency gains through competition (Boyne 1998; Brown and Potoski 2003a). Another benefit of contracting out government functions is to improve organizational flexibility and performance by allowing managers to focus on their organizations' core activities (O'Leary 1996).

Through the Touche Ross Survey, Kettl (1993) identifies cost savings as the top advantage resulting from contracting out of public services. The other major advantages are:

- Solving labor problems

¹ E. S. Savas. 2000. *Privatization and Public-Private Partnerships* (New-York: Chatham House Publishers). Savas states that "contracted services cost less and are at least as good in quality as corresponding services produced in-house by government agencies." Based on the 1979-87 study of 651 contracts by the Los Angeles County Auditor-Controller, he found that cost savings resulting from contracting out amounted to 32%.

- Sharing risks
- Higher quality of service
- Providing services not otherwise available
- Shorter implementation time
- Solving local political problems

In addition, Hatry (1983) notes the following advantages of contracting out public services:²

- Costs less or provides better performance
- Provides specialized skills
- Limits unnecessary growth of government
- Avoids large initial costs
- Permits greater flexibility in adjusting program size
- Provides a yardstick for comparison
- Produces better management

However, the efficiency argument for contracting out has clear implications for public employment and the size of the public workforce. For example, Donahue (1989) argues that public organizations can save money by delegating public service provision to private firms, which occurs at the expense of public employees. In short, contracting out does not always bring about potential benefits. Moreover, recent reviews of contracting out suggest that it can bring about negative effects. For example, deLeon and Denhardt (2000) argue that the customer-oriented focus of contracting out has led to criticisms about its implications for democratic governance, including citizenship, civic engagement, and broad conceptions of the public interest.

² Hatry, Harry P. 1983. *A Review of Private Approaches for Delivery of Public Services*. Washington, D. C.: The Urban Institute Press.

In other words, contracting out considers citizens as customers and may restrict civic engagement in government decision making while focusing on efficiency rather than equity, fairness, and community building. From another angle, some economists have suggested that under certain conditions public organizations may be more efficient and/or appropriate service providers than private firms. For instance, Sappington and Stiglitz (1987) contend that when government is less certain about its objectives, it may be more costly to rely on the private sector because of costly renegotiation resulting from information asymmetry. In Williamson's (1999) transaction cost economics framework, public bureaucracies will be likely to reduce contractual hazards associated with probity. Others argue that the increased complexity of contract service delivery creates coordination problems (Wise 1990). Finally, Milward (1996) maintains that contracting out leads to a "hollow state" in which public organizations cannot deliver public services themselves and accountability problems occur. In sum, contracting out is not a panacea. Savas (2000) notes the following potential disadvantages of contracting out public services:³

- Contracting in the end is more costly than government in-house service delivery because corruption taints the contract awarding process.
- Privatization leads to unusually high profits being made by contracted service providers, as opposed to government in – house delivery of services, which are provided on a non-profit basis.
- Privatization leads to retrenchment of government workers.
- On many occasions, there is a dearth of qualified contract service providers, leading to a lack of competition, and its attendant benefits.

³ E. S. Savas. 2000. Privatization and Public-Private Partnerships (New-York: Chatham House Publishers).

- The cost of overseeing, managing and monitoring contractor performance could become prohibitive, erasing any efficiency gains.
- Expanding government services can be done at a lower marginal cost, compared to privatization.
- Contracts, that are of the cost – plus – fixed – fee type, do not provide any impetus for efficiency.
- When the government gets out of any arena/area of service delivery, if there is an absence of competition in that area/arena, the government is subject to the whims and caprices of the contractor, in subsequent contracts.
- Critics of privatization, charge that the contracting out of services, renders void, the cardinal principle of merit employment, and contradicts laws governing the government employment of civil service veterans. Furthermore, critics of privatization charge that it saps the morale of affected government employees, deprives government of needed in – house skills, and therefore degrades the capabilities of government.
- The contracting out of service delivery by government hampers the pliability of government in responding to emergencies.
- Critics of privatization say contracting leads to an undesirable reliance on contractors, leaving the public susceptible to work stoppages caused by strikes, and bankruptcy of the firm handling the contract.
- Critics charge that the contracting out of services by government relies on adequately written agreements/contracts which are not only difficult to draw up, but result in the government losing accountability and control.
- When the government contracts out the delivery of services, it reduces the opportunities for

the government to achieve economies of scale.

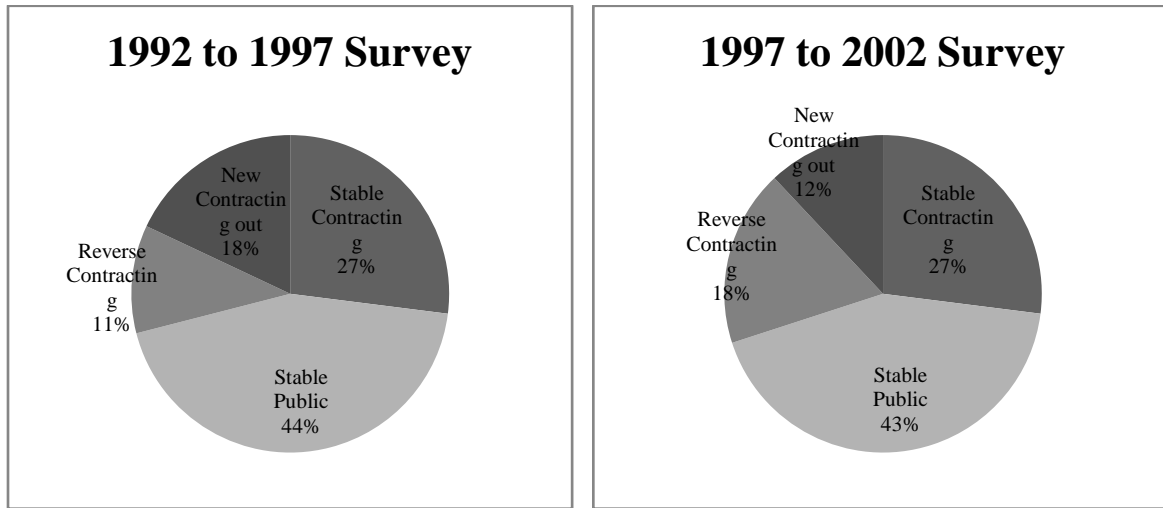
- When the government contracts out the delivery of services, the private firms that win these contracts, increase their political power at the government's expense, and can therefore lobby for increased government spending.
- Contracting leads to a disproportionate loss in jobs for minorities, many of whom are government employees.

1.2. Purpose of the Study

Along with the controversies over public service delivery modes such as in-house provision versus contracting out, there have been meaningful changes in public service delivery in local governments. According to surveys conducted by the International City/County Management Association, a major shift in public service delivery between 1992 and 2002 was the dramatic increase in reverse contracting among local governments. Hefetz and Warner (2007) compare two surveys from the periods 1992-1997 and 1997-2002. In the earlier period, new contracting out was about two times more frequent than reverse contracting. But, from 1997 until 2002, the proportions of new contracting out and reverse contracting reversed. Twelve percent of respondents reported new contracting out, while 18 percent replied that their localities were reverse contracting (see Figure 1.1). In addition, Hefetz and Warner (2004) find that between 1992 and 1997, 93 percent of local governments that responded to the ICMA survey had newly contracted out at least one service, and 81 percent of these governments contracted back in at least one service. More specifically, Warner and Hefetz (2004) indicate that cases of contracting back in have increased in water distribution among local services between 1992 and 2002. In short, local governments have shown a dynamic process in public service delivery including

movements from direct public delivery to market contracts and from market contracts back to in-house delivery.

Figure 1.1. Dynamics of Local Government Service Delivery, 1992–2002.



Source: Hefetz and Warner (2007). International City/County Management Association, Profile of Alternative Service Delivery Approaches, Survey Data 1992, 1997, 2002 Washington DC.

This study aims to examine factors influential in choosing public service delivery modes in local governments. Influential factors are divided into three main categories. The first category is the importance of public values as perceived by public managers in local governments. Many scholars have discussed numerous public values. For example, Van der Wal, De Graaf, and Lasthuizen (2008) present a mixed set of 20 values such as accountability, collegiality, dedication, effectiveness, efficiency, honesty, impartiality, and so on. This study classifies various public values into two categories: values from NPM and values from Public Value Management (PVM). Prominent values from NPM are efficiency, flexibility, managerial accountability, and customer orientation. Values from PVM include fairness, political accountability, social cohesion, and employee safety. The second category is related to organizational environments. This category consists of four subcategories: economic factors, a political factor, a managerial factor, and

community characteristic factors. Market structure and fiscal pressure are examined as economic factors. Participation of government's staff in decision making is explored as the political factor. Monitoring capacity in contract management as the managerial factor is tested. Finally, the proportions of the population that are age 65 and older, white, and poor are examined as community characteristic factors. The third category is associated with characteristics of public services. Asset specificity and measurability as characteristics of public services are examined.

For the purpose of this study, public services are broadly classified into five categories: 1) Public Works, 2) Public Safety, 3) Health and Human Services, 4) Parks, Recreation, and Culture, and 5) Support Functions.⁴ This study employs a cross-sectional design, with a survey questionnaire as the primary instrument for data collection.

1.3. Research Questions

Empirical studies show local governments have provided public services through a dynamic process including movements from public delivery to market contracts and from market contracts back to in-house delivery. Contracting out is relevant to the argument from NPM that governments can become more efficient and more responsive by employing market approaches to public service delivery (Kettl 1997; Osborne and Gaebler 1992; Savas 2000; Terry 1998).

There have been two approaches to examine the effect of contracting out. The first

⁴ Public Works include residential solid waste collection, street repair, and water and sewage service. Public Safety consists of fire prevention/suppression and emergency medical service. Health and Human Services are child welfare programs, programs for the elderly, public health programs, and workforce development/ job training programs. Parks, Recreation, and Culture includes operation and maintenance of recreation facilities. Finally, Support Services include buildings and grounds maintenance.

approach has been based on transaction cost theory. Transaction cost theory compares the costs of direct public delivery with the contracting process. Market structure and the competitive bidding process play an important role in the decision about service delivery modes (Brown and Potoski 2003a; Nelson 1997). In addition, transaction cost theory focuses on individual and organizational behavior to address principal agent problems. Therefore, the monitoring capacity of local governments has an influence on the choice of service delivery modes (Fernandez, Ryu, and Brudney 2008; Ferris and Graddy 1986; Hefetz and Warner 2004; Warner and Hebdon 2001).

The second approach is the critique of the values that NPM pursues. Denhardt and Denhardt (2000) and O'Flynn (2007) maintain that economic efficiency as the core value of NPM may not address other public values inherent in public services. As a result, the focus of the second approach shifts from results and efficiency toward the achievement of the broader government goal of public value creation.

Based on these approaches, my main research questions are:

- *What influences the choice of public service delivery modes by local governments?*
- *To what extent do values from NPM and PVM influence the choice of public service delivery modes?*
- *How do organizational environment factors faced by local governments and the characteristics of public services influence the choice?*

1.4. Significance of the Study

Why is this study important? First, as mentioned above, previous studies of public service delivery modes have focused mainly on organizational factors and transaction cost theory.

Among organizational factors, political and financial factors have been mainly examined. For example, empirical research has indicated that elected officials' opposition, the party of the governor, and political competition influence decisions about service delivery modes (Brown, Potoski, and Van Slyke 2006; Brudney, Fernandez, Ryu, and Wright 2005; Fernandez et al. 2008; Hefetz and Warner 2004; Ya Ni and Bretschneider 2007). In addition, tax and expenditure limitations, fiscal health, and revenue capacity have been verified as influential factors (Brudney et al. 2005; Fernandez et al. 2008; Ferris and Graddy 1986; Warner and Hebdon 2001; Ya Ni and Bretschneider 2007). From transaction cost theory, previous studies have explored how market competition and monitoring capacity affect the decision about service delivery modes (Brown and Potoski 2003a; Hefetz and Warner 2004).

However, previous studies have missed the potential influence of public managers' values and/or the public sector's role. This is associated with the second significance of this study. NPM was a reaction to the perceived weaknesses of the traditional bureaucratic paradigm of public administration (Hood 1991). NPM assumed that governments are unresponsive and inefficient because of a government monopoly in which a government agency is the sole provider of a particular good or service and competition is prohibited by law. So, the focus of NPM was how governments can get things done more efficiently and effectively (Kettl 1997; Savas 2000). To achieve this NPM sought to use market approaches, which led to a dramatic increase of contracting out. However, critiques of NPM argue that public values inherent in public services may not be addressed by the NPM's approach emphasizing economic efficiency (Hefetz and Warner 2004). Denhardt and Denhardt (2000) suggest roles for the public servant to achieve public values. These roles are built on work in democratic citizenship, community and civil society, and organizational humanism. Even though critiques of NPM suggest new roles for the

public servant, no study examines how public managers' values or the public sector's role can influence the practical matter of the choice of service delivery modes. Therefore, this study may supplement missing concepts in previous studies.

1.5. Outline of the Study

Chapter Two, Theory Related to Public Service Delivery, presents NPM and PVM as the main public value paradigms public service should pursue. It identifies each paradigm's main argument, basic theories, and influence on public service delivery. The public values emphasized by each paradigm are also provided.

Chapter Three, Theoretical Foundations of the Model of Public Service Delivery Decisions, provides a conceptual framework for this study. The conceptual framework consists of three parts. The first part examines public values in the choice of service delivery modes. Public values are composed of values from NPM and PVM. The second part explores organizational environments including political, economic, managerial, and community characteristic factors. The third part looks at characteristics of public service in the choice of service delivery modes. Public service characteristics consist of asset specificity and measurability.

Chapter Four, Methods, discusses the methodology and variable measurements. This chapter discusses data source and collection. This chapter also provides details on the statistical models used to test factors influential in the choice of service delivery modes by local governments.

Chapter Five, Results, presents the results from data collection and the findings of the tests

of the research hypotheses.

Chapter Six, Discussion, provides a summary of these findings and discusses the meaning of these findings and the implications for public administration theory and practice.

Lastly, Chapter Seven, Conclusion, summarizes the findings and the implications of this study. The chapter also discusses this study's limitations and makes suggestions for future research.

CHAPTER 2

THEORY RELATED TO PUBLIC SERVICE DELIVERY

This study focuses mainly on whether the public values public managers hold influence the choice of service delivery modes. This chapter presents prominent literature associated with public values. Public values in this study derive from two main paradigms in public administration. In the first section, New Public Management is reviewed to explore how public values based on NPM are associated with the choice of service delivery modes. The following section discusses Public Value Management to explore which public values are based on PVM. The last section compares NPM and PVM.

2.1. New Public Management

During the 1980s and 1990s, many countries introduced administrative reforms for reducing the size of the public sector, curbing the power of the state, and making public bureaucracy more productive and efficient. Hood (1991) first used the term "New Public Management" to name these administrative reforms in the 1980s and 1990s. NPM is generally based on a combination of microeconomic theory and managerialism (Christensen and Laegreid 2002). NPM encompasses a paradigm for changing how the public sector is to be governed (Lane 2000). Various market-type approaches and forms of decentralization, deregulation, and autonomization were adopted to increase efficiency and responsiveness.

2.1.1. Microeconomic Theory

Reform movements of NPM are based on the use of the economic market as a model for political and administrative relationships and the assumptions of public choice, principal-agent, and transaction cost theories (Kaboolian 1998; Nagel 1997).

a. Public choice theory

Public choice theory assumes that human beings are rational economic actors driven by competitive self-interest. In addition, public choice theorists believe that public officials monopolize service delivery, which leads to oversupply and inefficiency (Buchanan 1978). The rationale of public choice theory is that government monopoly entails budget growth and less efficient allocation than a competitive market system. Monopolistic production is served as inherently inefficient and should therefore be exposed to the power of a competitive market (Boyne 1998; Ostrom and Ostrom 1971). Market competition is more efficient than monopolistic government behavior. Market arrangements may promote competition among service providers and encourage governments to provide services in times of increasing demands and shrinking resources. Thus competition should discipline the government in the same ways as the private market (Denhardt and Hammond 1992; Kettl 1993).

In addition to monopoly, Walsh (1995) maintains as the inherent failures of governments that 1) politicians captured by interest groups focus on their own self-interest rather than the public interest, 2) the bureaucracy does not comply with political directions because of their self-interest, and 3) bureaucrats also seek self-interest rather than efficiency. As a result, public choice theory believes that these problems can be solved by replacing monopoly with competition in

public service markets (Boyne 1998). Public choice theory assumes that private-sector technologies are superior to those used in the public sector. Through privatization, private firms compete for public service delivery, which may lead to cost savings, higher efficiency, and improved service quality (Domberger and Jensen 1997; Savas 2000)

b. Principal-agent theory

Principal-agent theory focuses on the relationship between principals and agents. It tries to conceptualize the relationship between principals and agents and to develop a control mechanism based on assumptions of self-interest, opportunistic behaviors, information asymmetry, and partial goal conflict among participants (Eisenhardt 1989). The core of principal-agent theory in contracting out is that contracts should be designed by reflecting requirements, monitoring, reward and incentive systems (O'Flynn 2007). Kelly (1998) emphasizes well-designed contracts as follows:

The government manager clearly articulates the policy, sets the performance standards, and chooses in a competitive market an agent who will faithfully act in the government's behalf to deliver the goods and services so that the outcome sought will be attained (p. 205).

c. Transaction cost theory

Transaction costs are the expenses incurred in managing the negotiation, monitoring, and enforcement of contracts, including those for service delivery (Williamson 1981). A fundamental decision as to whether to internalize or externalize production can be analyzed as a comparison of transaction costs, complete with concerns about information asymmetries, capture, rent-

seeking, moral hazards, and the attendant problems of monitoring to ensure compliance (Lane 1993). The most efficient structure for externalizing production is that "which best matches specific transaction characteristics (i.e., the levels of frequency and asset specificity) with governance structures allowing for economising on the costs associated with bounded rationality, opportunism, and asset specificity; and an overall reduction in the cost of transacting" (O'Flynn 2007, p. 356). Contracting out is justified only when one can expect to lower the sum of production costs and the costs of managing the relationship between government and the contractee (transaction costs) (Globerman and Vining 1996).

2.1.2. Managerialism

Managerialism can be traced to the work of Frederick Winslow Taylor (Terry 1998). According to Boston (2011), several ideas are central to managerialism. First, there is a common term, "management," which is a generic instrumental activity, embodying a set of principles that can be applied to the public as well as the private sector. Second, managers can and should be given significant authority and discretion for pursuing decision making responsibilities, appropriate resource allocation, good performance, and robust monitoring. Third, individuals respond to rewards and sanctions, which can lead to improved performance. Finally, it emphasizes defining and measuring the various tasks that individuals and organizations perform for the sake of efficiency, cost-effectiveness, and accountability. These ideas generate several strengthened values as following.

a. Flexibility

Government reformers argue that the low efficiency and poor performance of public bureaucracies result not from managerial incompetence or malfeasance but from a bad system in which public bureaucracies are overburdened by lots of cumbersome and unnecessary rules, regulations, and other constraints (Terry 1998). In short, NPM assumes that public managers are competent and highly skilled individuals familiar with good management practices, but they are trapped in bad systems (Gore 1993; Terry 2005). Government reformers emphasize the need to "let managers manage" (Terry 1998, p 195). It makes governments work better for managers to focus on the problems and to gain the flexibility to solve them (Aucoin 1995; Boston et al. 1996; Kettl 1997). In addition, criticizing the unresponsiveness of the traditional bureaucratic hierarchy, government reformers pursue flexibility, replacing authority and rigidity and the comfortable stability of government agencies with market-style competition (Kettl 1997; Osborne and Gaebler 1992).

b. Efficiency and performance

One of the characteristics of managerialism is market-driven management, which reflects the assumptions of public choice theory. Public choice theory assumes that private-sector technologies are superior to those used in the public sector. In addition, competition leads to the advantage of improving the performance of public bureaucracies because it lowers costs and increases efficiency (Hood 1995; Peters 1996). Hence, advocates of market-driven management believe that exposing public managers to market forces motivates them to improve organizational efficiency and their performance (Boston, Martin, Pallot, and Walsh 1996; Kettl 1997). From a different view, NPM assumes that people "maximize their expected utilities in formally predictable ways" (Green and Shapiro 1994, p. 17). Assuming that citizens are the same

as customers/consumers, NPM argues that individuals receiving public services are attempting to maximize their utility with regard to the services, and that contractors acting in a competitive market and seeking to maximize their profits will perform better than a government bureaucracy providing the services directly (Kelly 1997).

c. Customer service movement

The customer service movement is one of the characteristics of managerialism. It focuses managers not on the needs of the bureaucracy but on serving citizens. This approach advocates the idea of treating citizens as clients, customers, and main beneficiaries of the operation of the public sector that today is more oriented toward assessing its performance (Thomas and Palfrey 1996). A major goal of government is to satisfy the needs or demands of citizens, namely to show higher responsiveness to the public as clients. In the same vein, Savas (1994) argues that modern states must rely more on private institutions and less on government to satisfy the societal needs of vast populations. Hence, the goal of satisfying the needs of citizens became central to NPM reforms (Vigoda 2002).

d. Managerial accountability

NPM highlights the idea that public managers should seek to satisfy stakeholders or customers of their programs (Moore 1994). Government reinvention seeks to shift hierarchical and legal accountability expectations away from compliance with procedures and toward the measurement of outcomes (Osborne and Plastrik 1997). Reinvention initiatives address concerns about performance by increasing the discretion of managers and staff to devise creative responses to the particular needs of individual clients and communities. Hence, accountability in

NPM depends on how managers satisfy demands of customers according to agreed criteria of performance. In short, NPM focuses primarily on strengthening managerial accountability. Contracts defined by performance targets are estimated by technical management rather than by direct political oversight.

2.1.3. Summary of NPM

Even though different commentators on and advocates of NPM have highlighted different aspects, Hood (1991, p. 4-5) summarizes the seven overlapping precepts as follows:

- Hands-on professional management in the public sector
- Explicit standards and measures of performance
- Greater emphasis on output controls
- Shift to disaggregation of units in the public sector
- Shift to greater competition in public sector
- Stress on private-sector styles of management practice
- Stress on greater discipline and parsimony in resource use

Moreover, Kaboolian (1998) indicates a set of core principles under NPM: 1) economic markets should be the model for relationships in the public sector; 2) policy, implementation and delivery functions should be separated and constructed as a series of contracts; and 3) a range of new administrative technologies should be introduced including performance-based contracting, competition, market incentives, and deregulation.

2.2. Public Value Management

2.2.1. Critiques of NPM

NPM is a cluster of ideas and practices combining market approaches with the public sector. However, many scholars have continued to point out weaknesses of NPM and the role for public managers that NPM suggests.

The NPM approach advocates the idea that citizens are considered as clients, customers, and the main beneficiaries of the operation of the public sector oriented toward assessing its performance (Thomas and Palfrey 1996). This view is limited in improving the important collaboration between citizens and public administration which is a core of democratic civil society (Vigoda 2002). Terry (1993; 1998) argues that managerialism based on NPM undermines democratic and constitutional values such as fairness, justice, representation, and participation. In addition, the NPM approach is mainly concerned about efficiency and quality, but critiques of NPM argue that public managers must balance an even wider set of concerns, including accountability, equity, and public preferences (Hefetz and Warner 2004).

Moreover, public managers should pay attention to the effects of various institutional arrangements on the relationships and processes that are necessary for the health of democracy and inevitable political engagement (Kaboolian 1998). According to Kelly and Muers (2002), NPM has several weaknesses:

1) the focus on improving functionally defined services rather than meeting the overall service needs of different client groups; 2) a pre-disposition towards piecemeal improvement rather than larger scale innovation; 3) a tendency for micro-management

and reduced discretion for front-line workers, with high costs created by detailed inspection by the centre; and 4) a lack of attention given to democratic engagement with citizens and stakeholder groups (p. 10).

Based on these problems and challenges of experiments with NPM, there are increasing concerns about what the public sector should pursue. Stoker (2006) advocates Public Value Management, which is an emerging new management paradigm to steer toward public value. There is a strong belief that the public sector is different from the commercial sector. Governing is not simply shopping or more broadly buying and selling goods in market. Rather, the governance of the public realm involves networks of deliberation and delivery in pursuit of public value. Stoker (2006) defines the public value paradigm as developing four key propositions: "1) public interventions are defined by the search for public value; 2) there is a need to give more recognition to the legitimacy of a wide range of stakeholders; 3) an open-minded, relationship approach to the procurement of services is framed by a commitment to a public service ethos; and 4) an adaptable and learning-based approach to the challenge of public service delivery is required" (p. 47-49). In the same vein, Denhardt and Denhardt (2000) advocate New Public Service as an alternative to New Public Management and "old" public administration. The New Public Service consists of many diverse elements. They focus on three precursors of the New Public Service, including "1) theories of democratic citizenship; 2) models of community and civil society; and 3) organizational humanism" (p. 552).

2.2.2. New Public Service

a. Democratic citizenship

Even though many scholars have viewed citizenship in different ways, citizenship is generally considered as follows:

Citizenship is the status and role which defines the authority and obligations of individual members of a community. This status and role may be formally codified in terms of qualifications, rights, and obligations by constitutions, charters, and laws, or informally determined by values, tradition, and consensus. A citizen is one who qualifies for the status of citizenship as prescribed formally, or informally, by a particular community, and is encumbered with the obligations assigned to this role by that community (Cooper 1984, p. 144).

In this view, citizenship is relevant to the individuals' capacity to influence the political system (Denhardt and Denhardt 2007).

Based on this definition of citizenship, Denhardt and Denhardt (2007) explain two different views of democratic citizenship. The first view is that governments should advance the economic interests of the community and individuals within the community. From this view, the relationship between the state and citizens is based on materialism. The second view is related to political altruism. From this view, public spirit plays an important role in the process of democratic governance. Citizens consider the larger public interest more than their self-interest. As a result, public managers should seek greater responsiveness and a corresponding increase in citizen trust (King and Stivers 1998).

b. Community building

Frug (1999) suggests that a primary function of local governments ought to be the

cultivation and reproduction of their traditional form of human association. Gardner (1991) argues that a sense of community might provide a helpful mediating structure between the individual and society. McNeely (1999) defines community building as follows:

Community building is, rather, a new approach that is emerging to help address the problems and opportunities of both impoverished inner-city neighborhoods and rural areas. It works by building community in individual neighborhoods: neighbors learning to rely on each other, working together on concrete tasks that take advantage of new self-awareness of their collective and individual assets and, in the process, creating human, family, and social capital that provides a new base for a more promising future and reconnection to America's mainstream (p.742).

In this view, public managers should redefine their role with respect to the involvement of citizens in the governmental process (Thomas 1995). Along the same lines, King and Stivers (1998) point out that governments can play an important and critical role in creating, facilitating, and supporting connections between citizens and their communities.

c. Organizational humanism

The Public Value Management paradigm also emphasizes the professional growth of government employees. This approach seeks to fashion public organizations that are less dominated by issues of authority and control and more attentive to the needs and concerns of employees inside public organization (Denhardt and Denhardt 2000). Through contracting out, public employees have less job security. For example, Brotman (1992) indicates that privatization resulted in laying off more than 800 state employees working with various

outpatient and residential mental health programs in Massachusetts. In addition to layoffs, when services are contracted out, private firms typically offer less generous employee benefit packages than governments, which can lead to significant reductions in real wages (Becker, Silverstein, and Chaykm 1995). Through contracting out public employees confront weakened job security and reduction of benefits.

2.2.3. Comparison between NPM and PVM

The previous sections discussed the differences between NPM and PVM. These very different perspectives emerge as a result of deep-seated philosophical differences. Table 2.1 set out the key differences.

Table 2.1. Paradigms of Public Management

	New Public Management	Public Value Management
Primary theoretical and epistemological foundations	Economic theory, more sophisticated dialogue based on positivist social science	Democratic theory, varied approaches to knowledge including positive, interpretive, critical and postmodern
Dominant focus	Results	Relationships
Conception of the public interest	Represents the aggregation of individual interests	Result of a dialogue about shared values
To whom are public servants responsive?	Customers	Citizens
Managerial goals	Achieve agreed performance targets	Multiple goals including responding to citizen/user preferences, renewing mandate and trust through quality services, steering network
Approach to accountability	Market-driven – the accumulation of self-interest will result in outcomes desired by broad groups of citizens (or customers)	Multi-faceted – public servants must attend to law, community values, political norms, professional standards and citizen interests
Administrative discretion	Wide latitude to meeting entrepreneurial goals	Discretion needed, but constrained and accountable
Motivational basis of public servants and administrators	Entrepreneurial spirit, ideological desire to reduce size of government	Public service, desire to contribute to society

Adapted from Denhardt and Denhardt (2000) and O'Flynn (2007)

CHAPTER 3

THEORETICAL FOUNDATIONS OF THE MODEL OF PUBLIC SERVICE DELIVERY DECISIONS

This chapter covers research hypotheses that examine the choice of public service delivery modes. After providing research hypotheses, this chapter shows the summary of hypotheses.

3.1. Contextual Explanations for the Choice of Public Service Delivery Modes

This study focuses on what influences the choice of public service delivery modes. Previous studies of public service delivery modes have focused mainly on organizational factors and transaction cost theory. In addition, previous studies have emphasized efficiency in public service delivery. However, this focus on efficiency has been criticized because public values inherent in public services may not be addressed by economic efficiency (Hefetz and Warner 2004). I believe that previous studies have missed the influence of public managers' values or the public sector's role beyond efficiency in exploring the choice of public service delivery modes. Therefore, this study examines how values public managers hold influence the choice of public service delivery modes. This study also explores how organizational environment factors and characteristics of public service in combination with value factors affect the choice.

3.2. The Role of City Managers and County Administrators

Local governments today have more alternative service delivery options than ever before.

Today's contracting environment presents many opportunities for service contracting. In particular, faced with the reality of limited resources and increasing citizen expectations, many local governments have turned to service contracting as a way of saving money or at least avoiding cost increases. As a result, public managers face a number of choices.

Top administrators in local governments have a specific authority to be involved in the preparation and execution of fundamental decisions about service delivery, even though such decisions are ultimately made by elected officials. With regard to the role of top administrators, Huntley and MacDonald (1975) and Green (1987) find that virtually all managers always or nearly always participate in the formulation of policy and set the council agenda. Most initiate policy and play a leading role in policy-making. Svava (1988) also finds that council members recognize substantial involvement by the manager in decisions on government mission and policy. Fannin (1983) indicates that among both council members and managers in Texas, there is overwhelming preference for managers to apply professional expertise to policy-making, acting independently of the council or as an advisor depending on the circumstances. Based on the survey of the council members in all 16 North Carolina cities, Svava (1991) suggests that "the manager should a) assume leadership in shaping policies, b) advocate major changes in policy, c) advocate new services to promote equity, d) actively promote equity in service delivery, and e) foster citizen participation." (p. 240). Therefore, top administrators play an important role in deciding to public service delivery modes.

I start from the premise that elected officials expect the values public managers hold to influence the adoption of public service delivery modes. Managers are hired for their expertise, which encompasses values concerning essential government operations. Posner and Schmidt (1996) describe values as lying "at the core of personality, influencing the choices individuals

make." In the contracting context, public managers operate in a crucible of swirling technical and political values: effectiveness, efficiency, accountability, responsiveness, equality of treatment, and service quality, to name a few (Frederickson 1997; Rainey 2003). Managers experience these values as pressures from internal or external stakeholders that they must balance or optimize as they deliver services. Therefore, I assume that public managers will choose a particular service delivery mode such as contracting out or in-house delivery based on values they have incorporated into their management philosophies. Van Wart (1998) explains the relationship between a decision and values as follows:

A decision is a judgment or conclusion reached or given. This definition emphasizes the choice, the selection of a single option based on variety of factors.... Further, once there are a number of options, the values inherent in the options will influence the decision-maker's selection. The more the options vary, the greater will be the role of those values (p. 234).

3.3. Public Values

Values generally refer to "complex personal judgments based on knowledge as well as an emotional reaction" (Bozeman 2007, p. 13). In government, public values are those values that provide "normative consensus about (a) the rights, benefits, and prerogatives to which citizens should (and should not) be entitled; (b) the obligations of citizens to society, the state, and one another; and (c) the principles on which governments and policies should be based" (Bozeman 2007: 13). In addition to the definition of public values by Bozeman, many scholars have tried to

define public values and classify public values.⁵ For example, Kernaghan (2003) divides public values into four categories: ethical values, such as integrity and fairness; democratic values, such as the rule of law and loyalty; professional values, such as efficiency and innovation; and people values, such as caring and compassion.⁶ Lane (1994) indicates public values by distinguishing public administration approach from public management approach.⁷ Though many scholars presented various public values, the emergence of the “New Public Management” has prompted a number of scholars to raise concerns about protecting values such as the public interest, democratic governance, community and civil society (Denhardt and Denhardt 2000; Heintzman, 2007). Some have argued that the NPM reinvention movement undermines the institutions and mechanisms that support the values inherent in good administrative judgment (Jos and Tompkins 2004). Frederickson (2005) emphasizes conflicts between crucial values such as fairness and efficiency: “The private market is designed to be efficient but not to be fair; democratic self-government is designed to at least try to be fair, and hope to be efficient” (p. 178). He fears that corruption and unethical behavior in government are on the rise because we are trying to run government organizations as if they were businesses. Therefore, this study classifies public

⁵ In the Handbook of Administrative Ethics, Gortner (1994, p. 381) distinguishes among four sets of values: political, economic, social and professional. These values play an important role in a public servant’s efforts to serve the public interest. In addition, in his book on about values in the public sector, van Wart (1998) presents a five-fold distinction: individual, professional, organizational, legal, and public interest values.

⁶ Ethical values are integrity, fairness, accountability, loyalty, excellence, respect, honesty, and probity. Democratic values include rule of law, neutrality, accountability, loyalty, openness, responsiveness, representativeness, and legality. Professional values are effectiveness, efficiency, service, leadership, excellence, innovation, quality, and creativity. People values consist of caring, fairness, tolerance, decency, compassion, courage, benevolence, and humanity.

⁷ The public administration approach includes rules, due process, anticipation, responsibility, formalism, openness, legality, vocation, and public interest. In contrast, public management approach consists of objectives, efficiency, adaptation, direction, innovation, secrecy, effectiveness, self-interests, and profit.

values into two categories: public values from New Public Management and public values from Public Value Management.

3.3.1. NPM Values

The first principle of NPM is managerialism, defined by Pollit (1993) as involving: 1) continuous increases in efficiency, 2) the use of “ever-more-sophisticated” technologies, 3) a labor force disciplined to productivity, 4) clear implementation of the professional management role, and 5) managers being given the right to manage. In addition, the customer service movement is one of characteristics of managerialism. It means that public managers should focus not on the needs of the bureaucracy but on serving citizens. This approach advocates the idea of treating citizens as client, customers, and main beneficiaries of the operation of the public sector (Thomas and Palfrey 1996). This study examines how public values from NPM such as efficiency, flexibility, managerial accountability, and customer orientation influence the choice of public service delivery modes.

a. Efficiency

The basic idea of NPM is that larger public bureaucracies are inherently inefficient. So, the main rationale for contracting out is to improve efficiency in public service delivery through competition, in particular the superior productivity engendered among competitive providers. Efficiency is defined as the ratio of outcomes to inputs. It describes the cost per activity to achieve given outcomes. Advocates of NPM argue that private sector technologies are superior to those used in the public sector and competition leads to the advantage of improving efficiency

because it lowers costs (Hood 1995; Peters 1996; Terry 2005). Therefore, this study hypothesizes that public managers will be encouraged to employ market approaches for improving efficiency.

Hypothesis 1: The more a local government administrator agrees that efficiency is important in deciding on a mode of service delivery, the more likely the jurisdiction will choose contracting out.

b. Flexibility

One element of NPM is "liberation management" (Peters 1992; Terry 1998). The core argument is that "poor performance of public bureaucracies is not the result of managerial incompetence or malfeasance. Rather, it is the result of a bad system, which is overburdened by a plethora of cumbersome and unnecessary rules, regulations, and other constraints" (Terry 1998, p. 195). Proponents of contracting out argue that both public and private organizations need to "cut the fat" and get "lean and mean" in order to survive. Given that most government services are labor-intensive, contracting out services provides government with an indirect method of reducing the number of individuals it employs directly. Government-by-contract also permits greater flexibility in determining employment levels, work rules, and health and safety standards since private firms are often subject to less restrictive regulations than public entities (Gilmour and Jensen 1998). Through contacting out public managers can be free to pursue higher performance. Likewise, NPM maintains that governments should pursue flexibility replacing authority and rigidity and the comfortable stability of government agencies with market-style competition (Kettl 1997; Osborne and Gaebler 1992). This study expects that public managers seeking to managerial flexibility are more likely to contract out.

Hypothesis 2: The more local government administrators emphasize managerial flexibility in public service delivery, the greater the likelihood that a locality will use contracting out.

c. Managerial accountability

NPM is seen as the delegation, devolution or decentralization of management authority, which allows managers to manage their organizations and their resources, financial and human. It leads to greater authority to manage their operation (Aucoin 2011). In addition, NPM approaches such as emphases on efficiency and performance and customer service movement are connected with "technical exercise involving bookkeeping and argument about whether what is being done is being done efficiently and effectively" (Christensen and Laegreid 2002, p 271). Also, NPM highlights the idea that public managers should seek to satisfy stakeholders or customers of their programs (Moore 1994). Hence, accountability of NPM depends on how managers satisfy demands of customers according to agreed criteria of performance.

Managerial accountability, under NPM, has expanded its scope beyond the traditional administrative accountability (monitoring processes), to include the monitoring of inputs, outputs and outcomes. Thus managerial accountability can be identified as the obligation of subordinates to account to their superiors for the performance of particular duties and to accept direction from their superiors in the performance of such duties (Mulgan 1997). In this sense, managerial accountability includes the obligation to account for performance and to accept oversight and direction. This study hypothesizes that public managers who are accountable to the public for the proper performance of their designated functions tend to employ contracting out.

Hypothesis 3: The more local government administrators see themselves as accountable to their immediate superiors for their own performance and for the performance of others below, the more likely their jurisdiction will be to use contracting out.

d. Customer orientation

An essential component of redesigning public administration on the basis of NPM principles is the idea that citizens are customers of the administration. Customer orientation of employees in the public sector has been described as a cornerstone of the NPM approach (Wherli, 1996).

A variety of government publications over many years have argued for contestable markets, including choice and voice for citizens in service delivery and the rigorous and systematic use of information in public organizations (Walker, Boyne, Brewer, and Avellaneda 2011). This policy discussion typically emphasizes providing what customers want and offering them choices in a competitive market place. This implies listening to them and offering alternative forms of service delivery as necessary. The normative argument that follows from this discussion is that public organizations should be market driven with a strong consumer or customer culture, and this will lead to public service improvement. The specific characteristic of customer orientation in public organizations as compared to the private sector is expressed in Schedler's definition (Schedler, 1995, p. 37):

The increased focus on the concrete and existing needs of customers (e.g. residents) brings about profound shifts in public administration. Naturally, laws still do have to

be followed, procedures have to be carried out properly, and uncomfortable decisions and demands have to be made, if necessary in an authoritarian manner. Customer orientation in this context does not mean making the customer the measure of all things. Rather, it means providing a necessary service in such a way that it meets the customer's needs in the optimum manner.

Based on previous research, this study expects that public managers attaching great importance to need of customers (e.g. residents) will choose contracting out.

Hypothesis 4: The more a local government administrator agrees that customer orientation is important in deciding on a mode of service delivery, the greater the likelihood that the jurisdiction will choose contracting out.

3.3.2. PVM Values

Since about the 1980s NPM has challenged public sector virtues to solve societal problems. The new trend in the public sector was 'run government like a business' (Jorgensen and Bozeman 2002). One of the more popular approaches to running government like a business is the public service delivery by contracting out. Through contracting out private firms are running welfare services, waste collection, public roads, public parks and recreation, prisons, airports, and so on. As a result, so-called classic public values such as fairness, accountability, probity, impartiality, and honesty are seriously threatened. Given the problems and challenges of experiments with NPM, there is increasing interest in what the public sector should pursue. As a result, a new post-competitive paradigm represented in Public Value Management by O'Flynn (2007) and Stoker

(2006) and New Public Service by Denhardt and Denhardt (2000) signals a shift away from the primary focus on results and efficiency toward the achievement of the broader public values.

This study explores how public values from Public Value Management and New Public Service such as fairness, political accountability, social cohesion, and employee safety are taken into account in decisions about contracting out.

a. Fairness

Fairness means equal treatment; that is, no discrimination according to sex, race, religion, poverty, or other categories not relevant to duly authorized entitlements (Jorgensen and Bozeman 2002). NPM is based on a customer-oriented model which assumes a "mercenary exchange relationship" between buyers and sellers as found in the private sector (Kettl 1998). From this viewpoint, individuals pursue narrow self-interest at the expense of any wider social or public interests (Clarke and Newman 1997). Kettl (1998) argues that the customer-oriented model tends to discriminate between the rich and the poor based on their capacity to pay, which impairs fairness treating all citizens equitably. For example, the poor may not even qualify as customers to receive public service because they do not have sufficient financial capacity to pay (Haque 2001). Therefore, this study hypothesizes that public managers emphasizing fairness are likely to provide public services through delivery by public.

Hypothesis 5: The more a local government administrator agrees that fairness is important in deciding on a mode of service delivery, the greater the likelihood that the jurisdiction will choose to deliver a service by public employees.

b. Political accountability

The issue of accountability is an important element in the debate over contracting out. Supporters of contracting out tend to claim that accountability can be maintained and even enhanced, while critics argue that accountability is seriously compromised. For example, contracting out imposes a definite break when contactors violate general oversight and accountability. In short, contractors are accountable to public officials for performance of the terms of the contract but not for the many acts of discretion which are not covered by the contract. In this case, accountability seems to be maintained and even enhanced. However, the accountability issue with contracting out is the extent to which providers of contracted services offer the same degree of accountability to citizens as is offered by public servant providers. Accountability is therefore limited to the terms of the contract. The accountability issue with contracting out should be highlighted in the view of political accountability which emphasizes responsiveness to a key stakeholder (e.g., citizens or service recipients) (Johnston and Romzek 1999). Among various stakeholders, paying attention to citizens is important in evaluating political accountability. According to Warner and Hefetz (2002), attention to citizen “voice” is lower among municipalities with higher levels of privatization, because contracting out involves a contract between government as purchaser and the suppliers, which excludes citizens as service recipients. Therefore, this study expects that public managers emphasizing the provider's accountability to service recipients are less likely to contract out.

Hypothesis 6: The more a local government administrator agrees that political accountability is important in deciding on a mode of service delivery, the greater the likelihood that the jurisdiction will choose to deliver a service by public employees.

c. Social cohesion

Since the late 1980s, many scholars have advocated the themes of building community, civil society, and civic infrastructure for solutions to the growing distance between citizens and governments (Nalbandian 1999). Frederickson (1997) argues that local government managers are in a distinct position to enhance civil society and help social capital if "the community paradigm were to become part of the bureaucrat's understanding of how the city ought to be" (p. 31). Social cohesion includes harmonious economic and social development and common standards; redistribution of public finances and of opportunities; equal access to services and welfare benefits (Forrest and Kearns 2001).

NPM reforms stress that markets could be superior, whereas current trends in public administration and planning urge the public sector to interact not only with markets, but also with communities to encourage democratic deliberation and enhance local quality of life (Denhardt and Denhardt 2000; Frug 1998; Nalbandian 1999). This alternative reform has been coined the 'New Public Service' in public administration (Denhardt and Denhardt 2003) and 'communicative planning' in the planning field (Healey 1993). Therefore, this study hypothesizes that public managers emphasizing social cohesion such as maintaining a strong community are likely to provide public services through delivery by public.

Hypothesis 7: The more a local government administrator agrees that social cohesion is important in deciding on a mode of service delivery, the greater the likelihood that the jurisdiction will choose to deliver a service by public employees.

d. Employee safety

In organization theory, a good working environment, management acceptance of certain employee rights, and decent pay are considered as a public value. Public organizations should not only produce goods and services, but also serve their employees (Jorgensen and Bozeman 2002). Private contractors often are required to offer displaced public employees the right of first refusal to new jobs created because of privatization. Potential disparities in wages and benefits between government and contract workers are a major concern among public employees (Fernandez, Lowman, and Rainey 2002). In addition, the Public Value Management paradigm emphasizes professional growth of government employees. This approach seeks to fashion public organizations that are less dominated by issues of authority and control and more attentive to the needs and concerns of employees inside public organization (Denhardt and Denhardt 2000). Through contracting out, public employees have less job security. For example, Brotman (1992) indicates that privatization resulted in laying off more than 800 state employees working with various outpatient and residential mental health programs in Massachusetts. In addition to layoffs, when services are contracted out, private firms typically offer less generous employee benefit packages than governments, which can lead to significant reductions in real wages (Becker et al. 1995). Through contracting out public employees confront weakened job security and reduction of benefits. Therefore, this study hypothesizes that public managers concerned about job security for their employees are likely to provide public services through delivery by public.

Hypothesis 8: The more a local government administrator agrees that employee safety is important in deciding on a mode of service delivery, the greater the likelihood that the jurisdiction will choose to deliver a service by public employees.

3.4. Organizational Environment

3.4.1. Economic Factors

a. Market structure or competition

The core of contracting out under NPM is that market competition plays a pivotal role in producing cost savings (Boyne 1998). However, despite the importance of market competition to gain some benefits from contracting out, it is hard to find competitive markets for many public services. If contracting out merely replaces a government monopoly with a private one, gains from contracting out may not occur (Hefetz and Warner 2004). Public choice theory assumes that competition will be the greatest effect on reducing costs in fragmented local government settings (Savas 2000). In many local areas, however, insufficient numbers of alternative suppliers may be an obstacle to privatization (Brudney et al. 2005; Hirsch 1995; Kodrzycki 1994). In order to create competition, local governments tend to introduce mixed public and private delivery in the same service area and rely on competitive bidding (Hefetz and Warner 2004; Martin 1999; Miranda and Lerner 1995). This results in complex and dynamic delivery of public services, and local managers use various alternatives for service delivery.

The problem of market structure or competition is important in the decision to service delivery modes. Competition among external producers provides incentives for cost savings. If the number of external suppliers is limited, this competition is diminished. Consequently, the cost savings from contracting out are likely to be reduced. This study expects that local governments encountering a greater availability of external producers are more likely to realize cost savings through contracting out.

Hypothesis 9: The more local government administrators perceive the existence of complete markets or competition for a service, the greater the likelihood that a jurisdiction will choose contracting out.

b. Fiscal pressure

Fiscal pressures are likely to influence the decision to contract out and serve as indirect impetus to gain cost efficiency from alternative service arrangements. The conventional wisdom on contracting out has regarded contracting out as a potential opportunity to reduce the cost of governments without significant reductions in the quality or level of services (Stein 1990).

Local governments may experience political pressures to contract out services when they are under fiscal constraints from high tax rates or high levels of municipal debt. Local governments respond to the political pressures to reduce the cost of government when they face complaints from overtaxed voters. If citizen demands threaten to the political position of leaders of government, they may be constrained to closely follow the will of the people. The most popular reason of privatization is a means to save taxpayers money. Shifting service supplier to the market may give a short term gains. More importantly, contracting out gives immediate visible social and political impacts on efficient government management. Since 1980's, privatization has been remained a prominent issue as a remedy for financial hardships of local governments. Likewise, one of the frequently cited reasons for contracting out is that it can reduce the cost of public service delivery because privatized service delivery leads to more efficiency (Boyne 1998; Brudney et al. 2005; Ferris 1986; Savas 2000). Local governments that suffer from the most severe financial pressures are more likely to seek savings by contracting out.

These financial pressures include higher tax burden and imposition of limits on local tax levels by state governments (Boyne 1998).

However, there have been controversies about influences of fiscal pressure. For example, Boyne (1998) asserts that "the evidence provides little support for the view that fiscal stress is a significant constraint on decisions to contract out" (p 152). However, other studies have found a positive correlation between fiscal stress and the extent of contracting out (Brown and Potoski 2003b; Brudney et al. 2005; Warner and Hebdon 2001). This study expects that as local governments face fiscal pressure, they are more likely to contract out.

Hypothesis 10: The stronger the local government administrator's perception of high fiscal pressure, the more likely the jurisdiction is to contract out.

3.4.2. Political Factor

Previous experiences about privatization have shown that it results in larger layoffs and lower wages and benefits. These disadvantages for public employees have led public unions to become significant players in the decision-making process regarding privatization (Brudney et al. 2005; Fernandez et al. 2008; Fernandez and Smith 2006; Pallesen 2004). Boyne (1998) reviews a number of studies that used labor union coverage and the ratio of public employees to total population as measures of the power of public employees to oppose privatization (e.g., Ferris 1986; Ferris and Graddy 1986; Miranda 1992; Morgan et al. 1988). He concludes that "a majority of the tests of employees per capita point toward a negative relationship with contracting out. The evidence on unionization is much more mixed but suggests that, on balance,

this variable also has a negative effect on service contracting” (Boyne 1998, p. 157). The State of Virginia does not allow the unionization of public employees. Therefore, I include the participation of local government staff in decision-making to capture public employee strength. So, this study hypothesizes that public employees generally oppose privatization and that the participation of local government's staff in decision-making has a positive influence on delivery by public.

Hypothesis 11: The greater the perception of participation by local government staff in decision-making on service delivery, the less likely the jurisdiction is to choose contracting out.

3.4.3. Managerial Factor

Contracting out creates potential agency problems such as adverse selection and moral hazard that result from information asymmetry and opportunism. To curb these problems and help ensure success, local governments need to develop contract management capacity to plan privatization initiatives, manage the solicitation process, and monitor contractor performance (Brown and Potoski 2003a, 2003b; Kettl 1993; Savas 2000; Sclar 2000). In this study, good monitoring capacity is considered as the managerial factor.

NPM highlighted competitive service delivery, which led to support for privatization (Osborne and Gaebler 1992). Yet, as just noted, most markets for public services have limited competition, which results in market failures due to high transaction costs, limited information, uncertainty about the future, and opportunistic behaviors (Brown et al. 2006). Transaction costs

occur when contracting organizations cannot fully predict all possible future scenarios and stipulate contracts. In this situation, vendors may behave opportunistically. As a result, transaction costs have an important influence on contracting out. Some scholars argue that transaction costs are grounds for contracting back in if the transaction costs of contracting out are higher than those of in-house production (Nelson 1997). Sclar (2000) criticizes contracting out because of the high transaction costs associated with contracting, particularly the costs of monitoring.

Studies of contracting out show that local governments are likely to provide public service with in-house and intergovernmental service delivery when contract specification and monitoring are difficult (Hefetz and Warner 2004; Nelson 1997). The absence of a good monitoring system may lead to higher levels contracting back in. Paroush and Prager (1999) suggest that public managers decide on contracting out or in-house production through comparison between the costs of in-house production and monitoring costs. The monitoring process starts with service specification and continues with government oversight and assessment of service delivery. Weak monitoring control will not guarantee expected benefits from privatization (Hefetz and Warner 2004; Sclar 2000). In addition, Donahue (1989) argues that successful contracting requires good measures of performance. Therefore, this study expects that good monitoring capacity is positively associated with decisions to contract out.

Hypothesis 12: Local governments with greater contract monitoring capability as perceived by local government administrators are more likely to contract out.

3.4.4. Community Characteristic Factors

Community characteristics of local governments play an important role in decisions to public service delivery modes. Visser (2002) has argued that urban political cultures have an important impact on the roles and activities of city officials, and these cultural factors are more significant than traditional explanations for public service delivery modes. According to Morgan et al. (1988), the percentage of the population that is black, the percentage aged 65 years or older, and the percentage of households with low income influence the decisions about public service delivery modes. Specifically, these three groups are more likely to depend on public services than other groups and to resist changes that might modify existing service delivery types.

Previous findings also indicate that lower income households favor a larger role for government and are therefore more likely to oppose privatization (Ferris 1986; Ferris and Graddy 1986; Miranda 1992; Morgan and Hirlinger 1991; Morgan et al. 1988). Lower income households reap greater benefits from public assistance programs than more affluent residents. Privatization at the local level does not affect the level of funding from states for formula-based programs and does not appear to reduce public spending (Stein, 1990). However, lower income residents may still perceive it as a withdrawal of the public sector's commitment to the service area (Ferris 1986) and as a means for reducing public spending.

Hypothesis 13: The higher the proportion of population age 65 and older in a jurisdiction, the less frequent will be its choice to contract out.

Hypothesis 14: The proportion of white population will be positively associated with decisions to contract out.

Hypothesis 15: The proportion of lower income households will be negatively associated with decisions to contract out.

3.5. Characteristics of Public Services

Findings from previous research suggest that the characteristics of goods and services represent some of the most important factors in the determination of which are likely to be contracted (Brown and Potoski 2003b; Ferris and Graddy 1986; Greene 2002; Levin and Tadelis 2005; Nelson 1997; Ostrom and Ostrom 1977; Stein 1993; Williamson 1981).⁸ I consider two specific characteristics—asset specificity and measurability—and explore how the decision to make or buy is determined by these characteristics.

3.5.1. Asset specificity

Asset specificity refers to whether specialized investments are required to produce the service. Specialized investments apply to the production of on service but are very difficult to adapt for the production of other services.⁹ If local governments decide to contract for a highly

⁸ Brown and Potoski (2003b) studied contracting patterns of 1,586 U.S. cities and counties that hold membership in the ICMA, and found that asset specificity and service measurability are significant factors in local governments' choice of external production mechanisms. These authors argue that city managers involved in contracting decisions must calculate the risks associated with using alternative service delivery arrangements. The authors demonstrated that local government officials rely on the criteria of asset specificity and service measurability as general heuristics in their approach to risk minimization.

⁹ Brown and Potoski (2005, p. 329) suggest the following examples of specialized investments: 1) the use of a specific location that is only moveable at great cost; 2) the use of highly specialized human skills that cannot be put to work for other purposes; 3) the use of specialized tools or a complex system designed for a single purpose; and 4) the requirement that the service

asset-specific service, these specialized investments create an advantage to the first contract winner in subsequent rounds of bargaining, thus raising a barrier to entry for later vendors and risking market monopolization. Under such conditions, a monopolistic vendor can opportunistically exploit the contracting organization in subsequent rounds of contracting. This study expects that local governments are likely to internalize production of services that are more asset specific.

Hypothesis 16: As the asset specificity of services increases, as perceived by local administrators, local governments are more likely to deliver services by public employees.

3.5.2. Measurability

The concept of measurability refers to the ability of the contracting organization to evaluate vendor performance or to effectively monitor how the vendor delivers the service. A service is difficult to measure when neither the outcomes to be achieved nor the activities to be performed in delivering the service are easily identifiable. Easily measured services have readily identifiable performance metrics that accurately represent the outputs and/or outcomes of service quantity and quality (Brown and Potoski 2005). For other services, however, it is necessary to create mechanisms that can be used to effectively measure, monitor, and manage what the vendor does. It is far less costly, for example, to measure the quality of trash collection than it is to assess the delivery of mental health care services. Developing a contract for the latter services is

reach the user within a relatively limited period of time or the quality of the service greatly diminishes.

more costly because expected levels of output often cannot be established in advance, and performance of these types of functions requires substantial discretion, making it difficult to clearly specify performance expectations in contract language (LeRoux 2007).

When the measurement difficulty of a service is low, external production is more likely. The savings in production costs from external production are likely greater than the cost of monitoring these suppliers. Government officials are likely to rely on private and nonprofit contractors when measurement difficulty is relatively low (Brown and Potoski 2005). This strategy is attributed to the fact that nongovernmental producers usually operate in more competitive markets than governmental suppliers, increasing the likelihood of greater cost savings than when governments are used. However, as measurement difficulty increases, the cost of monitoring of these providers increases relative to the gains achieved from a competitive market. When measuring service quality is more difficult, local governments will turn to their governmental counterparts because monitoring and enforcement costs will be lower as a result of the expectation of less opportunistic behavior by another government in comparison to a private provider (Brown and Potoski 2003; Lamothe, Lamothe, and Feiock 2008). When measurement difficulty becomes very high, local governments are expected to opt for direct production rather than spend scarce resources for costly monitoring and enforcement of a contracting agreement.

Hypothesis 17: As services become more difficult to measure, as perceived by local administrators, local governments are more likely to deliver services by public employees.

3.6. Summary of Hypotheses

The factors expected to predict the likelihood of contracting out are summarized in Table 3.1, along with the direction in which the variable is expected to influence contracting out. The next chapter describes how I test these hypotheses, examining data collection and data analysis.

Table 3.1. Summary of hypotheses

Factors influencing contracting out		Hypothesized direction
Public values		
	NPM values	
	Efficiency	+
	Flexibility	+
	Managerial accountability	+
	Customer orientation	+
PVM values		
	Fairness	-
	Political accountability	-
	Social cohesion	-
	Employee safety	-
Organizational environment		
	Economic factors	
	Complete market or competition	+
	High fiscal pressure	+
	Political factor	
	Participation of local government's staff	-
	Managerial factor	
	Good monitoring capacity	+
Community characteristic factors		
	The high proportion of population age 65 and older	-
	The high proportion of white population	+
	The high proportion of low-income households	-
Service characteristics		
	Asset specificity	-
	Measurability	+

CHAPTER 4

METHODS

This study focused on one of the major alternative service arrangements entered by municipal governments, namely contracting out. It was based on a survey of counties and municipalities in Virginia. The survey was developed for purposes of a larger study that includes questions related to variables for this dissertation research. The survey respondents were County Administrators and City Managers who play an important role in deciding to public service delivery modes. Their responses to the survey provide data that is used to test a model for the decision to contract out. This chapter delineates the research methods and data analysis plan.

4.1. Research Design

This study utilized a cross-sectional research design. The key feature of a cross-sectional design is that its data represent a set of people or cases at one point in time. O'Sullivan, Rassel, and Berner (1995) point out that cross-sectional designs are particularly suited for studies that involve collecting data 1) on many variables and 2) from a large group of subjects who are geographically dispersed. Any one of these conditions is sufficient justification for using a cross-sectional design. In addition to the number of variables, subjects, and the location of subjects, other considerations favor cross-sectional studies: 1) to gather information on people's attitudes and behavior, 2) to answer questions of how much, how many, who, and what happened, and 3) to begin exploratory research and identify hypotheses for future research.

For this study, a cross-sectional design was the appropriate design of choice. This study employed multiple variables in the form of subjective values of municipal administrators, organizational environments of each municipality, and public service characteristics.

4.2. Research Population and Data Collection

The research population for this study was counties and municipalities in Virginia. The State of Virginia has 95 Counties, 39 Independent Cities, and 190 Towns. This study focused on county and city governments to explore what influences the choice of public service delivery modes by local governments because most town governments provide only a limited number of public services of the type investigated in this study. For example, the Town of Alberta provides only water and sewer and police services. The Town of Dayton only provides refuse collection, water and sewer, and operation and maintenance of recreation facilities. Therefore, I excluded town governments from this study. The data were collected through a mail/web survey questionnaire. A copy of the preliminary draft questionnaire was proofread and critiqued by Dr. Cook and Dr. Willis-Walton who are familiar with survey research design procedures. Initial questionnaires were emailed to four County/City managers for pretesting the survey questionnaire.¹⁰ Dillman (1978) notes the importance of pretests when he says "that a pretest is designed to test the questionnaire as well as the questions. General impressions of the questionnaire are just as important, if not more so, as the precise wording of questions in stimulating the return of mail questionnaires" (p. 156). He also notes that "every effort should be made to produce a questionnaire that looks final" (p. 156).

¹⁰ 4 Counties/Cities for pretesting the survey questionnaire were Montgomery County, Floyd County, Radford City, and Roanoke City.

After IRB approval of the survey (see appendix A), the final survey was administered to 134 County Administrators/City Managers on June 25, 2012. Survey respondents had an option to respond either by mail or via the web. A total 134 copies of the questionnaire along with a personalized cover letter and a postage-paid return envelop were mailed to each County Administrator/City Manager. Appendix B and C contain copies of the cover letter of the survey and the final questionnaire mailed to the officials. The County Administrators/City Managers were asked to complete the survey, which took between 15-20 minutes. A follow-up mailing of post cards was sent on July 16, 2012 to non-respondents. The period to respond to the survey was from June 25 through August 31, 2012. The total number of County Administrators/City Managers who responded to the survey was 70. Among the 70 respondents 60 responded by mail and 10 responded by the web. Appendices D and E include information about the non-respondents compared to the respondents. The overall response rate was 52.2%.

Table 4.1. Survey Timeline

Date	Task
June 6, 2012	IRB approval
June 25, 2012	First Survey Package Mailed
July 16, 2012	Reminder Postcard Mailed
July 30, 2012	Email to non-respondents

Table 4.2. Profile of Response Rate

	Number Surveyed	Number Received	Response Rate in %
Counties	95	44	46.3%
Cities	39	26	66.7%
Total	134	70	52.2%

The demographics of the survey respondents are presented in Table 4.3. A majority (82.6%) of the respondents were male, many had work experience in the private sector (52.2%), and a majority held a Master’s degree (59.4%). In addition, a majority (68.6%) had worked in the public sector more than 20 years.

Table 4.3. Survey Respondents' Demographics

Demographics		
Sex		
	Male	57 (82.6%)
	Female	12 (17.4%)
Previous job experience		
	None outside public sector	23 (33.3%)
	Private	36 (52.2%)
	Non-profit	10 (14.5%)
Highest level of education		
	High school diploma	2 (2.9%)
	2 year college degree	0
	4 year college degree	22 (31.9%)
	Master's degree	41 (59.4%)
	Ph.D.	2 (2.9%)
	Other	2 (2.9%)
Work experience in the public sector		
	0-5 years	3 (4.3%)
	6-10 years	1 (1.4%)
	11-15 years	6 (8.6%)
	15-20 years	12 (17.1%)
	More than 20 years	48 (68.6%)

4.3. Variables and Measurement

4.3.1. Dependent Variables

The dependent variable in this study was a binary variable: delivery by public employees versus contracting out. Actual public service delivery modes are various (see Table 4.4). For example, the ICMA survey for studying local government service delivery uses eight service delivery modes such as "your employees entirely," "your employees in part," "another government or authority," "private for profit," "private nonprofit," "franchises/concessions," "subsidies," or "volunteers." In the article by Mohr et al. (2010) on alternative methods of service delivery, choices of service provision include "municipal provision" (either "entirely" or "in part"), "another government or authority," or "private" (either "for-profit" or "nonprofit"). In this study, I considered "directly provide," "jointly provide this service with another government," "jointly provide this service with for-profit," and "jointly provide this service with non-profit" as delivery by public. On the other hand, "this service is provided by another government," "this service is provided by for-profit," and "this service is provided by non-profit" are coded as contracting out. Likewise, I measured the dependent variable as a dichotomous response; 0=delivery by public employees, and 1=contracting out.

Table 4.4. Modes of Public Service Delivery in Local Governments

Non- provision	Does not provide	
Non-contracting	Directly provide	
	Jointly provide this service	With another government
		With for-profit
		With non-profit
Contracting	This service is provided	By another government
		By for-profit
		By non-profit

This study had contracting out of public services as a major dependent variable. Public services were classified into five categories, which in turn were further subdivided into 11 different kinds of services.

Public Works

Residential solid waste collection; street repair; and water and sewage service

Public Safety

Fire prevention/suppression and emergency medical service

Health and Human Services

Child welfare programs; programs for the elderly; Public health programs; and workforce development/ job training programs.

Parks, Recreation, and Culture

Operation and maintenance of recreation facilities

Support Services

Buildings and grounds maintenance

Table 4.5. Local Government Contracting out of Selected Services

Service	Number Contracting Out/Number Providing Service	Percentage
1. Residential solid waste collection	19/61	31.1%
2. Street repair	22/47	46.8%
3. Water and sewage service	16/62	25.8%
4. Fire prevention/suppression	12/68	17.6%
5. Emergency medical service	12/67	17.9%
6. Child welfare programs	11/67	16.4%
7. Programs for the elderly	19/67	28.3%
8. Public health programs	22/66	33.3%
9. Workforce development/ job training programs	20/63	31.7%
10. Operation and maintenance of recreation facilities	3/67	4.4%
11. Buildings and grounds maintenance	1/70	1.4%
Total	155/705	21.9%

4.3.2. Independent Variables

Seventeen independent variables were used to predict the likelihood of contracting out. These seventeen variables were grouped into seven categories. The value categories consisted of NPM values and PVM values. NPM values included efficiency, flexibility, customer orientation, and managerial accountability. PVM values consisted of fairness, political accountability, social cohesion, and employee safety. The political category included the participation of local government's staff in decision-making. Two variables comprised the economic category: market structure (competition) and fiscal pressure (external fiscal pressures including restrictions placed on raising taxes). In the managerial category, monitoring capacity (adequate monitoring system) was tested. With regard to community characteristics, I examined the heterogeneity of municipality's residents in terms of race. Racial homogeneity was measured as the percent of the population that is non-Hispanic, white. Socio-economic heterogeneity of municipal populations was measured in two ways: 1) the percentage of the population for whom poverty status is determined and 2) the proportion of population age 65 and older.

As described earlier, asset specificity and measurability variables represented characteristics of public service. I utilized asset specificity and measurability scales developed by Brown and Potoski (2003b) to operationalize these variables. These scales are average perception ratings by County/City managers who were asked to rate asset specificity and measurement difficulty measures on a scale of 1 to 5 for each service. Higher values on a scale for a particular service indicate higher asset-specificity and greater measurability.

Table 4.6. Measures of Independent Variables

Variables	Measure	Source
NPM values		
Efficiency	Rate the importance of cost savings in deciding on a service delivery mode?	Survey
Flexibility	Rate the importance of managerial flexibility in deciding on a service delivery mode.	Survey
Customer orientation	Rate the importance of providers having a “customer orientation” in deciding on a service delivery mode.	Survey
Managerial accountability	How important is managerial accountability to their superiors in deciding on a service delivery mode?	Survey
PVM values		
Fairness	How strongly do you agree that fairness to all citizens is important in deciding on a service delivery mode?	Survey
Political accountability	How strongly you agree that the provider’s accountability to service recipients is important in deciding on a service delivery mode?	Survey
Social cohesion	How strongly you agree that maintaining a strong community is important in deciding on a service delivery mode?	Survey
Employee safety	Indicate how strongly you agree that job security for your local government's employees is important in deciding on a service delivery mode?	Survey
Economic factors		
Competition	Do you agree that many providers would be available to replace the present provider?	Survey
Fiscal pressure	My local government is facing external fiscal pressures (such as restrictions on raising taxes).	Survey
Political factor		
Participation of staff	I think the influence of my local government's staff in decision-making about how public services are delivered is strong.	Survey
Managerial factor		

	Monitoring capacity	My local government has an adequate contract monitoring system.	Survey
Community characteristics			
	Older	Percentage age 65 years or older	U.S. census (2011)
	White	Percentage of the population that is white	U.S. census (2011)
	Poverty	Percentage of householders with low income	U.S. census (2007-2011)
Service characteristics			
	Asset specificity	Rate your level of agreement that given the nature of the service or specific needs of clients, incumbent providers have an advantage over new vendors and are difficult to replace?	Survey
	Measurability	How easy is it to measure the quality of the service provided?	Survey

4.4. Data Analysis Procedures

In analyzing data to address the research questions, I first used a descriptive analysis to find means, ranges, and numbers of valid cases of each variable. This will be important in data cleaning. Second, a correlation analysis will be performed to assess for potential colinearity problems. Finally, binary logistical regression will be employed to examine how independent variables influence the dependent variable. Appendix F includes response frequencies for all responses to all items in the survey.

CHAPTER 5

RESULTS

This chapter presents the findings of testing the hypothesized relationships between contracting out and independent variables including public values, organizational environments, and public service characteristics. First, it briefly describes the data from my survey. Second, the relationships between contracting out and each of the independent variables are examined using bivariate correlations and logit regression analysis. This chapter concludes with a discussion of the results in terms of the specific hypotheses and explains the limitations of the data.

5.1. Descriptive Analysis

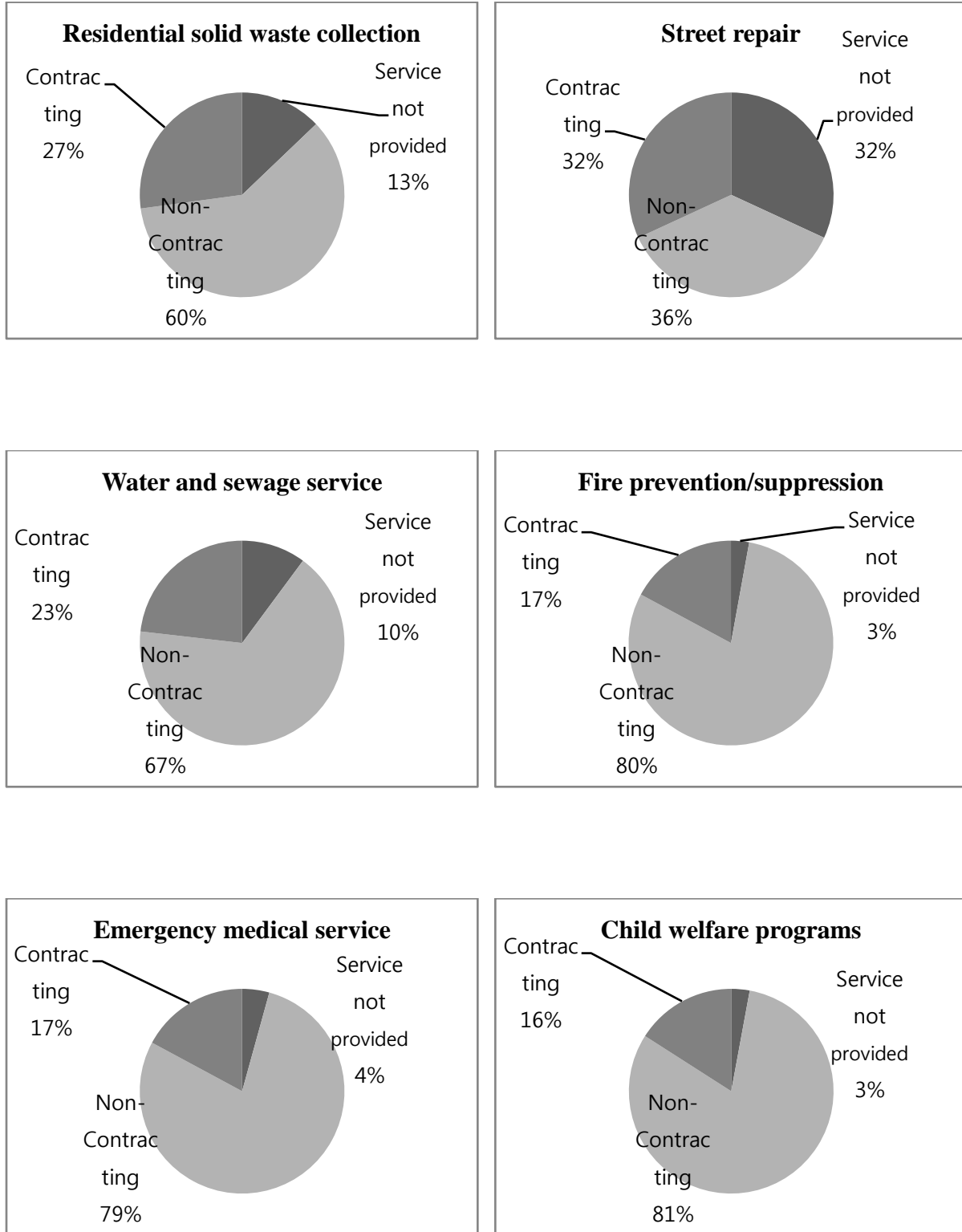
5.1.1. Dependent Variable

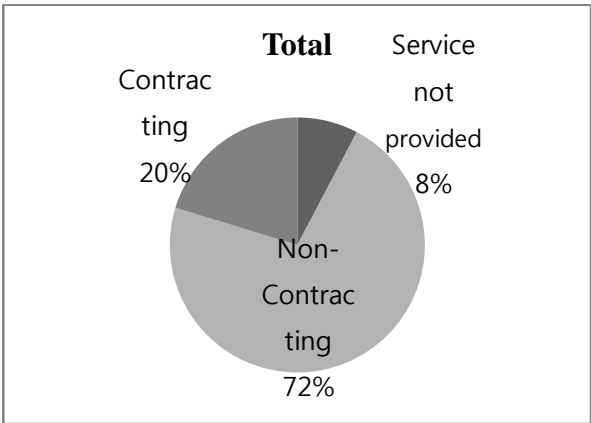
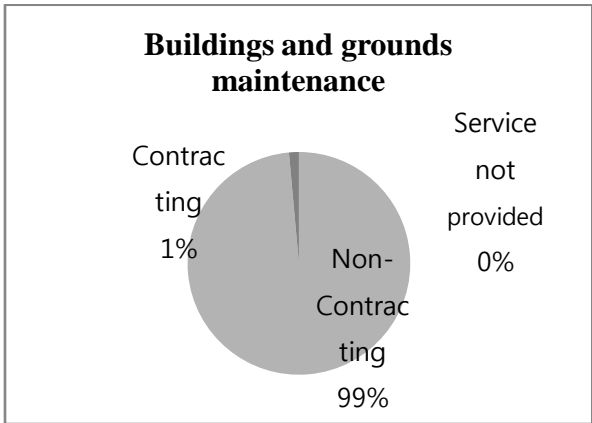
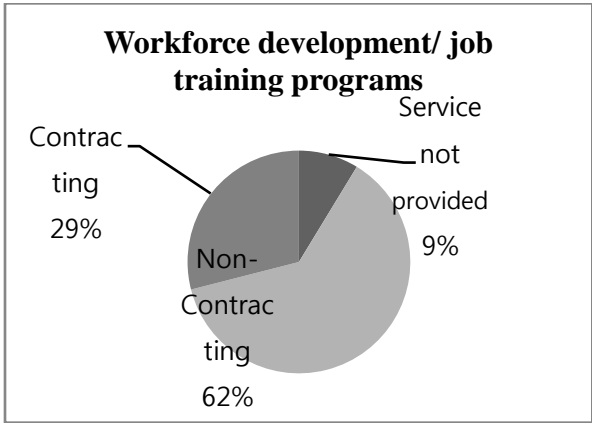
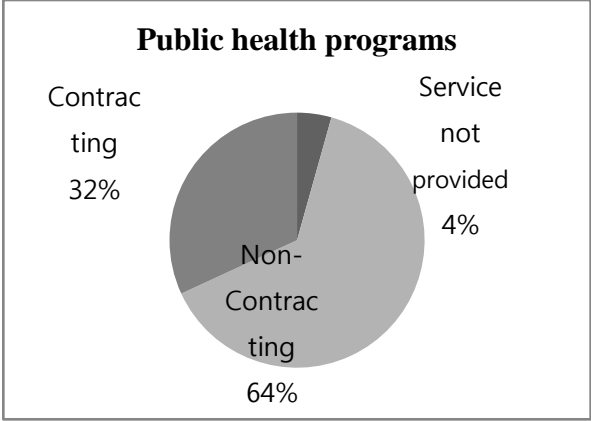
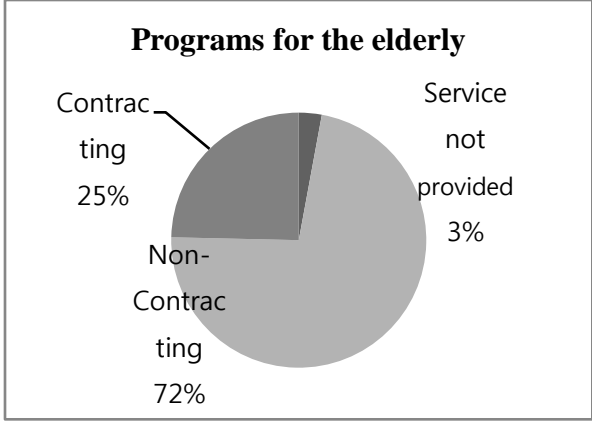
The dependent variable in this study is a binary variable which represents either delivery by public employees or contracting out. I consider "directly provide," "jointly provide this service with another government," "jointly provide this service with for-profit," and "jointly provide this service with non-profit" as delivery by public employees. On the other hand, "this service is provided by another government," "this service is provided by for-profit," and "this service is provided by non-profit" are coded as contracting out. Likewise, I measure the dependent variable as a dichotomous response; 0 = delivery by public employees, and 1 = contracting out.

Table 5.1. Number of Respondents Reporting Each Local Government Service Arrangement

Public Services	Service Delivery Mode							
	Service Delivered by Jurisdiction					Service Contracted Out		
	Not Provided	Directly Provides	Jointly Provided with Other Govt.	Jointly Provided with For-profit	Jointly Provided with Non-profit	Provided by Other Govt.	Provided by For Profit	Provided by Non-profit
Residential solid waste collection	9	32	3	6	1	3	16	0
Street repair	22	19	1	5	0	20	1	1
Water and sewage service	7	29	17	0	0	10	2	4
Fire prevention/suppression	2	34	2	0	20	1	0	11
Emergency medical service	3	25	4	1	25	1	0	11
Child welfare programs	2	27	24	0	5	9	0	2
Programs for the elderly	2	21	15	0	14	8	0	9
Public health programs	3	13	26	0	5	19	0	3
Workforce development/ job training programs	6	8	21	1	13	14	0	6
Operation and maintenance of recreation facilities	3	57	3	1	3	0	1	2
Buildings and grounds maintenance	0	66	0	3	0	0	1	0
Total	59	331	116	17	86	85	21	49

Figure 5.1. Proportion of Service Delivery Modes by Public Service





The distributions of service delivery modes represented in Table 5.1 and Figure 5.1 confirm that the choice of contracting out is highly dependent on public service. The proportions of contracting out public services in Public Works and Health and Human Services generally are high. Public services of operation and maintenance of recreation facilities and buildings and grounds maintenance are generally provided by public employees.

5.1.2. Independent Variables

a. Public values

Eight public values were employed to examine the decision about service delivery modes. These public values were derived from the Public Value Management and New Public Management paradigms. PVM includes fairness, political accountability, social cohesion, and employee safety. NPM consists of efficiency, flexibility, customer orientation, and managerial accountability. Eight survey questions tapped public values County Administrators and City Managers perceived. The items tapped how public values of County Administrators and City Managers influence the decision about public service delivery modes.

Table 5.2. Public Values

	N	Minimum	Maximum	Mean	Std. Deviation
Fairness	770	1	5	4.20	.977
Political accountability	770	1	5	4.20	.824
Social cohesion	759	1	5	3.97	.918
Employee safety	760	1	5	2.59	1.054
Efficiency	770	1	5	3.41	.918
Flexibility	743	1	5	3.23	.955
Customer orientation	764	1	5	3.71	.951
Managerial accountability	752	1	5	3.81	.913

Table 5.3. Average Scores by Public Service: Public Values

	Efficiency	Flexibility	Customer orientation	Managerial accountability	Fairness	Political accountability	Social cohesion	Employee safety
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Residential solid waste collection	4.10 (.801)	3.40 (.964)	3.83 (.868)	3.87 (.873)	4.03 (1.103)	4.19 (.822)	3.67 (1.053)	2.45 (1.145)
Street repair	3.73 (.850)	3.30 (.938)	3.49 (1.024)	3.71 (.947)	3.89 (1.110)	4.03 (.884)	3.67 (1.010)	2.45 (1.105)
Water and sewage service	3.64 (.885)	3.31 (.839)	3.77 (.926)	3.94 (.862)	4.13 (1.006)	4.33 (.829)	3.99 (.883)	2.64 (1.071)
Fire prevention/suppression	2.87 (.916)	3.25 (.952)	3.64 (.979)	3.88 (.939)	4.37 (.887)	4.33 (.756)	4.36 (.766)	2.75 (1.104)
Emergency medical service	2.87 (.931)	3.28 (.990)	3.86 (.997)	3.93 (.951)	4.41 (.860)	4.41 (.752)	4.39 (.732)	2.75 (1.117)
Child welfare programs	3.19 (.839)	3.16 (.987)	3.84 (.973)	3.88 (.900)	4.41 (.825)	4.34 (.740)	4.10 (.807)	2.61 (1.003)
Programs for the elderly	3.29 (.725)	3.13 (.998)	3.93 (.913)	3.78 (.944)	4.34 (.866)	4.24 (.788)	4.03 (.766)	2.55 (.978)
Public health programs	3.14 (.767)	3.06 (.967)	3.81 (.959)	3.76 (.916)	4.36 (.901)	4.27 (.815)	4.10 (.789)	2.62 (1.016)
Workforce development/job training programs	3.31 (.843)	3.03 (1.029)	3.75 (.898)	3.66 (.940)	4.13 (.977)	4.03 (.851)	3.93 (.913)	2.52 (1.009)
Operation and maintenance of recreation facilities	3.59 (.876)	3.22 (.867)	3.65 (.888)	3.78 (.912)	4.20 (.942)	4.07 (.822)	3.93 (.880)	2.55 (1.037)
Buildings and grounds maintenance	3.74 (.846)	3.36 (.954)	3.29 (.903)	3.71 (.870)	3.89 (1.071)	3.97 (.900)	3.51 (1.052)	2.61 (1.026)

b. Organizational environments

Organizational environments include economic, political, and managerial factors as well as community characteristics. Economic factors were measured by competition and fiscal pressure. The political factor was measured by participation of local government's staff in decision on service delivery modes. Monitoring capacity in contract management was employed to measure the managerial factor. These variables were based on survey items. Community characteristics were measured by the proportions of persons 65 years and over, white persons, and persons below the poverty level.

Table 5.4. Organizational Environments

	N	Minimum	Maximum	Mean	Std. Deviation
Competition	770	1	5	2.44	1.124
Fiscal pressure	770	1	5	4.01	1.036
Participation of staff	770	1	5	4.04	.726
Monitoring capacity	770	1	5	3.70	1.034
Older(%)	759	5.1	26.4	15.69	4.5
White(%)	759	39.8	97.8	74.89	15.8
Poverty (%)	759	3.9	32.7	13.64	7.1

c. Public service characteristics

Public service characteristics were measured by asset specificity and measurability. Public services that are more asset specific or more difficult to measure the quality of the service are less likely to be contracted out. Across all cases of service delivery, the average asset specificity was 3.35 and measurability was 3.26 (Table 5.5).

Table 5.5. Public Service Characteristics

	N	Minimum	Maximum	Mean	Std. Deviation
Asset specificity	770	1	5	3.35	1.040
Measurability	770	1	5	3.26	1.038

Those services with the highest asset specificity were in water and sewage service, fire prevention/suppression, emergency medical service, child welfare programs, and public health programs. Services with the lowest asset specificity were residential solid waste collection, street repair, workforce development/ job training programs, and buildings and grounds maintenance. Services with higher levels of measurability were residential solid waste collection, street repair, water and sewage service, and buildings and grounds maintenance. In contrast, child welfare programs, programs for the elderly, public health programs, and workforce development/ job training programs were difficult to measure the quality of the service.

Table 5.6. Average Scores by Public Service: Asset Specificity and Measurability

	Asset specificity		Measurability	
	Mean	SD	Mean	SD
Residential solid waste collection	2.83	1.154	3.91	1.087
Street repair	2.96	.999	3.76	1.042
Water and sewage service	3.61	1.081	3.67	1.003
Fire prevention/suppression	3.84	.987	3.14	1.040
Emergency medical service	3.79	1.006	3.30	1.026
Child welfare programs	3.56	.958	2.70	.857
Programs for the elderly	3.47	.989	2.77	.871
Public health programs	3.56	.958	2.79	.832
Workforce development/ job training programs	3.19	.906	2.74	.829
Operation and maintenance of recreation facilities	3.34	.866	3.34	.883
Buildings and grounds maintenance	2.71	.837	3.73	.883

5.2. Bivariate Correlation Analysis

The second step in the data analysis is to determine how strong a relationship exists between the independent variables and the decisions about service delivery modes. Bivariate

correlation coefficients between each of the independent and dependent variables show how strongly and in what direction (either positive or negative) variables in the model are linearly related. High correlation coefficients may indicate multicollinearity. Hair et al. (2006) define multicollinearity as “the degree to which any variable’s effect can be predicted or accounted for by the other variables in the analysis” (p. 24). Multicollinearity may have critical implications for model specification. “As multicollinearity rises, the ability to define any variable’s effect is diminished” (Hair et al. 2006). Such multicollinearity can be detected with bivariate correlation matrices. As long as the coefficient values remain below approximately .800, where 1.00 represents perfect collinearity and 0.00 represents perfect non-collinearity, this potential concern will be avoided in the model.

Table 5.7 presents the correlation coefficients between the variables. As predicted, many of the independent variables are positively related to contracting out. Efficiency, flexibility, managerial accountability, competition are each positively related to contracting out and are significant at the 0.01 or 0.05 level. In contrast, social cohesion, employee safety, participation of staff in decision making process, and asset specificity are each negatively associated with contracting out. .In this model, fortunately, there appears to be no multicollinearity problem.

Table 5.7. Bivariate Correlations

	1. Service delivery mode	2. Efficiency	3. Flexibility	4. Customer orientation	5. Managerial accountability	6. Fairness	7. Political accountability	8. Social cohesion	9. Employee safety
1. Service delivery mode									
2. Efficiency	.110**								
3. Flexibility	.058	.183**							
4. Customer orientation	.062	.035	.365**						
5. Managerial accountability	.086*	.217**	.449**	.527**					
6. Fairness	-.184**	-.117**	-.153**	.188**	.079*				
7. Political accountability	-.239**	-.134**	-.038	.186**	.061	.505**			
8. Social cohesion	-.086*	-.154**	.175**	.336**	.257**	.527**	.383**		
9. Employee safety	-.197**	.042	.058	.076*	.021	.133**	.181**	.304**	
10. Competition	.141**	.316**	.215**	.037	.092*	-.282**	-.203**	-.174**	-.036
11. Fiscal pressure	.030	.170**	.124**	.169**	.230**	-.090*	-.077*	-.121**	-.273**
12. Participation of staff	-.151**	.044	-.027	.005	-.057	.122**	.081*	.114**	.122**
13. Monitoring capacity	.045	.105**	.149**	.047	.143**	-.092*	-.050	-.054	-.122**
14. Older	.080*	.010	.076*	.057	.137**	.028	-.110**	-.004	-.188**
15. White	.050	.033	.038	.069	.050	-.064	-.026	.020	-.053
16. Poverty	-.070	-.126**	-.007	.032	-.040	.189**	.105**	.031	-.003
17. Asset specificity	-.194**	-.293**	-.045	.157**	-.041	.315**	.259**	.275**	.194**
18. Measurability	.069	.289**	.288**	.188**	.209**	-.075*	-.013	-.007	.080*

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

	10. Completion	11. Fiscal pressure	12. Participation of staff	13. Monitoring capacity	14. Older	15. White	16. Poverty	17. Asset specificity
1. Service delivery mode								
2. Fairness								
3. Political accountability								
4. Social cohesion								
5. Employee safety								
6. Efficiency								
7. Flexibility								
8. Customer orientation								
9. Managerial accountability								
10. Completion								
11. Fiscal pressure	.125**							
12. Participation of staff	.042	.284**						
13. Monitoring capacity	.224**	.325**	.360**					
14. Older	.037	-.103**	-.147**	-.146**				
15. White	-.015	-.046	-.179**	-.128**	.473**			
16. Poverty	-.141**	-.104**	.101**	-.125**	.056	-.064		
17. Asset specificity	-.434**	-.016	.140**	-.027	-.139**	-.081*	.098**	
18. Measurability	.370**	.127**	.070	.257**	-.003	-.081*	-.057	-.124**

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

5.3. Logit Regression Analysis

A binomial logit model was estimated to more rigorously explore how the independent variables influence local governments' propensity to choose contracting out.

The Hosmer–Lemeshow test is a statistical test for goodness of fit for logistic regression models and allows for any number of explanatory variables, which may be continuous or categorical. I use the Hosmer-Lemeshow test to test the goodness of fit for the logistic model. A nonsignificant chi-square indicates that the data fit the model well. Table 5.8 shows that the chi-square is not statistically significant.

The Nagelkerke R-square is presented to indicate the overall strength of association. The R-square (Nagelkerke) for the regression model was 0.191, suggesting that 19% of the variance in service delivery modes is explained. Although the R-square of this model is lower than in much other social science literature, the contracting out literature shows relatively low R-squares.¹¹ Insofar as the model is well specified and statistically significant, I believe it provides meaningful results.

Table 5.8. Goodness of Fit for Logit Model: Hosmer and Lemeshow Test

Chi-square	df	Sig.
7.472	8	.487

¹¹ The R-square of Fernandez and Smith (2005) is .11. Studies by Hefetz and Warner (2011) and Carr et al. (2009) have .13 and .132 of the R-square, respectively. Ya Ni and Bretschneider's study indicates a higher R-square of .338.

Table 5.9. Logit Model Results

Variables	B	S.E.	Wald	df	Sig.	Exp(B)
Efficiency	.313**	.138	5.139	1	.023	1.368
Flexibility	-.195	.129	2.292	1	.130	.823
Customer orientation	.350**	.143	5.938	1	.015	1.419
Managerial accountability	-.063	.152	.169	1	.681	.939
Fairness	-.230*	.135	2.892	1	.089	.794
Political accountability	-.467***	.147	10.125	1	.001	.627
Social cohesion	.318**	.154	4.294	1	.038	1.375
Employee safety	-.430***	.118	13.216	1	.000	.650
Competition	.008	.114	.005	1	.942	1.008
Fiscal pressure	.093	.128	.530	1	.467	1.097
Participation of staff	-.382**	.174	4.819	1	.028	.683
Monitoring capacity	.250**	.120	4.308	1	.038	1.284
Older	.014	.026	.273	1	.602	1.014
White	.001	.008	.034	1	.854	1.001
Poverty	-.004	.015	.083	1	.773	.996
Asset specificity	-.255**	.122	4.356	1	.037	.775
Measurability	-.056	.117	.229	1	.632	.946
Constant	.746	1.359	.301	1	.583	2.109
Number of observations	662					
Nagelkerke R Square	.191					
Log likelihood	596.121					

Note: * p < .10, ** p < .05, *** p < .01

a. Public values

Hypothesis 1: The more a local government administrator agrees that efficiency is important in deciding on a mode of service delivery, the more likely the jurisdiction will choose contracting out.

Hypothesis 2: The more local government administrators emphasize managerial flexibility in public service delivery, the greater the likelihood that a locality will use contracting out.

Hypothesis 3: The more local government administrators see themselves as accountable to their immediate superiors for their own performance and for the performance of others below, the more likely their jurisdiction will be to use contracting out.

Hypothesis 4: The more a local government administrator agrees that customer orientation is important in deciding on a mode of service delivery, the greater the likelihood that the jurisdiction will choose contracting out.

Hypothesis 5: The more a local government administrator agrees that fairness is important in deciding on a mode of service delivery, the greater the likelihood that the jurisdiction will choose to deliver a service by public employees.

Hypothesis 6: The more a local government administrator agrees that political accountability is important in deciding on a mode of service delivery, the greater the likelihood that the jurisdiction will choose to deliver a service by public employees.

Hypothesis 7: The more a local government administrator agrees that social cohesion is important in deciding on a mode of service delivery, the greater the likelihood that the jurisdiction will choose to deliver a service by public employees.

Hypothesis 8: The more a local government administrator agrees that employee safety is important in deciding on a mode of service delivery, the greater the likelihood that the jurisdiction will choose to deliver a service by public employees.

Among public values from NPM, contrary to my expectation, flexibility and managerial accountability are statistically insignificant in spite of negative relationships to contracting out. On the other hand, as expected, efficiency and customer orientation values have a positive and statistically significant influence on the decision to contract out, at the significance level of 0.05. Specifically, a one standard deviation increase in the emphasis local government administrators

place on efficiency in deciding on a mode of service delivery increases the odds of the frequency of contracting out by 36.8 percent among local governments. In addition, a one standard deviation increase in local government administrator perception that customer orientation is important in deciding on a mode of service delivery increases the odds of the frequency of contracting out by 41.9 percent.

With regard to public values from PVM, as expected, manager perceptions of the importance of fairness, political accountability, and employee safety have a negative and statistically significant relationship with the frequency of contracting out. Interestingly, contrary to my expectation, social cohesion has a significant and positive influence on the frequency of contracting out. A one standard deviation increase in fairness, political accountability, and employee safety value emphasis among local administrators reduces the odds of contracting out by 20.6 percent, 37.3 percent, and 35 percent, respectively. In contrast, a one standard deviation increase in social cohesion increases the odds of contracting out by 37.5 percent.

b. Organizational environments

Hypothesis 9: The more local government administrators perceive the existence of complete markets or competition for a service, the greater the likelihood that a jurisdiction will choose contracting out.

Hypothesis 10: The stronger the local government administrator perception of high fiscal pressure, the more likely the jurisdiction is to contract out.

Hypothesis 11: The greater the perception of participation by local government staff in decision-making on service delivery, the less likely the jurisdiction is to choose contracting out.

Hypothesis 12: Local governments with greater contract monitoring capability as perceived by local government administrators are more likely to contract out.

Hypothesis 13: The higher the proportion of population age 65 and older in a

jurisdiction, the less frequent will be its choice to contract out.

Hypothesis 14: The proportion of white population will be positively associated with decisions to contract out.

Hypothesis 15: The proportion of low-income households will be negatively associated with decisions to contract out.

Organizational environments consist of four categories: economic factors, the political factor, the managerial factor, and the community characteristics. The independent variable estimates from economic factors do not approach statistical significance. Participation of staff in the decision making process as the political factor has a negative and statistically significant influence on the decision to contract out. A one standard deviation increase in participation of staff reduces the odds of the decision to contract out by 31.7 percent. Monitoring capacity is significantly and positively associated with the decision to contract out. A one standard deviation increase in monitoring capacity as perceived by local government administrators increases the odds of contracting out by 28.4 percent by the local governments. Finally, contrary to my expectation, the independent variable estimates from community characteristics do not approach statistical significance. As a result, only Hypotheses 11 and 12 are supported.

c. Public service characteristics

Hypothesis 16: As the asset specificity of services increases, as perceived by local administrators, local governments are more likely to deliver services by public employees.

Hypothesis 17: As services become more difficult to measure, as perceived by local administrators, local governments are more likely to deliver services by public employees.

Asset specificity and measurability as public service characteristics are examined. Results show that asset specificity as perceived by respondents has a negative and statistically significant influence on the contracting out decision at the level of 0.05. A one standard deviation increase in asset specificity as assessed by respondents reduces the odds of the decision to contract out by 22.5 percent.

5.4. Summary of the Findings

Results of the data analysis support eight of the hypotheses for the model connecting manager values, organizational environment, and public service characteristics to the choice of public service delivery mode. The data from the binary logit regression coefficients indicate that manager perceptions of monitoring capacity to manage contracts is the most influential variable in the model for the decision to contract out. Additionally, results indicate that the more County Administrators and City Managers support efficiency and customer orientation values from New Public Management in determining public service delivery modes, the more local governments will choose contracting out. In contrast, the more County Administrators and City Managers support fairness, political accountability, and employee safety values from the Public Value Management in determining public service delivery modes, the more local governments will choose delivery by public employees. The interesting point is that the social cohesion value from Public Value Management is negatively associated with delivery by public. Results of competition and fiscal pressure are not consistent with previous research. These two variable estimates from economic factors do not approach statistical significance. The research findings support the hypothesis that participation of local government staff in the decision making process is negatively associated with the decision to contract out. Finally, with regard to the hypotheses

about public service characteristics, the hypothesis that as the asset specificity of services increases, local governments are more likely to deliver services by public employees is supported. The measurability hypothesis is not supported. Chapter 6 will examine the meaning of these results and the implications for public administration theory and practice.

CHAPTER 6

DISCUSSION

Following Chapter 5's presentation of the statistical findings, this chapter engages in a more substantive discussion about the implications of the findings based on the model estimates. The purpose of this study was to ascertain which factors, based on local manager perceptions, are influential in choosing public service delivery modes in local governments. Influential factors are divided into three main categories. The first category is the influence of public values as perceived by public managers in local governments. The second category is related to manager perceptions of organizational environments. The third category is associated with manager perceptions of characteristics of public services. This chapter proceeds by connecting the model estimates that were presented in Chapter 5 to the conceptual framework that was presented in Chapter 3. The findings are discussed in terms of rejecting and accepting the null hypotheses associated with the test hypotheses presented in Chapter 3.

The model estimates that were presented in Chapter 5 appear in Table 6.1, which summarizes their links to each of the hypotheses presented in Chapter 3. The purpose of this summary table is to provide a clear and straightforward assessment of how the hypotheses fared in terms of statistically significant relationships. Then the more substantive discussion will proceed.

Table 6.1. Summary of Hypothesis Testing: Primary Independent Variables

Variables	B	Expected direction to contracting out	Estimated direction to contracting out
Efficiency	.313**	+	+
Flexibility	-.195	+	(-)
Customer orientation	.350**	+	+
Managerial accountability	-.063	+	(-)
Fairness	-.230*	-	-
Political accountability	-.467***	-	-
Social cohesion	.318**	-	+
Employee safety	-.430***	-	-
Competition	.008	+	(+)
Fiscal pressure	.093	+	(+)
Participation of staff	-.382**	-	-
Monitoring capacity	.250**	+	+
Older	.014	-	(+)
White	.001	+	(+)
Poverty	-.004	-	(-)
Asset specificity	-.255**	-	-
Measurability	-.056	+	(-)

Note: * $p < .10$, ** $p < .05$, *** $p < .01$. Parentheses in estimated direction mean non-significant.

6.1. Public Values

During the last thirty years, there has been intense debate about whether the private sector can provide a variety of public services more effectively than government. The debate has touched on services ranging from health and human services, public safety, and recreation to public works including waste collection and street repair. This debate has also raised the normative question of what role government should assume in providing public services. In other words, there is an emerging challenge to the publicness of public service because of the reorientation of administrative reforms towards the principles of markets and business management. For example, in the case of the United Kingdom, Haque (1998) notes that the contemporary public service reforms have used private sector values and languages, instilled business management culture, and eroded public service ethics. Whitfield (1992) also mentions that "the principles of public service are rapidly being eroded. Commercial values, business practice and market forces are fast becoming the dominant operational criteria" (p. 11). In the same vein, Cooper (1992) argues that norms and values such as efficiency, effectiveness, and competence may displace more basic public service norms like equality, public interest, human dignity, and justice. In addition, Terry (1993, 1998) notes that public entrepreneurship and neomanagementism threaten to undermine democratic and constitutional values such as fairness, justice, representation, and participation. Likewise, many scholars have continued to express concerns about the New Public Management and the role for public organizations this model suggests. As a result, some scholars maintain that the public sector should interact not only with markets, but also with communities to encourage democratic deliberation and enhance local quality of life (Denhardt and Denhardt 2000; Frug 1998; Nalbandian 1999). This alternative reform has been coined the "new public service" in public administration (Denhardt and

Denhardt 2000) and the "public value management" (Stoker 2006; O'Flynn 2007).

This study hypothesizes that public managers have inculcated a set of public values derived from NPM and PVM. Public managers who emphasize public values from NPM may be likely to be associated with local governments that choose contracting out, whereas greater concerns about public values from PVM may be positively associated with local governments choosing more delivery by public entities.

6.1.1. NPM Values

a. Efficiency

I hypothesized that public managers who emphasize efficiency in deciding on a mode of service delivery may be more likely to employ contracting out. Consistent with previous research, the finding supports this hypothesis. Public managers are under pressure to downsize government and reduce the amount of taxes citizens pay. Pressure from citizens for smaller government and tax relief encourages public managers to seek efficiency. One of the strongest claims made by the proponents of privatization is that because of the competitive nature of private enterprises, they are inherently more efficient than the public sector (Hood 1995; Peters 1996; Terry 2005). Replacing government monopolies with private competition is the key action needed to improve efficiency at the state and local government levels (Donahue 1989).

Empirical evidence indicates that contracting for a range of services involving low levels of task complexity and uncertainty (e.g., support, public works, and recreational services) results in lower costs (Hodge 2000; Savas 2000). Contracting at the local level also reduces full-time

public sector employment (Fernandez et al. 2006). The finding of this study suggests that public managers in local governments appear to be aware of these economic benefits derived from contracting out and rely more on this approach where the circumstances warrant.

b. Flexibility

The driving idea of NPM is "managerialism." The approach argues that poor performance of public bureaucracies results from unnecessary rules, regulations, and other constraints rather than managerial incompetence or malfeasance (Terry 1998). Although public managers know the right thing to do, existing rules, procedures, and structures prevent managers from doing it. As a result, reformers seek to replace authority and rigidity with flexibility. Contracting out allows public managers to get flexibility by determining employment levels, work rules, and health and safety standards (Gilmour and Jensen 1998). Therefore, this study hypothesized that public managers who have greater concerns that managers need to be given the freedom to pursue higher performance are more likely to be associated with local governments that choose more contracting out. However, the finding indicates that flexibility does not significantly play a role in the production choice. A possible interpretation is related to two contrasting views about a contract type: formal contracting and relational contracting (Poppo and Zenger 2002). Formal contracting relies heavily on detailed, formalized contracts that explicitly lay out expectations and sanctions. Relational contracting, on the other hand, is looser and depends more heavily on norms of cooperation to ensure task completion and to protect the property rights of participants. Based on the contract type, public manager's flexibility may be limited. The finding suggests that contracting out is not always a tool for flexibility.

c. Managerial accountability

In administrative reforms like NPM, much attention has been paid to managerial accountability and very little to political responsibility. Managerial accountability is defined as the obligation to provide an account of one's actions to those in superior positions of authority (Christensen and Laegreid 2002). In other words, in NPM there is a shift in accountability from the political to the managerial sphere and from input and processes to output and outcomes. Therefore, this study hypothesized that public managers who are more concerned about accountability to their immediate superiors for their own performance and for the performance of others below them will be associated with local governments that choose more often to contract out. The finding shows, however, that managerial accountability is not significantly associated with decisions to contract out. A possible interpretation is that it is difficult to measure output and outcomes of public services. As another interpretation, Yang, Hsieh, and Li (2009) contend that contracting performance depends on contracting capacity including agenda setting, contacting formulation, contracting implementation, and contracting evaluation. Local governments who lack these capacities cannot achieve good performance by contracting out. This finding suggests that public managers may not introduce contracting out for performance improvement.

d. Customer orientation

The major premise of NPM reforms is that democratic governments can be effectively customer-driven to serve "customer interests." The customer service movement focuses public managers on serving citizens instead of the needs of the bureaucracy. The proponents of this idea maintain that it offers many advantages such as greater accountability, more innovation,

availability of service choices, and less public waste (Gore 1993; Osborne and Gaebler 1992). This study finds strong support for the prediction that public managers who are greatly concerned about customer orientation are more likely to be associated with local governments that more frequently use contracted delivery modes. If public managers are more concerned about a poverty problem of a specific class as one of customer orientation examples, they may be more involved in contracting out with nonprofits. It is because nonprofits interact with local communities (Ferris and Graddy 1986). Rosenbaum (2006) argues that nonprofits based on local community-based self-help groups work to deal with problems of the poor (church food aid efforts, neighborhood initiatives, etc.). In addition, when there are diverse demands by a rapid culture change and when public organizations do not meet diverse demands, local governments are more likely to contract out because private contractors provide greater expertise and have more advanced equipment.

6.1.2. PVM Values

a. Fairness

Consistent with previous research, this study finds support for the hypothesis that greater manager emphasis on equality or fairness will be related to a higher frequency of decisions to in-house provision. Previous research criticizing NPM argues that the customer-oriented model in public service focuses on a mercenary exchange relationship between buyers and sellers as found in the private sector, which forces individuals to pursue narrow self-interest at the expense of any wider social or public interests (Haque 2001). According to Kettl (1998), the customer model tends to discriminate between the rich and the poor based on their capacity to pay, which goes

against citizens' expectations of government to treat them equitably. For example, private providers of health care might turn down the sickest patients to avoid incurring the high cost of treating them if they can find a reason within the contract to do so. A publicly run hospital, by contrast, would be more likely to accept such patients. In fact, the low-income households may not even qualify as customers to receive services due to their financial incapacity.

Recent initiatives of financial and personnel retrenchment based on NPM have had serious adverse impacts on the public sector in terms of its reduced financial and personnel capacity to carry out public programs such as health, housing, education, rural development, and environmental safety. These public services are crucial for the low-income households. This reduced financial and personnel capacity of the public service creates a declining fairness because it is increasingly incapable of responding to citizens' needs and demands for basic services.

From another angle, Kelly (1998) argues that the rational-choice underpinnings of the New Public Management are problematic for the continued legitimacy of democratic institutions in heterogeneous societies attempting to maintain an inclusive polity. In light of evidence that minority groups may not have assimilated or may have rejected seemingly universal norms about individualism and profit maximization, contracting out may be evaluated as unfair, unresponsive, unjust, and illegitimate.

The above trend towards narrower composition and definition of service recipients implies the diminishing fairness of public services. The principle of fairness requires public services to respond to the needs and expectations of all citizens, not just the affluent customers or clients who "seem unable to function as a public" (Frederickson 1991, p. 405). The critics of contracting

out argue that “citizens are not the customers of government; they are its owners who elect leaders to represent their interests” (Schachter 1995, p. 530). Clarke and Newman (1997) contend that contracting out focusing on businesslike agencies and the fragmentation of the public into customers, users, or clients may weaken public interest and erode the idea of the public realm or public good.

b. Political accountability

Although the issue of accountability is an important element in the debate over contracting out, there is controversy about accountability because its meaning varies according to the context of the participants and the perspective of observers. This study distinguishes political accountability from managerial accountability. Managerial accountability is defined as the obligation of subordinates to account to their superiors for the performance of particular duties and to accept direction from their superiors in the performance of such duties. In contrast, political accountability emphasizes discretion in the pursuit of responsiveness to key stakeholders, such as the state purchaser of services, legislators, peer service provider networks, and clientele (Romzek and Johnston 2005).

Moe (1987) contends that the assignment of a public function to a private entity through contracting results in an inevitable weakening in the lines of political accountability. For example, Mulgan (1997) argues that contracting out threatens political accountability, because delivery by public employees and contractor provision respond differently to unforeseen problems. If public servants fail to deliver the expected quality of service, citizens have the right to complain to the public servants' supervisors. Supervisors, activating the hierarchical chain of authority and accountability, have the right to seek immediate answers and impose immediate remedies. Where

the service is provided by a contractor, however, supervisors may well be powerless. The citizen may seek redress from the company, if the contractor is clearly in breach of the terms of the contract. However, where the contractor has fulfilled the terms of the contract, immediate remedies are not available. Public officials and their supervisors may be held accountable for deficiencies in the contract and may be pressured into promising to implement changes in future contracts or even into renegotiating the current contract. However, they will not usually be free to offer the type of immediate redress which is available when acts of departmental staff are involved. Therefore, this study hypothesized that public managers who show greater support for political accountability in decisions about service provision will be associated with jurisdictions that choose more frequently to deliver services by public employees. An important finding of this study is that manager perceptions of political accountability seem to play a key role in decisions to delivery service by public rather than private contracted entities.

According to Greenaway (1995) and Boston et al. (1996), cases of the United Kingdom and New Zealand indicate deterioration of political accountability in contracting relations. When maladministration appears, citizens expect ministers to take responsibility in the normal way, by providing information, offering explanations and imposing remedies. However, ministers have claimed that they are responsible for general policy only and not for the details of day-to-day administration and are therefore powerless to justify or intervene. It implies that contractual relations limit ministerial intervention and thus limit a traditional right of public accountability (Mulgan 1997).

c. Social cohesion

Despite increasing racial diversity, community is seen as a way of bringing about greater

unity (Etzioni 1995; Selznick 1992). In public administration, the quest for community has been reflected in the view that the role of government, especially local government, is indeed to help create and support "community." King and Stivers (1998) point out that governments can play an important and critical role in creating, facilitating, and supporting these connections between citizens and their communities.

Under privatization, governments give priority to efficiency concerns and diminish their attention to voice. However, consumer citizens do not act as though efficiency is the only currency running through their markets. In contracting relations, profit considerations of contractors outweigh social values. Thus, contracting out may provide an avenue to increase efficiency, but the limitations of markets prevent it from adequately addressing the full range of community and regional needs.

This study hypothesized that public managers who say they are more concerned about social cohesion are more likely to be associated with jurisdictions more frequently choosing internal production. The finding shows that this hypothesis is rejected: instead of a significant negative coefficient on contracting out, the statistical model produces a statistically significant positive coefficient. A coefficient of .350 for social cohesion suggests that as public managers are more concerned about social cohesion, local governments are more likely to contract out for public services. There is a possible explanation for this result when we recognize the role of nonprofits. Considine (2003) believes that nonprofits would promote a more just welfare society (social justice) by helping particular kinds of clients, such as young people or the disabled. In addition, nonprofits contribute to improved local opportunity (community building). Likewise, nonprofits can lead to higher levels of social cohesion by meeting minority demands and by providing job opportunities for local residents.

d. Employee safety

Previous research indicates that contracting out affects the public employees who have been delivering public services. When contracting out is implemented, the options for public employees usually range from transfer to another government department (sometimes with reduction in pay or seniority) to being hired by the private contractor (usually with lower wages and fringe benefits) to being completely "outplaced" into the labor market. Concern over this displacement effect, especially among women and minorities who benefit significantly from public sector employment, has been the major reason for employee and union opposition to contracting out.

Based on previous studies, I hypothesized that public managers who are more concerned about job insecurity and reduction of benefits for public employees are more likely to be associated with jurisdictions that decide to deliver services by public employees more frequently. The finding supports this hypothesis. The obvious implication here is that public managers' concerns about job security and reduced benefit packages for public employees are a strong factor in decisions about service delivery modes. Empirical studies show these public managers' concerns. For example, a study by Brotman (1992) indicates that privatization efforts in Massachusetts resulted in the layoff of more than 800 former state employees working with various outpatient and residential mental health programs. In addition, results of a 1988 study by the National Commission for Employment Policy indicate that when services are contracted out, the new jobs created by the private sector often offer employee benefit packages that are substantially less generous than the government positions that they replaced.

6.2. Organizational Environment

6.2.1. Economic Factors

a. Competition

Competitive bidding, in particular, has been a popular instrument used by government. Competition between bidders is intended to spur efficiency gains and cost savings for purchasers, as market forces can drive out marginal producers (Hefetz and Warner 2004). Interestingly, it has been argued that the mere threat of competition can generate efficiency gains and cost savings within the public sector as internal providers seek to protect themselves from unemployment (Walsh and O’Flynn, 2000). The applicability of the competition doctrine to the public sector has been questioned in the literature for several reasons including the existence of both demand and supply side imperfections and the absence of conditions required to generate efficiency gains (Kelly 1998). Despite such critiques, competition theory has clearly played a critical role in influencing decisions about contracting out. Hefetz and Warner (2004) empirically tested and supported the importance of competition on decisions about service delivery modes.

The hypothesis for competition is rejected, however. There are a number of possible explanations. In this study, competition was measured by public managers' subjective appraisal rather than objective indicators. In particular, this study measured competition as availability to replace the present provider. While some studies used a subjective measurement (e.g., Hefetz and Warner 2004), other studies measured competition more directly. For example, Ya Ni and Bretschneider (2007) use the competitiveness of the bidding process. Also, Brudney et al. (2005) measured competition using total service business establishments in a state. Assuming the measure for my study is adequate for capturing levels of competition, it may be that as available

providers increase, transaction costs also increase, and thus finding appropriate vendors for specialized technical services is more difficult, making it more costly to contract for the service.

b. Fiscal stress

Local governments experience pressures to contract out services when they are under fiscal constraints from citizen protests about high tax rates or from high levels of municipal debt. Local governments respond to the pressures to reduce the cost of government when they face complaints from overtaxed voters. Indeed, most studies aimed at explaining patterns in local government contracting have included measures of fiscal stress. Brown and Potoski (2003b) find that general revenue per capita is negatively correlated with external service delivery, and Brudney et al.'s (2005) study finds some evidence of fiscal stress at the state level influencing contracting for services by state agencies. However, the finding of this study is that fiscal stress, at least as perceived by local managers, appears to have no impact on the relative frequency of local government contracting. The finding is consistent with Fernandez et al.'s study (2008) and Hefetz and Warner's study (2004).

There are several possible interpretations. First, though some studies have found a positive correlation between fiscal stress and the extent of contracting out, Boyne (1998b, p. 152) asserts that overall, “the evidence provides little support for the view that fiscal stress is a significant constraint on decisions to contract out.” He attributes the lack of support for this hypothesis to various factors, including poor measures of the revenue shortfall aspect of fiscal stress, a disregard for measures of fiscal need or growing demand for services, and the fact that governments often contract out not to reduce costs but to improve quality of service. Second, this study measured overall fiscal stress. With regard to this measurement, Bel and Fageda (2007)

note that the effect on overall financial stress of the internal or external production of just one service should be marginal. Decisions about how to produce local services should be more influenced by fiscal considerations when a broader range of services is being considered. This finding suggests that future research needs to measure fiscal stress in terms of each public service.

6.2.2. Political Factor

During the last three decades, public employee morale and job satisfaction have been hurt by unfavorable public attitudes and reform efforts that have targeted public bureaucracy and its members (Light 2002; Rainey 2003). Privatization is especially harsh and disparaging of public employees because of the various allegations regarding wastefulness and inefficiency in government. Many privatization advocates believe that competition, in the form of contracting out, will motivate public employees to become more productive and efficient. Because of the widespread belief that government jobs are lost when services are contracted out, however, public employees are more likely to view privatization as a threat than as an incentive. Empirical studies indicate that opposition from public employees is a significant factor in decisions to deliver services by public entities. For example, Chandler and Feuille (1991, 1994) find that opposition from public-sector unions reduces the likelihood that a city considers contracting out. Fernandez and Smith (2006) also indicate that public employees are negatively correlated with support for contracting out. Consistent with previous research, this study shows that participation of public employees in the service delivery decision making process is negatively associated with the frequency of contracting out.

The finding suggests that public employees fear for their job security because of contracting out, and their participation in the decision making process makes the choice to contract out less likely. Statistics on contracting out show public employees' concerns about job security. For example, Light (2003) states that between 1990 and 2002, contract jobs in the federal government increased by more than 100,000, whereas federal civil servants decreased by more than 400,000. Warner et al. (2003) also indicate that between 1982 and 1997, the increase/decrease of the contracting out percentage of all service delivery is associated with the decrease/increase of the number of public employees. According to Moore (1999), more than 80% of the employees influenced by contracting out either went to work for the private contractors or were placed in other government jobs.

The finding also suggests that public managers should consider various tactics for managing employee opposition to contracting out if contracting out is really needed. Some tactics to reduce employee opposition are to establish a “no layoff” policy when contracting out and to provide retraining, job placement, and counseling services and reimbursement for lost pensions payments (Fernandez et al. 2008).

6.2.3. Managerial Factor

Some previous research has indicated that governments' contract management capacity may be low overall and does not appear to be keeping pace with the growing prevalence of contracting (Kettl 1993; Sclar 2000). In addition, the study by Hefetz and Warner (2004), which analyzed all the ICMA data on new contracting out and contracting back in, indicates that higher levels of monitoring are associated with higher levels of new contracting out and lower levels of

contracting back-in. In other words, it is the lack of monitoring that determines high transaction costs and the decision to contract back-in. Therefore, this study hypothesized that local governments with greater contract monitoring capability as perceived by local managers are more likely to contract out.

The finding shows that contract monitoring capacity helps to account for variations in local government contracting frequency. Consistent with the Brown and Potoski study (2003b) and the Hefetz and Warner study (2004), this study finds that the indicator of contract monitoring capacity is positively correlated with the extent of local government contracting. The finding suggests that local governments who report higher levels of contract monitoring capacity may be able to manage the planning and solicitation phase of contracting out better than other local governments. These local governments are more likely to assess the benefits of contracting, to identify potential barriers, to specify comprehensive and detailed solicitation and contract documents, and to conduct more rigorous evaluations of bids before awarding contracts. In addition, contract monitoring capacity reduces the dangers posed by principal-agent problems, such as adverse selection and moral hazard, and helps to ensure contractor accountability and adequate performance (Fernandez et al. 2008). In short, public managers who believe they have good contract monitoring capacity rely more on privatized service delivery as their capacity to manage the contracting process increases.

6.2.4. Community Characteristics

In this study, community characteristics capture the effects of variations in proportions of population age 65 and older, white population, and low-income households on local

government's likelihood of contracting out to provide public services. Nelson (1997) finds that local governments that are more homogenous are more likely to pursue external provision for service delivery. According to Fernandez et al. (2008), privatization can be used to cut costs and reduce the size of the public workforce. As a result, lower income residents receiving public assistance may view it as a threat to the public welfare programs from which they benefit. Also, creaming to improve efficiency at the expense of quality may be more prevalent in contracting for social services areas. They argue that such concerns among lower-income residents translate into political opposition to privatization and that local officials are receptive to such concerns by reducing their reliance on contracting for services. However, the findings of this study show that these factors are not statistically significant regarding the frequency of contracting out.

6.3. Public Service Characteristics

6.3.1. Asset Specificity

Previous research argues that the contracting out decision is influenced by the nature of the service. Although Lamothe et al. (2008) argue that asset specificity is a poor predictor of the degree of externalization of public services, transaction cost economics have been widely applied to the contracting out of public services. Brown and Potoski's (2003b) study found that increases in asset specificity decreased the likelihood that local governments would contract with other governments, for-profit firms, and nonprofit organizations. Consistent with Brown and Potoski's (2003b) study, this study finds that as the asset specificity of services increases, as perceived by local managers, local governments more frequently choose to deliver services by public employees. This finding suggests that asset specificity entailed by large investments is a problem not only because local government officials will find it hard to reverse previous transfer

decisions and return to internal production, but also because the municipal corporation is locked in an irreversible investment. As a consequence, underinvestment in specific assets is likely when these services are transferred to municipal corporations, so that services characterized by high asset specificity will most likely be provided internally.

6.3.2. Measurability

Local governments deliver easily measured public services more often through contracting out because public managers face lesser risks of inaccurate perception by constituents and productive efficiency gains can be accomplished due to more flexible personnel contracting. In contrast, public services that are hard to quantify tend to be provided internally by traditional bureaucratic structures, because public managers can control performance, attend to service disruptions, and avoid allocative inefficiencies. Brown and Potoski (2003b) and Lamothe et al. (2008) find that measurability of public services plays an important role in governments' decisions to service delivery modes. Therefore, I hypothesized that measurement difficulty would be negatively associated with contracting out. Contrary to previous research and my expectation, the finding indicates that measurability, as perceived by local managers, is not strongly associated with service delivery mode choice.

CHAPTER 7

CONCLUSION

Since the 1980s, many countries introduced administrative reforms for reducing the size of the public sector, curbing the power of the state, and making public bureaucracy more productive and efficient. These reforms have encouraged local governments to deliver public services by contracting out. Although many scholars have explored why local governments contract out public services, their main focus has been variables based on organizational environments and transaction cost theory. I believe that previous research on contracting out has missed local government administrator views about the role the public sector should play in the their communities. For example, it seems likely they would stress that the public sector should treat all citizens equally, pay attention to citizens as stakeholders rather than mere service recipients or customers, and maintaining a strong community.

In this study, I posed such questions as, what influences the choice of public service delivery modes by local governments? Do organizational environment factors faced by local governments and characteristics of public services emphasized in previous contracting literature still influence the choice? Are there other influential factors such as public values governments should pursue? To answer these questions, I developed and tested a model of the choice of public service delivery modes. The model in this study included public values as well as organizational environment and public service characteristics that have been hypothesized to influence public service delivery mode decisions in previous research.

7.1. Summary of Findings

7.1.1. Public Values

This study has argued that public values play a key role in how local governments decide to organize to produce public services. The empirical analyses support this contention. Efficiency and customer orientation derived from NPM are significantly associated with contracting out. On the other hand, fairness, political accountability, and employee safety derived from PVM play important roles in decisions to use internal service provision.

Such differences are explored by Stoker (2006) who, in the context of service delivery, points to fundamental differences by arguing that public sector "governing is not the same as shopping or more broadly buying and selling goods in a market economy" (p. 46). From a contracting perspective, Hefetz and Warner (2004) argue that private sector firms focus on efficiency and performance, while public managers combine these concerns with accountability and public (i.e. collective) preferences. Such distinctions are important in that different public values based on the distinction between the public and private sectors differently influence production mechanisms.

Public values are the stakeholder preferences that public managers must balance or optimize as they deliver services. Throughout the phases of contracting, public managers must continually identify and prioritize the often politically contentious value preferences of key stakeholders. This study suggests that these values or value trade-offs very likely guide the choice of different service delivery modes. For instance, trade-offs between efficiency and political accountability offer a good illustration. When providers of services aim to satisfy the public merely in order to increase their companies' profit and where members of the public are

limited to accepting the service or choosing an alternative provider, the relationship is one of market exchange rather than public accountability, and members of the public are treated as consumers or clients rather than as citizens. Consumers in a market can expect providers to be responsive to their needs but, because they do not ultimately own or employ the providers who serve them, they have no right to demand accountability from them. Private providers are accountable to their own employers and to their ultimate owners, the shareholders, but not to the members of the public they serve. Thus contracting out replaces the accountability rights of citizenship with the expectations of consumer responsiveness found in competitive markets, and that may very well be of concern to local government managers as they weigh which service delivery mode to use for various services.

7.1.2. Organizational Environment

The economic variables included in my model failed to attain statistical significance. The findings suggest that economic variables have little apparent effect on contracting out by local governments, at least as perceived by local managers.

In this study, participation of local employees in the decision making process was measured as the political variable, and the finding shows that the participation is positively and significantly associated with delivery by public employees. Because public employees fear the loss of jobs when public services are transferred to private or nonprofit organizations through contracting out, employee participation plays a pivotal role in choosing in-house delivery (Chandler and Feuille 1994; Martin 1999).

In addition, this study finds that the indicator of contract monitoring capacity is positively

correlated with the extent of local government contracting. The philosophy of contracting and much of the New Public Management rest on the principal-agent relationship. In this relationship the public manager clearly articulates the policy, sets performance standards, and chooses in a competitive market an agent who will faithfully act in the government's behalf to deliver the goods and services so that the outcome sought will be attained. The feasibility of implementing this logic depends on the contract monitoring capacity of the principal, which would explain why local government administrators see it as positively associated with the decision to contract out.

7.1.3. Public Service Characteristics

The characteristics of public services influence which production mechanisms are best suited to achieve stakeholder values. Findings of this study show that as the asset specificity of services increases, as perceived by local managers, local governments are more likely to deliver services by public employees. Asset specificity refers to whether specialized investments are required to produce the service. If local governments decide to contract for a highly asset-specific service, these specialized investments create an advantage to the first contract winner in subsequent rounds of bargaining, thus raising a barrier to entry for later vendors and risking market monopolization. Under such conditions, a monopolistic vendor can opportunistically exploit the contracting organization in subsequent rounds of contracting. Therefore, public managers may be determining whether service conditions favor contracting. Of particular importance are factors that increase the risk of contract failure. When these factors are present, public managers may internalize service delivery (if they can) or expand contract management capacity.

7.1.4. Conclusion

The "make or buy" decision faced by local governments is a complex one where a whole host of considerations must be weighed. Most previous studies on public service delivery modes have focused on cost comparison between internal production and external production by accounting for transaction costs. Consistent with previous research, the findings of the present study show that efficiency plays a key role in decisions to contract out. However, this approach is missing an important point. The new public management emphasizing efficiency has been challenged for eroding the "publicness of public service" (Christensen and Lægreid 2002, p. 291). For example, Frederickson (2005) emphasizes conflicts between crucial values such as fairness and efficiency: "The private market is designed to be efficient but not to be fair; democratic self-government is designed to at least try to be fair, and hope to be efficient" (p. 178). Although the new public management offers the market approach to improve public service delivery in the efficiency perspective, this study has shown that top managers in local governments recognize that the limits of market approaches such as incomplete markets, organizational capacity such as monitoring capacity, and public values such as fairness and political accountability require local governments to pay attention to the choice of service delivery modes on the basis of more than just efficiency.

The findings of this study strongly suggest that it is time to move beyond simple market failure and government failure frameworks and instead look at the full array of factors that influence government contracting behavior. Privatization is not a one way street. Whether government managers contract out or not is likely based on various public values derived from NPM and PVM as well as market and government failures previous research explains.

7.2. Implications

What are the policy and management implications of my findings? First, the findings of this study indicate that transaction costs and organizational environment factors cannot fully account for why local governments select particular production mechanisms over others. Consistent with previous research, several factors such as monitoring capacity, participation of public employees, and asset specificity still shape local governments' production choices. Nevertheless, some public values that public managers hold are significantly associated with local governments' production choices. This suggests that public managers place weight on what the public sector should pursue beyond mere cost savings.

The second implication relates to the distinction between public and private for-profit organizations. Whereas the performance of private firms can be judged primarily if not solely in terms of efficiency and profitability, public organizations are expected to pursue the competing goals of competence and political responsiveness (Rainey 2003). In addition to being efficient and effective, public organizations are expected to make and implement policy that is responsive to the preferences and concerns of citizens, elected officials, the courts, interest groups, and the media, among other external stakeholders. Contracting for services is a managerial tool that when used effectively can reduce costs and improve the efficiency of public organizations. However, it is much more than that. The use of contracting out and other forms of privatization involves making political decisions that affect the lives of individual citizens and groups in society. Contracting out can have an impact on the amount of taxes citizens pay, on the quality or level of services citizens receive, and on public sector jobs. Public managers, therefore, must be responsive to political interests and public values in addition to efficiency when making decisions about privatization. This study's findings suggest that public managers who emphasize

fairness and political accountability more are associated with local governments that do not use contracting out as frequently as local governments where public managers give these values less emphasis. Variations in attention to these particular public values other than efficiency can explain some of the variation in the frequency of contracting out or in-house delivery. While previous research on contracting out has focused on efficiency, transaction costs, and organizational environment, no study has explored whether other public values influence the choice of public service delivery modes. This study fills the gap by indicating that public managers pay attention to fairness and political accountability as well as efficiency in service delivery decisions.

7.3. Limitations and Suggestions for Future Research

This study has several limitations. First, it examines factors influential in choosing public service delivery modes in local governments in eleven public services. Each service has different characteristics such as asset specificity and measurability. In addition, public managers may place different weight on public values based on the public service. However, though this study explores influential factors on the delivery decisions, analysis focusing on the different types of public services is not included because of insufficient sample size.

Levin and Tadelis (2010) indicate that in-house provision suffers from productive inefficiency due to the weak incentives of employees, but enjoys low contracting costs. In contrast, the productive efficiency of performance contracts comes at the cost of specifying and implementing performance requirements. This leads to predictions about how privatization decisions will vary across services. Services for which it is harder to write, monitor or adjust performance standards are more likely to be provided in-house. The same will be true of services

for which public managers are more sensitive to fairness and political accountability.

In addition to the analysis based on the service type, this study considered whether influential factors on decisions to contract out differed based on type of local government: county vs. city. Counties and cities differ in population, fiscal status, and administrative structure. However, the analysis based on type is not presented in this study because of insufficient sample size for the subsamples.

Future research should seek to explore whether different types of public services and vendors are associated with different influential factors in the choice of public service delivery modes.

A second limitation of this study is The R-square of this model, .191, which is lower than in much other social science literature. Previous research indicated that political and socioeconomic factors play important roles in the decisions to contract out. But this study employed only participation of staff in the decision making process as a political factor. Other possible factors such as the political ideology of the chief managers were overlooked. In addition, socioeconomic factors in this study did not have significant influence on decisions to contract out because of low variance among local governments in Virginia. To improve the explanatory power of the model, future research needs to consider these factors.

A third limitation of this study is that it implicitly treats production choices as one-shot decisions rather than iterative processes. By using data from only one time period, I have been able to capture the service production decisions of many local governments, but I sacrifice insights into how transaction costs risks and public values that public managers hold influence such decisions over time. With regard to public values, especially, the values do not remain

completely constant over time. Values change in the lives or evolution of individuals, organizations, and countries. The foremost value researcher, Rokeach (1973, p5-6), commented:

If values were completely stable, individual and social change would be impossible. If values were completely unstable, continuity of human personality and society would be impossible. Any conception of human values, if it is to be fruitful, must be able to account for the enduring character of values as well as for their changing character.

Therefore, time-series analysis, whether case based or large sample, might address these issues.

Fourth, the unit of analysis in this study may limit the generalizability of my findings. Although my theory treats governments generally, my analysis is limited to municipal and county governments. Future research should investigate whether my conclusions apply more generally by examining service production in state governments and federal agencies.

Finally, the cross-sectional design cannot guarantee causality, so the relationships reported here are associations, not strict causal relationships.

In spite of these limitations, this study offers important contributions to knowledge about public service delivery. Although transaction costs provide a useful framework for analyzing local governments' service production choices, other theories clearly have much to offer. As my results show, public value may influence local government decisions in important ways. Although my analysis did not consistently find strong support for the influence of all public values, I believe some of these results reflect measurement difficulties rather than theoretical flaws.

Studies which explore how public values influence decisions about service delivery modes

are rare, and empirical inquiries aimed at explaining this phenomenon are nonexistent. The present study offers a solid beginning. My findings appear sufficiently promising to warrant further efforts toward understanding and explaining the influence of public values. Both my findings and the questions raised by them have implications for the phenomenon of contracting out and its study that, I hope, will motivate further scholarly attention to these issues.

REFERENCES

- Aucoin, P. 1995. *The new public management: Canada in comparative perspective*. Montreal, Canada: Institute for Research on Public Policy.
- . 2011. The political-administrative design of NPM. In *the Ashgate Research Companion to New Public Management*, edited by Tom Christensen and Per Laegreid, 33-46. MPG Book Group, UK.
- Bately, R. 1994. The consolidation of adjustment: Implications for public administration. *Public Administration and Development*, 14(5): 489-505.
- Becker, E. W., Silverstein, G., and Chaykm, L. 1995. Public employee job security and benefits: A barrier to privatization of mental health services. *Public Productivity and Management Review*, 19(1): 25-33.
- Bel, G., and Fageda, X. 2007. Why do local governments privatise public services? A survey of empirical studies. *Local Government Studies*, 33(4): 517 – 534.
- Boston, J. 2011. Basic NPM ideas and their development. In *the Ashgate Research Companion to New Public Management*, edited by Tom Christensen and Per Laegreid, 17-32. MPG Book Group, UK.
- Boston, J., Martin, J., Pallot, J., and Walsh, P. 1996. *Public management: The New Zealand model*. Auckland: Oxford University Press.
- Boyne, G.A. 1998a. Bureaucratic theory meets reality: Public choice and service contracting in U.S. local government. *Public Administration Review*, 58(6): 474-484.
- . 1998b. The determinants of variations in local service contracting: Garbage in, garbage out? *Urban Affairs Review*, 34:149–62.
- Brotman, A. 1992. Privatization of mental health services: The case of increasing policy gridlock. *Community Mental Health Journal*, 29: 103-114.
- Brown, T., and Potoski, M. 2003a. Contract-management capacity in municipal and county governments. *Public Administration Review*, 63(2): 136-147.
- . 2003b. Transaction costs and institutional explanations for government service production decisions. *Journal of Public Administration Research and Theory*, 13(4): 441-468.
- . 2005. Transaction costs and contracting: The practitioner perspective. *Public Productivity and Management Review*, 28 (3): 326-51.
- Brown, T., Potoski, M, and Van Slyke, D. 2006. Managing public service contracts: Aligning values, institutions, and markets. *Public Administration Review*, 66(3): 323-331.

- Brudney, J. L., Fernandez, S., Ryu, J. E., and Wright, D. 2005. Exploring and explaining contracting out: Patterns among the American States. *Journal of Public Administration Research and Theory*, 15(3): 393–419.
- Buchanan, J. 1978. From private preferences to public philosophy: The development of public choice. In James Buchanan, *The Economics of Politics*. London: Institute of Economic Affairs.
- Chandler, T., and Feuille, P. 1991. Municipal unions and privatization. *Public Administration Review*, 51(1): 15-22.
- . 1994. Cities, unions, and the privatization of sanitation services. *Journal of Labor Research*, 15: 53-71.
- Christensen, T., and Laegreid, P. 2002. New public management: Puzzles of democracy and the influence of citizens. *The Journal of Political Philosophy*, 10(3): 267-95.
- Clarke, J., and Newman, J. 1997. *The managerial state: Power, politics and ideology in the remaking of social welfare*. London: Sage Publications Ltd.
- Considine, M. 2003. Governance and competition: The role of non-profit organisations in the delivery of public services. *Australian Journal of Political Science*, 38(1): 63–77.
- Cooper, T. L. 1992. Public administration ethics: Theory and praxis in the United States of America. *Asian Journal of Public Administration*, 14(1): 79–97.
- deLeon, L., and Denhardt, R. 2000. The political theory of reinvention. *Public Administration Review*, 60(2): 89-97.
- Denhardt, R., and Denhardt, J. 2000. The New Public Service: Serving rather than steering. *Public Administration Review*, 60(6): 549-559.
- Denhardt, R., and Hammond, B. 1992. *Public administration in action: Readings, profiles, and cases*. CA: Pacific Grove.
- Dillman, D. A. 1978. *Mail and telephone surveys: The total design method*. New York: John Wiley and Sons.
- Domberger, S., and Jensen, P. 1997. Contracting out by the public sector: Theory, evidence, prospects. *Oxford Review of Economic Policy*, 134 (4): 67–78.
- Donahue, J. D. 1989. *The privatization decision: Public ends, private means*. New York: Basic-Books.
- Dubin, J., and Navarro, P. 1988. How markets for impure public goods organize: The case of household refuse collection. *Journal of Law, Economics, and Organization*, 4(2): 217-241.
- Dunleavy, P. J., and Hood, C. 1994. From old public administration to new public management.

- Public Money and Management*, 14(3): 9-16.
- Eisenhardt, K. M. 1989. Agency theory: An assessment and review. *Academy of Management Review*, 14(1): 57-74.
- Etzioni, A. 1995. *The new communitarian thinking*. Charlottesville, VA: University of Virginia Press.
- Fannin, W. R. 1983. City manager policy roles as a source of city council/city manager conflict. *International Journal of Public Administration*, 5: 381-399.
- Feiock, R., and Kim, J. H. 2000. Form of government, administrative organization, and local economic development policy. *Journal of Public Administration Research and Theory*, 11(1): 29-49.
- Fernandez, S., Lowman, C. E., and Rainey, H. 2002. Privatization and human resources management. In C. Ban and N.N. Riccucci (Eds.), *Public personnel management: Current concerns, future challenges* (3rd ed., pp. 225-242). New York: Longman.
- Fernandez, S., and Smith, C. 2006. Looking for evidence of public employee opposition to privatization: An empirical study with implications for practice. *Review of Public Personnel Administration*, 26(4): 356-381.
- Fernandez, S., Smith, C., and Wenger, J. 2006. Employment, privatization, and managerial choice: Does contracting out reduce public sector employment? *Journal of Policy Analysis and Management*, 26(1): 57-77.
- Fernandez, S., Ryu, J. E., and Brudney, J. L. 2008. Exploring variations in contracting for services among American local governments: Do politics still matter? *American Review of Public Administration*, 38(4): 439-462.
- Ferris, J. 1986. The decision to contract out: An empirical analysis. *Urban Affairs Quarterly*, 22(2): 289-311.
- Ferris, J., and Graddy, E. 1986. Contracting out: For what? With whom? *Public Administration Review*, 46(4): 332-344.
- Forrest, R., and Kearns, A. 2001. Social cohesion, social capital and the neighbourhood. *Urban Studies*, 38(12): 2125-2143.
- Frederickson, G. 1997. Facing the Community. *Kettering Review*, (December): 28-37.
- Frederickson, H. G. 1991. Toward a theory of the public for public administration. *Administration and Society*, 22(4): 395-417.
- . 1997. *The Spirit of Public Administration*. San Francisco: Jossey-Bass .
- . 2005. Public ethics and the new managerialism: An axiomatic theory. In H. G.

- Frederickson & R. K. Ghore (Eds.), *Ethics in public management* (pp. 165-183). London: M.E. Sharpe.
- Frug, G. 1999. *City making: Building communities without building walls*. Princeton, NJ: Princeton Univ. Press.
- Gilmour, R., and Jensen, L. 1998. Reinventing government accountability: Public functions, privatization, and the meaning of State action. *Public Administration Review*, 58(3): 247-257.
- Globerman, S., and Vining, A. 1996. A framework for evaluating the government contracting-out decision with an application to information technology. *Public Administration Review*, 56(6): 577-586
- González-Gómez, F., and Guardiola, J. 2009. A duration model for the estimation of the contracting out of urban water management in southern Spain. *Urban Affairs Review*, 44(6): 886-906.
- Gore, A. 1993. *Creating a government that works better and costs less*. Report of the National Performance Review. Washington, DC: Government Printing Office.
- Gortner, J. F. 1994. Values and ethics. In T. L. Cooper (Ed.), *Handbook of administrative ethics* (pp. 373-390). New York: Marcel Dekker
- Green, D., and Shapiro, I. 1994. *Pathologies of rational choice theory: A critique of applications in political science*. New Haven, CT: Yale University Press.
- Green, R. E. 1987. Local government managers: Styles and challenges. *Baseline Data Report*, 19: 1-11.
- Greenaway, J. 1995. Having the bun and the halfpenny: Can old public service ethics survive in the new Whitehall? *Public Administration*, 73: 357-74.
- Greene, J. D. 2002. *Cities and privatization: Prospects for the new century*. Upper Saddle River, NJ: Prentice Hall.
- Haque, S. 1998. Legitimation crisis: A challenge for public service in the next century. *International Review of Administrative Sciences*, 64(1): 13-26.
- . 2001. The diminishing publicness of public service under the current mode of governance. *Public Administration Review*, 61(1): 65-82.
- Hatry, H. P. 1983. *A review of private approaches for delivery of public services*. Washington, D. C.: The Urban Institute Press.
- Healey, P. 1993. Planning through debate: the communicative turn in planning theory, in: F. Fischer & J. Forester (Eds) *The Argumentative Turn in Policy Analysis and Planning* (Durham, NC and London: Duke University Press).

- Hefetz, A., and Warner, M. 2004. Privatization and its reverse: Explaining the dynamics of the government contracting process. *Journal of Public Administration Research and Theory*, 14(2): 171-190.
- . 2007. Beyond the market vs. planning dichotomy: Understanding privatisation and its reverse in US Cities. *Local Government Studies*, 33(4): 555-572.
- Heintzman, R. 2007. Public-service values and ethics: Dead end or strong foundation? *Canadian Public Administration*, 50(4): 573-602.
- Hirlinger, M.W., and England, R.E. 1986. *City managers and the legislative process: The case of Oklahoma*. Norman: University of Oklahoma, Bureau of Governmental Research.
- Hirsch, W.Z. 1995. Contracting out by urban governments: A review. *Urban Affairs Review*, 30(3): 458-72.
- Hodge, G. A. 2000. *Privatization: An international review of performance*. Boulder, CO: Westview Press.
- Hood, C. 1991. A public management for all seasons. *Public Administration*, 69(1): 3-19
- . 1995. Contemporary public management: A new global paradigm. *Public Policy and Administration*, 10: 104-117.
- Jos, P. H., and Tompkins, M. E. 2004. The accountability paradox in an age of reinvention: The perennial problem of preserving character and judgment. *Administration and Society*, 36(3): 255-281.
- Johnston, J. M., and Romzek, B. S. 1999. Contracting and accountability in state medicaid reform: Rhetoric, theories, and reality. *Public Management Review*, 59(5): 383-399.
- Jorgensen, T., and Bozeman, B. 2002. Public values lost? Comparing cases on contracting out from Denmark and the United States. *Public Management Review*, 4(1): 63-81.
- Kaboolian, L. 1998. The New Public Management: Challenging the boundaries of the management vs. administration debate. *Public Administration Review*, 58(3): 189-193.
- Kelly, R. M. 1998 An inclusive democratic polity, representative bureaucracies, and the new public management. *Public Administration Review*, 58 (8): 201-08.
- Kernahan, K. 2003. Integrating values into public service: The values statement as centerpiece. *Public Administration Review*, 63(6): 711-719.
- Kettl, D. F. 1993. The myths, realities, and challenges of privatization. In *Revitalizing State and Local Public Service: Strengthening Performance Accountability and Citizen Confidence*, Edited by Frank J. Thompson, 246-275. San Francisco: Jossey-Bass Publishers.
- . 1997. The global revolution in public management: Driving themes, missing links.

- Journal of Policy Analysis and Management*, 16(3): 446-462
- . 1998. *Reinventing government: A fifth-year report card*. Washington, DC: The Brookings Institution.
- . 2002. *The transformation of governance: Public administration for twenty-first century America*. Baltimore, MD: Johns Hopkins University Press.
- King, C., and Stivers, C. 1998. *Government is us: Public administration in an anti-government era*. Thousand Oaks, CA: Sage Publications.
- Kodrzycki, Y. K. 1994. Privatization of local public services: Lessons for New England. *New England Economic Review*, (May/June): 31-46.
- Lamothe, S., Lamothe, M., and Feiock, R. C. 2008. Examining local government service delivery arrangements over time. *Urban Affairs Review*, 44(1): 27-56.
- Lane, J. 1994. Will public management drive out public administration? *Asian Journal of Public Administration*, 16(2): 139-151.
- . 2000. *New Public Management*. London: Routledge.
- . 2001. From long-term to short-term contracting. *Public Administration*, 79(1): 29-47.
- LeRoux, K. 2007. *Service contracting: A local government guide*. Washington, DC: ICMA Press.
- Levine, J., and Tadelis, S. 2010. Contracting for government services: Theory and evidence from U.S. Cities. *The Journal of Industrial Economics*, 58(3): 507-541.
- Light, P. C. 2002. *The troubling state of the federal public service*. Washington, DC: Brookings Institution Press.
- . 2003. Fact sheet on the new true size of government. Retrieved February 26, 2006, from www.brookings.edu/gs/cps/light20030905.htm
- Martin, L. 1999. Public-private competition: A public employee alternative to privatization. *Review of Public Personnel Administration*, 19(1): 59-70.
- Milward, B. 1996. Symposium on the hollow State: Capacity, control and performance in interorganizational settings. *Journal of Public Administration Research and Theory*, 6(2): 193-195.
- Miranda, R. 1992. Privatization in Chicago's city government. In K. Wong (Ed.), *Research in urban policy*. Greenwich, CT: JAI.
- Miranda, R., and Lerner, A. 1995. Bureaucracy, organizational redundancy, and the privatization of public services. *Public Administration Review*, 55(2): 193-200.
- Moe, R. 1987. Exploring the limits of privatization. *Public Administration Review*, 453-460.

- Mohr, R., Halstead, J., and Deller, S. Alternative methods of service delivery in small and rural municipalities. *Public Administration Review*, 70(6): 894-905.
- Moore, M. 1994. Public value as the focus of strategy. *Australian Journal of Public Administration*, 53 (3): 298-303.
- Moore, S. 1999. How contracting out city services impacts public employees. In P. Seidenstat (Ed.), *Contracting out government services* (pp. 211-218). Westport, CT: Praeger.
- Morgan, D., Hirlinger, M., and England, R. 1988. The decision to contract out city services: A further explanation. *Political Research Quarterly*, 41: 363-372.
- Mulgan, R. 1997. Contracting out and accountability. *Australian Journal of Public Administration*, 56(4): 106-116.
- Nalbandian, J. 1999. Facilitating community, enabling democracy: New roles for local government managers. *Public Administration Review*, 59(3): 187-197.
- Nagel, J. 1997. Radically reinventing government: Editor's introduction. *Journal of Policy Analysis and Management*, 16(3): 349-356.
- Nelson, M. A. 1997. Municipal government approaches to service delivery: An analysis from a transactions cost perspective. *Economic Inquiry*, 35(Jan): 82-96.
- Niskanen, W. A. 1971. *Bureaucracy and representative government*. Chicago: Aldine Atherton.
- O'Flynn, J. 2007. From new public management to public value: Paradigmatic change and managerial implications. *Australian Journal of Public Administration*, 66(3): 353-366.
- O'Leary, R. 1996. Managing contracts and grants. In *The Handbook of Public Administration*, edited by James Perry, 263-75. San Francisco, CA: Jossey-Bass.
- O'Sullivan, E., Rassel, G., and Berner, M. 1995. *Research methods for public administrators*. New York: Longman.
- Osborne, D., and Gaebler, T. 1992. *Reinventing government: How the entrepreneurial spirit is transforming the public sector*. Reading, MA: Addison-Wesley
- Ostrom, V., and Ostrom, E. 1971. A different approach to the study of the public administration. *Public Administration Review*, 31(2): 203-216.
- Pallesen, T. 2004. A political perspective on contracting out: The politics of good times. Experiences from Danish Local Governments. *Governance: An International Journal of Policy, Administration, and Institutions*, 17(4): 573-587.
- Paroush, J., and Prager, J. 1999. Criteria for contracting-out decisions when contractors can deceive. *American Economic Journal*, 27(4): 376-83.
- Peters, G. 1996. *The future of governing: Four emerging models*. Lawrence: University Press of

Kansas.

- Peters, T. 1992. *Liberation management: Necessary disorganization for the nanosecond nineties*. New York: A.A. Knopf.
- Pollit, C. 1993. *Managerialism and the public service: The Anglo-American experience*. 2nd edition. Oxford: Blackwel.
- Poppo, L., and Zenger, T. 2002. Do formal contracts and relational governance function as substitutes or complements? *Strategic Management Journal*, 23(8): 707-725.
- Posner, B., and Schmidt, W. 1996. The values of business and federal government executives: More different than alike. *Public Personnel Management*, 25(3): 277-289
- Rainey, H. G. 2003. *Understanding and managing public organizations* (3rd ed.). San Francisco: Jossey-Bass.
- Rokeach, M. 1973. *The nature of human values*. New York: The Free Press.
- Romzek, B. S., and Johnston, J. M. 2005. State social services contracting: Exploring the determinants of effective contract accountability. *Public Administration Review*, 65(4): 436-449.
- Rosenbaum, A. 2006. Cooperative service delivery: the dynamics of public sector-private sector-civil society collaboration. *International Review of Administrative Sciences*, 72(1): 43-56.
- Sappington, D. E., and Stiglitz, J. E. 1987. Privatization, information, and incentives. *Journal of Policy Analysis and Management*, 6(4): 567-582.
- Savas, E. 1994. On Privatization. In *Current Issues in Public Administration*, edited by F. Lane, 404-13. New York: St. Martin's Press.
- . 2000. *Privatization and public-private partnership*. New York: Chatham.
- Schachter, H. L. 1995. Reinventing government or reinventing ourselves: Two models for improving government performance. *Public Administration Review*, 55(6): 530-7.
- Sclar, E. 2000. *You don't always get what you pay for*. Ithaca, NY: Cornell University Press.
- Selznick, P. 1992. *The moral commonwealth*. Berkeley, CA: University of California Press.
- Stein, R. 1993. Arranging city services. *Journal of Public Administration Research and Theory*, 3(1): 66-92.
- Stoker, G. 2006. Public value management: A new narrative for networked governance? *American Review of Public Administration*, 36(1): 41-57.
- Svara, J. H. 1988. Conflict, cooperation, and separation of powers in city government. *Journal of Urban Affairs*, 10: 357-372.

- . Council and administrator perspectives on the city manager's role: Conflict, divergence, or congruence? *Administration and Society*, 23(2): 227-246.
- Terry, L. D. 1993. Why we should abandon the misconceived quest to reconcile public entrepreneurship with democracy. *Public Administration Review*, 53(4): 393-5.
- . 1998. Administrative leadership, neo-managerialism, and the public management movement. *Public Administration Review*, 58(3): 194-200.
- . 2005. The thinning of administrative institutions in the hollow state. *Administration and Society*, 37(4): 426-444.
- Thomas, P., and Palfrey, C. 1996. Evaluation: Stakeholder-focused criteria. *Social Policy and Administration*, 30(1): 125-42.
- Van Der Wal, Z., De Graaf, G., and Lasthuizen, K. 2008. What's valued most? Similarities and differences between the organizational values of the public and private sector. *Public Administration*, 86 (2): 465-482
- Van Wart, M. 1998. *Changing public sector values*. New York & London: Garland Publishing.
- Vigoda, E. 2002. From responsiveness to collaboration: Governance, citizens, and the next generation of public administration. *Public Administration Review*, 62(5): 527-540.
- Visser, J. A. 2002. Understanding local government cooperation in urban regions: Toward a cultural model of interlocal relations. *American Review of Public Administration*, 32(1):40-65.
- Walsh, J., and O'Flynn, J. 2000. Managing through contracts: The employment effects of compulsory competitive tendering in Australian local government. *Industrial Relations Journal*, 31(5): 454-469.
- Walsh, K. 1995. *Public services and market mechanisms: Competition, contracting and the new public management*. London: Macmillan.
- Warner, M. 2008. Reversing privatization, rebalancing government reform: markets, deliberation and planning. *Policy and Society*, 27(2): 1-12.
- Warner, M., Ballard, M., and Hefetz, A. 2003. Contracting back in: When privatization fails. In *The municipal year book 2003* (pp. 30-36). Washington, DC: International City/County Management Association.
- Warner, M., and Hefetz, A. 2002. Applying market solutions to public services: An assessment of efficiency, equity, and voice. *Urban Affairs Review*, 38(1): 70-89.
- . 2004. Pragmatism over politics: Alternative service delivery in local government, 1992 – 2002. In *The Municipal Yearbook 2004*, 8 - 16. Washington, DC: International City/County Management Association.

- Warner, M., and Hedbon, R. 2001. Local government restructuring: Privatization and its alternatives. *Journal of Policy Analysis and Management*, 20(2): 315-36.
- Whitfield, D. 1992. *The welfare State: Privatisation, deregulation, commercialisation of public services*. London: Pluto Press.
- Williamson, O. 1981. The economics of organization: The transaction cost approach. *American Journal of Sociology*, 87: 548-577.
- . 1999. Public and private bureaucracies: A Transaction cost economics perspective. *Journal of Law, Economics and Organization*, 15(1): 306-342.
- Wise, C. R. 1990. Public service configurations and public organizations: Public organization design in the post-privatization era. *Public Administration Review*, 50(2): 141-155.
- Ya Ni, Anna, and Stuart Bretschneider. 2007. The Decision to Contract Out: A Study of Contracting for E-Government Services in State Governments. *Public Administration Review*, 67(3): 531-544.
- Yang, K., Hsieh, J. Y., and Li, T. S. 2009. Contracting capacity and perceived contracting performance: Nonlinear effects and the role of time. *Public Administration Review*, 69(4): 681-696.

Appendix A: IRB approval

MEMORANDUM

DATE: June 6, 2012

TO: Brian J Cook, Jaekwon Ko

FROM: Virginia Tech Institutional Review Board (FWA00000572, expires May 31, 2014)

PROTOCOL TITLE: Local Government Decisions on Public Service Delivery Type

IRB NUMBER: 12-562

Effective June 6, 2012, the Virginia Tech Institution Review Board (IRB) Administrator, Carmen T Green, approved the New Application request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at:

<http://www.irb.vt.edu/pages/responsibilities.htm>

(Please review responsibilities before the commencement of your research.)

PROTOCOL INFORMATION:

Approved As: **Exempt, under 45 CFR 46.110 category(ies) 2**

Protocol Approval Date: **June 6, 2012**

Protocol Expiration Date: **N/A**

Continuing Review Due Date*: **N/A**

*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

Appendix B: Survey Introduction Letter

Survey Instrument

Dear (Name), (Municipal name) Administrator

My name is Jaekwon Ko, and I am a doctoral candidate at the Center for Public Administration and Policy at Virginia Tech. I am working on my dissertation, “**Local Government Decisions on Public Service Delivery Type: New Public Management or Public Value Management.**” My advisor is Professor Brian Cook. The purpose of this study is to explore the influences on local governments as they choose ways to deliver public services.

I hope that you will assist in this study by responding to a set of questions about the decisions that you or others in your organization make about how to deliver public services.

Please be assured that your answers will remain completely confidential. They will appear only as summary information. Once the initial data are recoded, there will be no association with your name or the responses you provided. All materials and other information with your name on it will be destroyed. You have the right not to participate or to withdraw from participation at any time. If you participate in my study, please complete either the paper questionnaire or the online questionnaire. I enclose the paper questionnaire and a stamped, self-addressed envelope for your convenience. For the online questionnaire, the URL is <https://survey.vt.edu/survey/entry.jsp?id=1340217920453>.

Please read each question in the questionnaire and choose the response you find most appropriate by clicking on the box or button that corresponds to your choice. If you complete the paper questionnaire, please return it to me by email or regular mail. I thank you in advance for your time and consideration. If you have questions about this study, please feel free to contact me or my advisor.

June, 2012

Jaekwon Ko

Doctoral Candidate

Center for Public Administration and Policy

Virginia Tech

(Phone): 540-808-5937

(Email): jaekk75@vt.edu

Brian J. Cook

Professor and Chair (Advisor)

Center for Public Administration and Policy

Virginia Tech

(Phone): 540-231-3438

(Email): brml27@vt.edu

Appendix C: Survey Instrument

The following questions are about your local unit's form and characteristics. For each question, please indicate which of the following best describes your local government.

1. What is the type of your local government?

Council-Administrator (County) Other type

2. My local government has an adequate contract monitoring system.

Strongly Disagree 1 2 3 4 5 Strongly Agree

3. My local government has staff with sufficient expertise in contract management.

Strongly Disagree 1 2 3 4 5 Strongly Agree

4. My local government is facing external fiscal pressures (such as restrictions on raising taxes).

Strongly Disagree 1 2 3 4 5 Strongly Agree

5. I think the influence of my local government's staff in decision-making about how public services are delivered is strong.

Strongly Disagree 1 2 3 4 5 Strongly Agree

6. Please place a check in the box that best describes service delivery in your jurisdiction.

	Does not provide	Directly provides	Jointly provides this service with			This service is provided by		
			Another government	For Profit	Non-profit	Another government	For Profit	Non-profit
Public Works								
1. Residential solid waste collection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Street repair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Water and sewage service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public Safety								
4. Fire prevention/suppression	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Emergency medical service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Health and Human Services								
6. Child welfare programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Programs for the elderly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Public health programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Workforce development/ job training programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parks, Recreation, and Culture								
10. Operation and maintenance of recreation facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Support Functions								
11. Buildings and grounds maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The following questions are considerations in the choice of service delivery mode in your government. Service delivery modes are based on question 6 you marked. Please respond to **each** of the following items by selecting the number on the scale that best characterizes how strongly you consider each factor in your local government's decisions on how to deliver the service.

7. For each service below, please indicate how strongly you agree or disagree that **the reputation of providers** is important in deciding on a service delivery mode.

	Strongly Disagree				Strongly Agree
1. Residential solid waste collection	1	2	3	4	5
2. Street repair	1	2	3	4	5
3. Water and sewage service	1	2	3	4	5
4. Fire prevention/suppression	1	2	3	4	5
5. Emergency medical service	1	2	3	4	5
6. Child welfare programs	1	2	3	4	5
7. Programs for the elderly	1	2	3	4	5
8. Public health programs	1	2	3	4	5
9. Workforce development/job training program	1	2	3	4	5
10. Operation and maintenance of recreation facilities	1	2	3	4	5
11. Buildings and grounds maintenance	1	2	3	4	5

8. For each service below, how strongly do you agree that **fairness to all citizens** is important in deciding on a service delivery mode?

	Strongly Disagree				Strongly Agree
1. Residential solid waste collection	1	2	3	4	5
2. Street repair	1	2	3	4	5
3. Water and sewage service	1	2	3	4	5
4. Fire prevention/suppression	1	2	3	4	5
5. Emergency medical service	1	2	3	4	5
6. Child welfare programs	1	2	3	4	5
7. Programs for the elderly	1	2	3	4	5
8. Public health programs	1	2	3	4	5
9. Workforce development/job training program	1	2	3	4	5
10. Operation and maintenance of recreation facilities	1	2	3	4	5
11. Buildings and grounds maintenance	1	2	3	4	5

9. For each service below, please indicate how strongly you agree that **the provider's accountability to service recipients** is important in deciding on a service delivery mode?

	Strongly Disagree				Strongly Agree
1. Residential solid waste collection	1	2	3	4	5
2. Street repair	1	2	3	4	5
3. Water and sewage service	1	2	3	4	5
4. Fire prevention/suppression	1	2	3	4	5
5. Emergency medical service	1	2	3	4	5
6. Child welfare programs	1	2	3	4	5
7. Programs for the elderly	1	2	3	4	5
8. Public health programs	1	2	3	4	5
9. Workforce development/job training program	1	2	3	4	5
10. Operation and maintenance of recreation facilities	1	2	3	4	5
11. Buildings and grounds maintenance	1	2	3	4	5

10. For each service below, please indicate how strongly you agree that **maintaining a strong community** is important in deciding on a service delivery mode?

	Strongly Disagree				Strongly Agree
1. Residential solid waste collection	1	2	3	4	5
2. Street repair	1	2	3	4	5
3. Water and sewage service	1	2	3	4	5
4. Fire prevention/suppression	1	2	3	4	5
5. Emergency medical service	1	2	3	4	5
6. Child welfare programs	1	2	3	4	5
7. Programs for the elderly	1	2	3	4	5
8. Public health programs	1	2	3	4	5
9. Workforce development/job training program	1	2	3	4	5
10. Operation and maintenance of recreation facilities	1	2	3	4	5
11. Buildings and grounds maintenance	1	2	3	4	5

11. For each service below, please rate the importance of **cost savings** in deciding on a service delivery mode?

	Not important at all				Most important
1. Residential solid waste collection	1	2	3	4	5
2. Street repair	1	2	3	4	5
3. Water and sewage service	1	2	3	4	5
4. Fire prevention/suppression	1	2	3	4	5
5. Emergency medical service	1	2	3	4	5
6. Child welfare programs	1	2	3	4	5
7. Programs for the elderly	1	2	3	4	5
8. Public health programs	1	2	3	4	5
9. Workforce development/job training program	1	2	3	4	5
10. Operation and maintenance of recreation facilities	1	2	3	4	5
11. Buildings and grounds maintenance	1	2	3	4	5

12. For each service below, please indicate how strongly you agree that **job security for your local government's employees** is important in deciding on a service delivery mode?

	Strongly Disagree				Strongly Agree
1. Residential solid waste collection	1	2	3	4	5
2. Street repair	1	2	3	4	5
3. Water and sewage service	1	2	3	4	5
4. Fire prevention/suppression	1	2	3	4	5
5. Emergency medical service	1	2	3	4	5
6. Child welfare programs	1	2	3	4	5
7. Programs for the elderly	1	2	3	4	5
8. Public health programs	1	2	3	4	5
9. Workforce development/job training program	1	2	3	4	5
10. Operation and maintenance of recreation facilities	1	2	3	4	5
11. Buildings and grounds maintenance	1	2	3	4	5

13. For each of the following services, please rate the importance of **managerial flexibility** in deciding on a service delivery mode.

	Not important at all				Most important
1. Residential solid waste collection	1	2	3	4	5
2. Street repair	1	2	3	4	5
3. Water and sewage service	1	2	3	4	5
4. Fire prevention/suppression	1	2	3	4	5
5. Emergency medical service	1	2	3	4	5
6. Child welfare programs	1	2	3	4	5
7. Programs for the elderly	1	2	3	4	5
8. Public health programs	1	2	3	4	5
9. Workforce development/job training program	1	2	3	4	5
10. Operation and maintenance of recreation facilities	1	2	3	4	5
11. Buildings and grounds maintenance	1	2	3	4	5

14. For each of the following services, please rate the importance of providers having a **“customer orientation”** in deciding on a service delivery mode.

	Not important at all				Most important
1. Residential solid waste collection	1	2	3	4	5
2. Street repair	1	2	3	4	5
3. Water and sewage service	1	2	3	4	5
4. Fire prevention/suppression	1	2	3	4	5
5. Emergency medical service	1	2	3	4	5
6. Child welfare programs	1	2	3	4	5
7. Programs for the elderly	1	2	3	4	5
8. Public health programs	1	2	3	4	5
9. Workforce development/job training program	1	2	3	4	5
10. Operation and maintenance of recreation facilities	1	2	3	4	5
11. Buildings and grounds maintenance	1	2	3	4	5

15. For each of the following services, how important is **managerial accountability** to their superiors in deciding on a service delivery mode?

	Not important at all				Most important
1. Residential solid waste collection	1	2	3	4	5
2. Street repair	1	2	3	4	5
3. Water and sewage service	1	2	3	4	5
4. Fire prevention/suppression	1	2	3	4	5
5. Emergency medical service	1	2	3	4	5
6. Child welfare programs	1	2	3	4	5
7. Programs for the elderly	1	2	3	4	5
8. Public health programs	1	2	3	4	5
9. Workforce development/job training program	1	2	3	4	5
10. Operation and maintenance of recreation facilities	1	2	3	4	5
11. Buildings and grounds maintenance	1	2	3	4	5

The following questions are on the characteristics of public services. Please respond to **each** of the following items by selecting the number on the scale.

16. For each service below, please rate your level of agreement that given the nature of the service or specific needs of clients, **incumbent providers have an advantage** over new vendors and are difficult to replace?

	Strongly Disagree				Strongly Agree
1. Residential solid waste collection	1	2	3	4	5
2. Street repair	1	2	3	4	5
3. Water and sewage service	1	2	3	4	5
4. Fire prevention/suppression	1	2	3	4	5
5. Emergency medical service	1	2	3	4	5
6. Child welfare programs	1	2	3	4	5
7. Programs for the elderly	1	2	3	4	5
8. Public health programs	1	2	3	4	5
9. Workforce development/job training program	1	2	3	4	5
10. Operation and maintenance of recreation facilities	1	2	3	4	5
11. Buildings and grounds maintenance	1	2	3	4	5

17. For each service below, how easy is it **to measure the quality of the service** provided?

	Very difficult				Very easy
1. Residential solid waste collection	1	2	3	4	5
2. Street repair	1	2	3	4	5
3. Water and sewage service	1	2	3	4	5
4. Fire prevention/suppression	1	2	3	4	5
5. Emergency medical service	1	2	3	4	5
6. Child welfare programs	1	2	3	4	5
7. Programs for the elderly	1	2	3	4	5
8. Public health programs	1	2	3	4	5
9. Workforce development/job training program	1	2	3	4	5
10. Operation and maintenance of recreation facilities	1	2	3	4	5
11. Buildings and grounds maintenance	1	2	3	4	5

18. For each service below, please indicate how strongly you agree or disagree that **multiple goals** make it **difficult to specify performance expectations for service providers**.

	Strongly Disagree				Strongly Agree
1. Residential solid waste collection	1	2	3	4	5
2. Street repair	1	2	3	4	5
3. Water and sewage service	1	2	3	4	5
4. Fire prevention/suppression	1	2	3	4	5
5. Emergency medical service	1	2	3	4	5
6. Child welfare programs	1	2	3	4	5
7. Programs for the elderly	1	2	3	4	5
8. Public health programs	1	2	3	4	5
9. Workforce development/job training program	1	2	3	4	5
10. Operation and maintenance of recreation facilities	1	2	3	4	5
11. Buildings and grounds maintenance	1	2	3	4	5

19. If you were to consider changing who delivers each of the following services, do you agree that **many providers would be available to replace the present provider?**

	Strongly Disagree			Strongly Agree	
1. Residential solid waste collection	1	2	3	4	5
2. Street repair	1	2	3	4	5
3. Water and sewage service	1	2	3	4	5
4. Fire prevention/suppression	1	2	3	4	5
5. Emergency medical service	1	2	3	4	5
6. Child welfare programs	1	2	3	4	5
7. Programs for the elderly	1	2	3	4	5
8. Public health programs	1	2	3	4	5
9. Workforce development/job training program	1	2	3	4	5
10. Operation and maintenance of recreation facilities	1	2	3	4	5
11. Buildings and grounds maintenance	1	2	3	4	5

Finally, please provide some information about yourself. Remember that all of your answers will remain completely confidential.

20. Are you?

Male

Female

21. Do you have other job experience beyond the public sector?

No

Private

Non-profit

22. What is your highest educational degree completed?

High school diploma or equivalent 2 year college degree 4 year college degree

Master's degree

Ph. D

Other

23. How many years have you worked in the public sector?

0-5 years

6-10 years

11-15 years

15-20 years

More than 20 years

Thank you for filling out our survey. Please return it to me at your earliest convenience. You may do so by:

1) scanning it and sending it as an e-mail attachment file to: jaekk75@vt.edu

2) mailing it to:

Jaekwon Ko

Center for Public Administration and Policy

Virginia Tech

104 Draper Road, SW (0520)

Blacksburg, VA 24061

Thanks again for your time and contribution!

Appendix D: Local Virginia Governments Surveyed

A County	Lunenburg County	Alexandria City
Amelia County	Madison County	Bedford City
Amherst County	Mathews County	Buena Vista City
Augusta County	Mecklenbrug County	Colonial Heights City
Bath County	Middlesex County	Fairfax City
Bland County	Montgomery County	Falls Church City
Campbell County	Nelson County	Fredericksburg City
Caroline County	Northampton County	Galax City
Chesterfield County	Page County	Harrisonburg City
Craig County	Patrick County	Hopewell City
Cumberland County	Prince William County	Lexington City
Fairfax County	Rappahannock County	Lynchburg City
Fauquier County	Rockbridge County	Manassas Park City
Floyd County	Rockingham County	Martinsville City
Frederick County	Russell County	Newport News City
Gloucester County	Scott County	Norfolk City
Goochland County	Shenandoah County	Norton City
Halifax County	Smyth County	Poquoson City
Honover County	Spotsylvania County	Radford City
Isle of Wight County	Warren County	Richmond City
James City County	Wythe County	Roanoke City
Louisa County	York County	Suffolk City
		Virginia Beach City
		Waynesboro City
		Williamsburg City
		Winchester City

Appendix E: Descriptive Statistics of Survey Respondents and Non-respondents

	Population (2011)				Total
	Less than 10,000	10,001 - 50,000	50,001- 100,000	More than 100,000	
Non-respondents	8 (6.0%)	43 (32.1%)	7 (5.2%)	7 (5.2%)	65(48.5%)
Respondents	11 (8.2%)	37 (27.6%)	11 (8.2%)	10 (7.5%)	69 (51.5%)

Note: The total number of County/City managers who were asked to complete the survey was 70. But, the number of respondents in this table is 69 because one municipality responded to the survey anonymously

	Per capita money income in the past 12 months (2011 dollars)		
	Less than \$33,000	More than \$33,001	Total
Non-respondents	58 (43.3%)	7 (5.2%)	65 (48.5%)
Respondents	57 (42.5%)	12 (9%)	69 (51.5%)

Note: Per capita money income in the past 12 months in the State of Virginia is \$33,000

	Location		Total
	Non-metro area	Metro area	
Non-respondents	26 (19.4%)	39 (29.1%)	65 (48.5%)
Respondents	21 (15.7%)	48 (35.8%)	69 (51.5%)

Appendix F: Response Frequencies

Item	Frequency (Percent)					Total
	1	2	3	4	5	
Efficiency ^a	15 (1.9)	103 (13.4)	289 (37.5)	280 (36.4)	83 (10.8)	770
Flexibility ^a	29 (3.9)	117 (15.7)	321 (43.2)	207 (27.9)	69 (9.3)	743
Customer orientation ^a	15 (2.0)	67 (8.8)	194 (25.4)	333 (43.6)	155 (20.3)	764
Managerial accountability ^a	22 (2.9)	28 (3.7)	182 (24.2)	359 (47.7)	161 (21.4)	752
Fairness ^b	13 (1.7%)	37 (4.8)	117 (15.2)	222 (28.8)	381 (49.5)	770
Political accountability ^b	2 (0.3)	21 (2.7)	124 (16.1)	296 (38.4)	327 (42.5)	770
Social cohesion ^b	19 (2.5)	28 (3.7)	133 (17.5)	356 (46.9)	223 (29.4)	759
Employee safety ^b	133 (17.5)	215 (28.3)	267 (35.1)	119 (15.7)	26 (3.4)	760
Competition ^b	168 (21.8)	277 (36.0)	182 (23.6)	103 (13.4)	40 (5.2)	770
Fiscal pressure ^b	1 (1.4)	7 (10.0)	10 (14.3)	24 (34.3)	28 (40.0)	70
Participation of staff ^b	1 (1.4)	1 (1.4)	8 (11.4)	44 (62.9)	16 (22.9)	70
Monitoring capacity ^b	2 (2.9)	8 (11.4)	15 (21.4)	29 (41.4)	16 (22.9)	70
Asset specificity ^b	23 (3.0)	143 (18.6)	261 (33.9)	227 (29.5)	116 (15.1)	770
Measurability ^c	23 (3.0)	169 (21.9)	265 (34.4)	211 (27.4)	102 (13.2)	770

a 1 = Not important at all, 5 = Most important

b 1 = Strongly disagree, 5= Strongly agree

c 1 = Very difficult, 5 = Very easy