

**CONTRACTING FOR PUBLIC BUS TRANSIT: DO
TECHNIQUES EMPLOYED MAKE A DIFFERENCE IN
SERVICE OUTCOME?**

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ABSTRACT. The evidence suggests deductions for non-performance and competitive solicitation methods are key determinants of contractor performance. A penalty provision is strongly associated with an increase in unit cost, while a competitive solicitation method reduces unit cost. The evidence is inconclusive for fixed price contract and contract length. The findings support the idea that contracting techniques impact contractor performance. The potential for cost savings may not be fully realized unless techniques that focus on competitive contracting are employed. Future research that addresses contract design factors for other services in other settings will provide information to help policy makers choose among the numerous contract design options.

INTRODUCTION

A survey of alternative service delivery methods for 62 municipal services reflects over 12,000 instances of local governments using contracting as a delivery method (Miranda & Anderson, 1994, p. 35). A local government that decides to implement service contracting is faced with a number of decisions. This paper focuses on decision factors associated with the pre-solicitation and contractor selection phases. It explores the relationship between contract formation decisions made in the two phases and contractor performance.

Local governments provide a variety of services in such areas as public works, transportation, utilities, safety, health, parks, and recreation

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(Miranda & Anderson, 1994, p. 35). Not all services are the same. Some are relatively easy to contract, while others are quite difficult. In a broad sense, services may be classified as either hard or soft (Savas, 1987; Hayes, 1989, p. 79, DeHoog, 1985). Hard services are those with a recognizable production process that produce visible results (Savas, 1987, p. 267). Hard services are considered easier to contract because they are less complex, more conducive to objective outcome measures, and can be described with greater specificity. In contrast, soft services generally involve a close client/provider relationship and have a less visible result (Stein, 1990). Soft services are considered difficult to contract because they are more complex, harder to measure, and more difficult to describe. The context for this research is public bus transit, which has hard service characteristics. The research question may be stated as follows: What influence do contract formation decisions have on the cost of fixed route bus transit services?

THE CONTRACTING DECISION: CONCEPTUAL FRAMEWORK

An important element of the decision to contract is the process involved in establishing and maintaining a legal contractual relationship with a private firm. This process is conceptualized as occurring in three phases; pre-solicitation, contractor selection, and contract management.

Pre-solicitation

The pre-solicitation phase begins when local officials first consider the possibility of relying on a private provider for a particular public service. The focus is on the probability of adequate market competition, the characteristics of the service in question, the political and social obstacles to contracting, and the fiscal ramifications of a decision to contract. Among other considerations, the jurisdiction must decide on the type of work specification, the type of solicitation method to use, and the type of contract to award. Embedded in these decisions are other important considerations such as contract length, the use of incentives and penalties, and how oversight will be conducted. This phase ends when the work force and community have been notified of the initiative and the necessary contractual instruments have been written to solicit bids or proposals from the private sector.

Contractor Selection

The contractor selection phase begins when a solicitation to submit bids or proposals is issued to the private sector and concludes when the selected contractor begins performance under the terms of the contract. This phase of the contracting process entails such contracting responsibilities as evaluation of bids or proposals, selection of a contractor, and actions related to a smooth transfer of responsibility from the local government to a private firm.

Contract Management

The final phase of the contracting process involves the activities related to contract administration and the oversight of contractor performance. Aspects of service delivery to be evaluated include cost, quality, customer satisfaction, and compliance with contract specifications. Numerous techniques are available for evaluating the performance of the contractor. These include citizen surveys, citizen complaints, field observation by local government officials, and review of records and reports.

Collectively these three phases –pre-solicitation, contractor selection and contract management-- comprise the contracting process.

CONTRACT FORMATION

The pre-solicitation phase and the contractor selection phase relate to contract formation (Hirsch, 1991). There are a number of decisions involved with contract formation. What type of specification will be written? What solicitation method will be used? What type of contract will be awarded? What type of incentive and penalty provisions will be included in the contract? What is the length of the contract? What type of private firm will be awarded the contract? Will more than one firm be awarded a contract? Contract formation is very complex and administratively demanding on the local government in terms of time and resources involved. The primary concern is to choose a design that will best meet the needs of the local government and the citizens to whom the service will be provided.

The policy choices are especially critical because they may influence the service outcomes of a decision to provide public services through private means (DeHoog, 1990, p. 336). For example, a study of contract design factors for residential refuse collection found that penalties for

non-performance were strongly associated with an increase in unit cost (Shetterly, 2000). The results of the study were inconclusive for other contract design factors such as performance specification, sealed bid solicitation method, and contract length.

A key contract formation consideration is choice of contractor selection method. Three formal solicitation designs can be used to acquire a particular service. The first approach emphasizes competition and selects contractors on the basis of lowest cost. In contrast, a negotiation approach allows for discussion with contractors on the merits of their proposal. Contractors are selected on the basis of cost and other relevant criteria, such as management and technical expertise. The final approach combines the emphasis on lowest cost of the competition approach with the emphasis on other relevant criteria of the negotiation approach (Page, 1980; Kettner & Martin, 1987; MacManus, 1992).¹

In addition, when conditions warrant, local governments have a number of non-competitive approaches that can be used to contract for services. Non-competitive approaches are more informal and eliminate many of the requirements of the formal approaches, such as public bid openings and award to the lowest responsive and responsible bidder (MacManus, 1992). Informal techniques are primarily used for emergencies, set-aside programs, sole source requirements, and professional services.

Formal Solicitation Approaches

The process for each of the formal solicitation designs is complex. A key characteristic of a sealed bid approach, which emphasizes competition among contractors, is a focus on efficiency. This approach involves selection of contractors based on cost and is appropriate for services where contract requirements can be stated unambiguously. It represents a management approach to service contracting since the goal is to select the lowest cost provider (Kettner & Martin, 1990, p. 16; DeHoog, 1990). The sealed bid approach involves preparation of a solicitation package called an Invitation for Bid (IFB), which describes the requirements related to the services to be provided and includes a closing date for submission of bids. The contracting action is announced to the public and the IFB provided to the private sector. Prior to bids being received, a bidders' conference is held for the agency to answer bidder questions on the requirements of the solicitation. At the designated closing date, bids are received, opened, and recorded. After

determining which bids are responsive (comply with the IFB requirements), the contract is awarded to the lowest cost and responsible bidder. Being a responsible bidder means the contractor has, or can acquire, the necessary skill and financial resources to satisfactorily meet contract requirements (Kettner & Martin, 1987, p. 85).

A negotiation approach, in contrast, has less emphasis on competition, involves flexibility in the contract relationship, and accommodates discussion with potential contractors on requirements of the service being acquired. It is appropriate when services are complex and difficult to describe. The negotiation approach is similar to a sealed bid with one key distinction: the contract award is based on cost and other relevant factors such as management ability, technical approach, and experience. The process involves issuing a Request for Proposals (RFP) to the private sector requesting proposals by a specific date. However, unlike a sealed bid, which has a public bid opening followed by a determination of responsiveness and responsibility, the RFP has several intermediate steps. Proposals must be evaluated and negotiation conducted before a contract is awarded. This critical phase of the process allows room for subjectivity on the part of local government officials to enter the selection process. A contract is awarded based on cost and other factors as specified in the RFP. Since other relevant criteria are part of the selection process, the firm awarded the contract is not necessarily the least cost provider.

Sealed bidding selects contractors on the basis of price. With negotiation, selection is made on the basis of price and other relevant criteria. The multi-step approach represents a combination of the sealed bid and negotiation approaches. It also involves selection of contractors on the basis of cost, but like the negotiation method incorporates a procedure for review of contractor proposals. The first step involves issuing an RFP soliciting proposals. Offerors respond with a proposal that addresses the performance requirements described in the RFP. The purpose of the first step is to determine the suitability of potential contractors and their service delivery methodologies. Price is not discussed in the first step. The second step uses an IFB to solicit bids from the suitable contractors with award made to the lowest cost, responsive, and responsible bidder. The primary purpose of the multi-step approach is to balance a desire for lowest cost with the need to ensure service quality.

Informal Noncompetitive Approaches

Lastly, a local government may use an informal non-competitive approach for acquiring contracted services. Since the procedures involved are informal, they will vary among local governments. Therefore, there is no consistent process that can be described. In general, they can be characterized as being approaches that are less public, involve fewer bureaucratic procedures, and consequently involve a shorter time period to implement than formal designs.

THEORETICAL FRAMEWORK

Methodology

Contractor performance is conceptualized as a function of contract formation (solicitation method and contract characteristics), while controlling for environmental factors and service characteristics. This study employs a multiple regression model to test the influence of contract formation on the cost of public bus transit. The regression model takes the following form:

$$\text{Unit Cost} = b_0 + b_1\text{CF} + b_2\text{EF} + b_3\text{SC} + e$$

Where:

CF = contract formation including solicitation method, contract type, incentives, and contract length;

EF = environmental factors including labor cost, metro status, contracting experience, geographic location, population, density, and scale;

SC = service characteristics including vehicle ownership, base vehicles, and peak to base ratio; and

e = error term

Economic theory supports the proposition that efficiency gains will be achieved when jurisdictions contract with private firms for the delivery of public services. However, not all contracting techniques are equal in terms of their emphasis on competitive prices. Therefore, the research hypothesis is that contract design factors emphasizing competition will be associated with more efficient contractor performance. A competitive model of service contracting is the primary approach to investigating the influence of contract design on contractor

performance. A competitive model emphasizes competition and serves as the basis for selection of variables and development of hypotheses. The characteristics of a competitive model are emphasis on a complete description of the work to be performed, actions that encourage active competition, objective award criteria, and objective cost and performance monitoring (DeHoog, 1990, p. 320). Other research suggests contracting techniques such as sealed bidding, fixed price contract, multiyear contracting and contracting with for-profit firms are more representative of a competitive approach to service contracting (Kettner & Martin, 1990)

Independent Variables

Table 1 summarizes the variables for contract formation (solicitation method and contract characteristics), environmental factors, and service characteristics. Sealed bid is the most competitive approach because it uses cost as the award criteria. A sealed bid method is expected to decrease the cost of contracted services. Because of increased flexibility and potential for innovation, a fixed price contract is expected to decrease the cost of contracted services.

Some contract provisions are intended to encourage the contractor to manage performance to the mutual benefit of both parties (MacManus, 1992, p. 54). A performance penalty provision with deductions for non-performance for the contractor payment shifts risk to the contractor. Such a provision is expected to increase the cost of residential refuse collection since the contractor may include the cost of increased flexibility in the bid price to avoid financial penalties. Contract length measures the years for which the contract was awarded. Contract length is expected to increase the cost of contracted services since the service is submitted for competitive bidding less frequently.

The cost of labor, market competition, contracting experience, the condition under which the service is provided, and scale of operations may influence contractor performance. Per capita income is a proxy for the wage level of labor and is expected to have a positive influence on the cost of contracted services. Population and metro status are proxies for level of competition. Larger jurisdictions should have more

TABLE 1
Definition and Predicted Influence for Variables Explaining the
Cost of Public Bus Transit

<i>Variable</i>	<i>Definition</i>	<i>Influence</i>
Solicitation Method	Use of a sealed bid or multi-step method	Negative
Contract Type	Use of a fixed price contract	Negative
Incentives	Deductions for non performance	Positive
Contract Length	Length of the contract in years	Positive
Labor Cost	Per capita income (000)	Positive
Metro status	Core city in a metropolitan statistical area	Negative
Contracting Experience	Proportion of public services provided, wholly or in part, by private for-profit firms	Negative
Geographic Location	Northeast, North Central, and South (Reference variable is West.)	Positive or Negative
Population	Actual population from 1990 census (000)	Negative
Density	Population per square mile (000)	Positive or Negative
Scale	Passengers transported annually (000)	Negative
Vehicle Ownership	Proportion of vehicles provided by contractor	Positive
Base Vehicles	Vehicles required at base service level	Negative
Peak/Base Ratio	Ratio of peak vehicles to base vehicles	Positive or Negative

potential suppliers and thus have more firms competing for contract award than smaller jurisdictions. Metro status measures competition more broadly by considering a jurisdiction's position relative to a metropolitan statistical area (MSA). A central city in a metropolitan statistical area (MSA) should have more potential suppliers. Metro status is expected to be associated with a decrease in the cost of contracted services.

Some jurisdictions have more experience with contracting than others. A jurisdiction's experience with service contracting is measured through the proxy of proportion of services contracted. Higher experience with service contracting is expected to decrease the cost of contracted services.

Density and geographical location measure the condition under which bus transit services are provided. Jurisdictions with a high population density will have destinations that are closer with the potential for more efficient use of vehicles. However, high density also creates the potential for greater traffic congestion leading to a higher risk for accidents and fuel and maintenance inefficiencies. Extreme weather conditions or difficult terrain may also influence bus transit cost. For example, contractors in regions with exposure to snow may incur higher maintenance costs or have more accidents than contractors in other regions. Due to a number of potential explanations the effect for density and location must be empirically derived. Lastly, scale of operations measured by number of passengers transported annually is expected to have a negative influence on the cost of contracted services.

The work of Perry and Babitsky (1986) is suggestive of the type of service characteristic variables that may influence the cost of public bus transit. The first of these is vehicle ownership. Vehicle ownership controls for variation in how vehicles used in providing bus transit are supplied. The proportion of transit vehicles provided by the contractor measures vehicle ownership. It is hypothesized that the larger the proportion of transit vehicles provided by the contractor, the higher the cost of public bus transit.

The second factor is the number of vehicles required when the transit system is operating at its base service level. Large transit systems are expected to generate more miles relative to smaller systems and be associated with a decrease in the cost of public bus transit. The second factor is the ratio of the number of vehicles required to operate the transit system at the peak service level to the number required at the system's base service level. Systems with a higher ratio require a larger number of vehicles on standby to accommodate peak load requirements. This standby capacity should result in a system with a higher cost level and be associated with an increase in the cost of public bus transit. However, larger systems will generate more miles and thus be associated with a decrease in the cost of public bus transit. The net effect will depend on whether an excess capacity or scale effect dominates.

Dependent Variable

Many transit systems receive some federal funding and accordingly must report performance annually as required by the Urban Mass Transportation Act of 1964. Fielding, Babitsky, and Brenner (1985) performed a factor analysis on performance data to identify a set of performance measures for efficiency and effectiveness. The authors evaluated 48 performance indicators with the purpose of identifying the minimum number of data to provide an amount of performance information. The efficiency measure best meeting the needs of this study is an overall measure of efficiency expressed as total vehicle miles per dollar of operating expense. The dependent variable is defined as cost per mile driven. Cost is the production cost of the contractor and represents the price paid to the contractor by the local government. It does not include transaction cost incurred by the local government to award and oversee the contract.

Data Collection

A variety of methods were used to collect relevant data. A purposive sample was drawn of jurisdictions responding to the 1992 International City/County Management Association (ICMA) Survey of Alternative Delivery Approaches, which reported contracting for public bus transit. All jurisdictions with a population greater than 25,000 citizens were included in the sample. A survey was used to acquire data on contract formation, cost of public bus transit, and other performance related variables. The survey questionnaire (Appendix 1) contains two sections. The first section includes eight questions on contract design. All but one question can be answered by using a check off procedure. The second section contains nine questions on performance data. In all cases these questions are open ended, requiring the respondent to enter a number or percent. The questionnaire includes a definition of the service and completion instructions. A data set from the 1992 ICMA survey and information in the County and City Data Book 1994 is the source for other variables used in the analysis. The survey questionnaire was mailed to 50 jurisdictions during the period May-July 1997.

RESULTS

A summary of the survey data collected for the 31 reporting jurisdictions is shown in Table 2. The jurisdictions show a preference for a request for proposal solicitation method, using a design-oriented

specification, with award of a fixed price contract to a single for-profit provider. The average contract length is 4.8 years. Private firms provide bus transit service using an average of 15 vehicles. On average, private firms provided 26% of the vehicles used to operate the transit systems, drove the transit vehicles 899,526 miles annually, and

TABLE 2
Public Bus Transit: Survey Data (N=31)

Variable	Definition	N	Mean/%
Cost	Annual cost of the contract (mean)	29	2,517,946
Specification Type	Performance oriented (%)	9	36
	Design oriented (%)	11	44
	Combination of performance and design (%)	5	20
	No response (6)		
Solicitation Method	Sealed bid (%)	5	16
	Request for Proposal (%)	18	58
	Multi-step (%)	5	16
	Non-competitive (%)	2	6
	Other (%)	1	3
Contract Type	Fixed price (%)	17	55
	Cost (%)	6	19
	Other (%)	8	26
Type of Firm	For-profit (%)	23	74
	Non-profit (%)	7	23
	Both For-profit and non-profit (%)	1	3
Positive Incentives	Share cost savings between parties (%)	4	13
	Do not share cost savings (%)	27	87
Negative Incentives	Deduction for nonperformance (%)	11	35
	No deduction for nonperformance (%)	20	65
Contract Length	Contract length in years (mean)	31	4.8
Scale	Passengers transported annually (mean)	30	1,615,813
	Miles driven annually (mean)	31	899,526
Ownership	Contractor provided transit vehicles (mean)	30	.26
Base Vehicles	Vehicles at basic operating level (mean)	30	15.2
Peak Vehicles	Vehicles at maximum operating level (mean)	30	21.8

transported 1,615,813 passengers annually. A total of 29 jurisdictions provided the annual payment to the contractor, which averages about 2.5 million dollars. The questionnaire asked for contractor payment data from Fiscal Year 1996.

Many of the contracts include some form of financial incentive. Eleven jurisdictions reported including a provision that allows deduction from the contract payment for non-performance, while four reported using some form of positive incentive, such as sharing cost savings for innovative practices implemented by the contractor.

Inferential Analysis

Table 3 provides a definition and mean for variables included in the statistical analysis. Solicitation method is coded to reflect a competitive approach to contracting. It compares methods in which award decisions

TABLE 3
Variables Explaining the Cost of Public Bus Transit
Mean for Observations Included in the Regression Analysis (N=28)

<i>Variable</i>	<i>Definition</i>	<i>Mean</i>
Unit cost	Cost per mile driven	2.39
Solicitation Method	Use of a sealed bid or multi-step method	.32
Contract Type	Use of a fixed price contract	.57
Incentives	Deductions for non performance	.39
Contract Length	Length of the contract in years	4.4
Labor Cost	Per capita income (000)	16.2
Metro Status	Core city in a metropolitan statistical area	.46
Contracting Experience	Proportion of public services provided, wholly or in part, by private for-profit firms	.21
Geographic Location (Reference variable is West)	Northeast	.11
	North Central	.07
	South	.29
Population	Actual population from 1990 census (000)	121.2
Density	Population per square mile (000)	3.8
Scale	Passengers transported annually (000)	1,724
Vehicle Ownership	Proportion of vehicles provided by contractor	.24
Base Vehicles	Vehicles required at base service level	16
Peak/Base Ratio	Ratio of peak vehicles to base vehicles	1.3

are based on cost, versus all other methods. A value of 1 represents jurisdictions that used either a sealed bid or multi-step solicitation procedure. Consistent with a competitive contracting approach, contract type is coded as 1 for jurisdictions reporting use of a fixed price contract. A variable for contracts that include a penalty provision is included in the analysis. Due to the small sample size, geographic location was compressed from nine geographic divisions into four regions: the Northeast, North Central, South, and West. The West region is designated as the reference category.

Several contract design variables were excluded from the analysis. Because of the small number of contracts with an incentive provision (4) involving the sharing of cost savings, this variable was not included in the analysis. Specification type was not included in the analysis due to the number of missing observations (6). Since the vast majority (74 %) of contracts were awarded to a for-profit firm, firm type is not included in the analysis.

The coefficient estimates and related statistics for unit cost per mile are shown in Table 4. The sample for unit cost consists of 28 observations. Three of the original 31 observations were eliminated in the analysis due to missing data for variables included in the analysis. Table 4 shows that use of a competitive solicitation method and a penalty provision have a statistically significant ($p < .05$) influence on unit cost per mile. The sign for a competitive solicitation method is negative as hypothesized. When jurisdictions use solicitation methods that emphasize competition, a jurisdiction's use of solicitation methods that emphasize competition has the effect of reducing cost per mile by \$1.17. As hypothesized, a penalty provision is associated with an increase in cost per mile. Jurisdictions that include a penalty provision in their contract pay a premium. Inclusion of a penalty provision adds \$1.29 to cost per mile driven. The other two contract design variables, fixed price contract and contract length, do not have a statistically significant influence on unit cost.

The key environmental characteristics impacting the cost of public bus transit are metro status, location, and scale of operations ($p < .05$). Metro status has a positive influence on cost rather than the hypothesized negative relationship. The effect of being a central city is to increase cost by \$1.09 per mile. In terms of geographic location, the North central and South regions are statistically significant ($p < .05$) and associated with a higher unit cost than the West, the reference region.

The number of passengers transported annually is the scale variable. It was expected that this variable would have a negative influence on public bus transit cost. While statistically significant, it has a positive influence on cost per mile.

Two of the service characteristic variables, vehicle ownership and base vehicles are also statistically significant ($p < .05$). As predicted, the number of vehicles at the base operating level is associated with a decrease in cost per mile as expected. Larger systems have lower unit cost, with each additional vehicle decreasing cost per mile by about \$0.18. Finally, vehicle ownership is associated with a decrease in unit cost.

TABLE 4
The Determinants of Contractor Performance (Cost per Mile)

Variable	Coefficient	Standard Error	P-value
Intercept	2.25285	1.12292	0.07005
Solicitation Method	-1.17200	0.38920	0.01183
Contract Type	-0.52348	0.49909	0.31674
Incentives	1.28935	0.53257	0.03394
Contract Length	0.02515	0.13561	0.85624
Labor Cost (000)	0.05039	0.03254	0.14977
Metro Status	1.09032	0.45698	0.03612
Contracting Experience	-0.04400	2.10355	0.98368
Northeast	1.66043	1.08004	0.15245
North Central	2.23622	0.77263	0.01459
South	1.01747	0.45521	0.04710
Population (000)	0.00728	0.00356	0.06586
Density (000)	-0.028082	0.05650	0.62893
Scale (000)	0.00099	0.00039	0.02965
Vehicle Ownership	-1.70863	0.73049	0.03924
Base Vehicles	-0.17673	0.06285	0.01691
Peak/Base Ratio	-0.78599	0.47833	0.12859

R-square: .87, Adjusted R-square: .67, F value = 4.49, probability > F = .0077.

Policy Implications

The results provide evidence in support of the research hypothesis that more competitive contracting techniques will be associated with lower unit cost. Because sealed bid and multi-step solicitation methods involve selection of contractors based wholly, or in part, on price criteria, it was hypothesized that these variables would be associated with a reduction in unit cost. When local jurisdictions use a competitive solicitation method, they tend to reap the benefit of a lower cost for services provided. Using a competitive sealed bidding solicitation method appears to be a good strategy for local jurisdictions contracting for bus transit. Sealed bidding is also a less resource intensive method than competitive sealed negotiation. Therefore, the method should also be attractive to local jurisdictions with small and less experienced contracting staffs. Yet, only 32% of the jurisdictions contracting for public bus transit used either a sealed bid or multi-step solicitation method.

Rewards and sanctions involve contract provisions that shift financial risk from one contractual party to the other. A contractor may respond to a penalty provision by including in the price offered additional flexibility so the incurrence of penalties might be avoided. Therefore, it was hypothesized that penalties would have a positive influence on the cost of contracted services. When local level organizations include a penalty provision in their contract they pay a premium. The positive influence of a penalty provision on contractor cost is consistent with a similar study (Shetterly, 2000) of residential refuse collection. The apparent result is that contractors preparing bids for solicitations that include a penalty provision consider them to have higher financial risk, and thus raise their bid price.

Political and fiscal imperatives faced by local governments (cities and counties) provide an enormous impetus to try alternative methods of service delivery. For example, public resistance to new public spending drives demand for new methods of service delivery. In addition, the need to replace infrastructure and expand services in developing communities creates a demand for capital and puts additional pressure on local budgets. Consequently, local governments need innovative means of providing services to their citizens. Privatization offers a set of alternative approaches with the potential to improve service delivery. In particular, contracting for services offers substantial promise for fiscally strained local governments. However, contracting for services involves

an array of choices for local government officials on how to structure the contractual relationship.

This research has important policy consequences because of the potential for efficiency gains from delivery of public services by private contractors. These savings could either be diverted to other priority requirements or used to reduce the tax burden on citizens. Further, public officials could then focus attention on services that cannot be delegated to the private sector. However, the savings potential may not be fully realized if less competitive contracting methods are employed by local jurisdictions.

NOTES

1. The solicitation design that selects contractors on the basis of cost is known by a variety of terms: Invitation for Bid, Formal Advertisement, and Competitive Sealed Bidding. The design based on cost and other relevant criteria is known as: Request for Proposal, Competitive Negotiation, and Competitive Sealed Negotiation. The solicitation design that combines the competition and negotiation approach is known as Two Step Formal Advertisement and Multi-step. For consistency this paper uses the following terms for the three formal contract solicitation designs: Sealed Bid, Negotiation, and Multi-step.

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APPENDIX A

Survey Questionnaire: Public Bus Transit

Service Definition: The operation and maintenance of fixed route, motorbus transit systems.

Instructions: Please complete the questions on contract design and contractor performance and return the questionnaire. If this service is no

longer contracted, complete the respondent information at the end of this questionnaire and return the questionnaire.

Contract Design (Check block and/or Fill in Blank)

1. What type of specification was used with the solicitation?
 - Performance (focus is ends oriented)
 - Design/Process (focus is on how services are delivered)
 - other (specify)

2. Which of the following solicitation methods was used?
 - Competitive sealed bid
 - Competitive sealed negotiation
 - Multi-step (combines features of sealed bid and competitive negotiation)
 - Non-competitive/sole source
 - Other (specify)

3. Did the contracting action involve multiple awards for the same service?
 - Yes
 - No
 If yes, how many contracts were awarded? _____

4. What type of contract(s) was awarded?
 - Fixed price
 - Cost reimbursement
 - Other (specify)

5. Do the contract(s) include any of the following provisions? **(Check all that apply)**
 - Incentives that share risk between contracting parties
Describe _____
 - Penalties for non-performance that reduce the contract payment
Describe _____
 - Termination for convenience clause
 - Describe _____

6. What is the total length of the contract(s) in years (base year plus option years)?

7. What type of firm(s) was awarded contracts?
 - For-profit

- Non-profit
- For-profit and non-profit

8. What are the primary forms of **performance** oversight/monitoring used by your jurisdiction for this service? **(Check all that apply)**

- Citizen surveys
- Observation by local government staff officials
- Citizen complaints
- Review of records and reports
- Independent external oversight
- Oversight not conducted

Contractor Performance

Instructions: Base your response to Questions 9 through 17 on your **Fiscal Year 96** experience with contracting for bus transit. If multiple contractors were used, base your response on your overall experience with all contractors.

9. What was the total number of valid customer complaints received in **Fiscal Year 96**?

Number of complaints _____

10. What percentage of bus routes were completed on time according to published timetables during **Fiscal Year 96**? On time is defined as leaving the terminal point on the exact schedule, and arriving at all intermediate points not more than 5 minutes late.

Enter percent _____

11. What was the total number of accidents (property damage, personal injury, or fatalities) involving transit vehicles in **Fiscal Year 96**?

Number of accidents _____

12. How many vehicle miles were driven by the contractor during **Fiscal Year 96**? Vehicle miles are the total distance traveled by transit vehicles, including both revenue and deadhead miles.

Number of miles _____

13. What was the total payment made to the contractor(s) during **Fiscal Year 96**?

Amount (dollars) _____

14. What was the average speed of the transit system?

Enter speed _____

15. What percent of the transit vehicles did the contractor(s) provide?
Enter zero if they provided none.

Enter percent _____

16. How many vehicles were required when the transit system was operating at the **basic** service level?

Number of vehicles _____

At the **maximum** service level?

Number of vehicles _____

17. How many passengers were transported by the contractor(s) in **Fiscal Year 96**?

Number of passengers _____