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PUBLIC TRANSIT SERVICE CONTRACTING

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REPORT

PUBLIC TRANSIT SERVICE CONTRACTING

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EXECUTIVE SUMMARY

This report summarizes research completed to date on a major study of public transportation service contracting. Contracting with private providers for the delivery of transit services has been increasingly advocated as a means of improving the cost-effectiveness of public transit. But while transit contracting is known to be widely used in certain states (e.g., California, Minnesota) and evidence exists of significant cost savings from contracting, no definitive study of either the utilization of transit service contracting or its cost savings potential had previously been performed. The intent of this study is to remedy this information deficiency.

This study consists of four components: 1) A nationwide survey of transit service contracting. 2) A comprehensive review of the literature on contracting for all types of public services. 3) Development of estimates based on survey techniques of cost differences between public agencies and private contractors in delivering transit service. 4) Development and application (to specific transit agencies) of cost models to determine the differences in cost between public agency and private contractor provision of specific transit services. This report concerns the completed first three components of the study.

The nationwide survey of transit contracting confirmed that this is a widely used strategy for delivering transit service but that it accounts for only a small portion of transit operating expenditures, approximately 5 percent. Nationally, approximately 35 percent of all

public agencies responsible for transit provision contract for at least a portion of their service. Although demand-responsive services are most likely to be contracted, many small (less than 25 vehicles) fixed-route services are also contracted. Very few large transit agencies, however, contract for more than a small portion of their service, and this is usually a limited demand-responsive service for the elderly and/or handicapped. Most contracting is undertaken for small transit systems. Moreover, the bulk of contract service expenditures, and the use of contracting for fixed-route service, is concentrated among these relatively small transit systems. As a consequence, contracted services represent only 8.6 percent of vehicle miles and 5.1 percent of operating expenditures (for non-rail modes). There is thus considerable potential for expanding the use of contracting, particularly by medium and large transit systems.

The survey data permit certain cost comparisons between public and private operators. These comparisons indicate little or no cost difference for the smallest systems (25 or fewer vehicles), but substantial differences for large systems. As service contracting by large systems will typically take the form of contracting portions of the overall service package, a relevant cost comparison is between public agencies operating 250 or more vehicles and private contractors operating 25 or more vehicles for the contract service. This produces a cost difference of 42 percent using operating cost per mile as the cost measure.

A review of research findings from contracting for all types of public services indicates that transit service has almost all the

qualities which make a public service amenable to contracting. A number of these other studies have examined the issue of cost savings from contracting. The findings indicated cost differences ranging from 15 to 50 percent, with a mean cost savings of about 30 percent. Some studies also found that when only some of the service was contracted, this policy induced improved cost-effectiveness on the part of the public agency responsible for providing the remainder of the service. Lower cost levels by private providers were attributed primarily to the competitive procurement of the service, not private sector provision, per se. Maintaining a competitive environment was cited as a key requirement for realizing continued cost savings. It was also found that service quality could be satisfactorily monitored and maintained under contract service delivery.

As a means of estimating the cost savings which competitive contracting of transit service could potentially make possible, a survey of public agencies which competitively contract for fixed route transit was undertaken. The survey results indicated that when public agencies do engage in competitive contracting for transit, an adequate number of bidders respond and sponsoring agencies can choose from a range of bid prices. The agencies' own estimates of cost savings from contracting ranged up to 50 percent, with a mean savings of 29 percent.

The overall evidence obtained from this research indicates that cost differences on the order of 10 to 50 percent exist between public agencies and private contractors of transit service. Competitive service contracting is thus likely to result in significant cost savings for those transit services where it is utilized, particularly for medium and large transit agencies.

CHAPTER ONE

Introduction

The seemingly endless financial problems of public transportation have motivated a search for more cost-effective ways of delivering transit services. This search has proceeded in two directions. One direction has been to focus on improving the internal cost efficiency of the services directly operated by transit agencies, notably by using part-time drivers to operate heavily-peaked services and by employing computer technology for a variety of routine functions.

The second direction of search has focused on alternatives to the current service delivery system. While internal reforms are desirable, they rarely produce significant cost savings. The use of part-time drivers, for example, widely expected to be a major cost savings innovation, has been widely implemented, but has led to relatively minor cost reductions (Chomitz, Giuliano and Lave, 1985). Equally significant, purely internal changes do nothing to address a fundamental factor behind the transit industry's cost escalation, namely the absence of competitive forces to keep costs under control. As a subsidized, monopoly-organized industry at the regional-level, transit agencies face no economic incentives (beyond the simple availability of subsidy) to keep costs low. Not surprisingly, costs have risen at a rate exceeding inflation for the past two decades.

Those who advocate serious consideration of alternative transit service delivery mechanisms have focused upon service contracting as a

method for injecting competition into the transit industry and thereby fostering improved cost effectiveness. Although service contracting is widely employed for small local transit services, its limited use by medium and large transit agencies means there exist substantial untapped opportunities to realize cost savings through contracting. Evidence already exists that transit contracting can reduce costs by as much as 10 to 50 percent from public agency cost levels. In transit's current fiscal environment, potential savings of this magnitude mandate that service contracting be carefully evaluated as a mechanism for improving the transit industry's cost effectiveness.

This report summarizes the results to date of a major study on public transportation service contracting performed by the University of California, Irvine and the University of Pennsylvania. This study had two major objectives. First, it sought to establish a national baseline for the current level and characteristics of transit service contracting through a nationwide survey of public agencies which are responsible for transit provision. Second, it sought to estimate the cost savings potentially available through service contracting by means of comparisons of public agency and private operator cost levels, using three different comparison methodologies.

The research results contained in this report address each of these objectives. Chapter Two summarizes the results of the nationwide survey of transit service contracting, providing the first definitive national evidence of the scope, magnitude, and characteristics of this form of service delivery. It bears emphasizing that the survey data includes at least 80 percent of all public transit providers in the U.S., and thus the results offer an extremely accurate picture of the current status of

service contracting in the U.S. In addition, the survey results permit comparison of public agency and private contractor cost levels. This is one of the methods of comparing costs.

Chapter Three summarizes the results of a survey of research findings on all forms of public service contracting. The purpose of this literature review was to determine the characteristics of public services which render them amenable to private sector contracting, to summarize the findings of cost savings in non-transit services, and to identify issues (e.g., service quality, maintenance of competition) which are important in insuring the long-term viability of contracting.

Chapter Four summarizes the results to date of the second of the three approaches to determining cost differences between public agencies and private contractors. Based on a survey of those public agencies which competitively contract for fixed route transit service, cost differences between private sector contract operation and estimates of what it would cost to operate these services by a public sector operator were determined. The ultimate intent of this component of the study is to estimate national level cost savings for transit service contracting using the observed differences in cost levels from the agencies surveyed.

The third approach to estimating cost savings from contracting--the development and application (to four transit systems) of public agency and private operator cost models--is not included in this report as the results are still preliminary and subject to significant revision. A detailed discussion of the costing methodology as well as the results, which indicate steady state cost differences of 12 to 39 percent, will be included in the Final Report. (The Final Report for this study will be submitted to UMTA by August, 1986.)

CHAPTER TWO

Results of Nationwide Transit Contracting Survey

Chapter Summary

This chapter reports the results of a nationwide survey which obtained information on the current magnitude and characteristics of transit service contracting. Over 800 public agencies responsible for public transportation provision are included in the survey, including almost any agencies which receive federal transit assistance. The survey indicates that 35 percent of all public agencies contract out at least a portion of their service, but that this contracting represents only 5 percent of total operating expenditures among survey respondents. Demand-responsive transit is the service most likely to be contracted for, but over 140 fixed-route services are also contracted. Although all types of public agencies engage in transit service contracting, municipal governments are most likely to contract for entire systems. In contrast, medium and large transit agencies, who consume the bulk of transit operating expenditures, tend to contract for only a portion of their service, often just a small demand responsive operation. Small systems are also more likely to be contracted in their entirety than large systems.

It is important to emphasize that while transit contracting is widely utilized, it does not represent a large portion of the national transit service delivery system. Expenditures on contracted services represent only 5.1 percent of total expenditures on non-rail transit by the survey respondents, and only 8.6 percent of vehicle miles. This is due to the fact that most contracted services are small scale in nature.

The survey also examined the issue of how contracting occurs. It was found that most contracts are short term (1 - 2 years), and competitive award of contracts is most common. Contractors are often required to purchase the vehicles for the service, but this is usually when the vehicles are not expensive. Public agency sponsors usually own large buses used for fixed route service.

The survey results shed some light on the issue of comparative costs of public agency and private contractor operation of transit service. For systems of 25 or fewer vehicles, there is essentially no difference in unit costs between public and private operators. For larger systems, however, public agency costs increase rapidly, whereas private contractor costs are only moderately higher. Moreover, in a typical contracting situation, a large public agency would contract with a smaller private operator to provide only a portion of its service. Cost differences of more than 40 percent exist between public agencies operating 250 or more vehicles and private contractors operating 25 or more vehicles in a contract service.

Introduction

This chapter presents results of a nationwide survey of transit service contracting among public agencies which are responsible for public transportation provision. The survey obtained information on whether public agencies contracted for transit service, and if so, for which types of service and the amount of service provided. Information was also obtained on vehicle ownership and the method of contractor selection. In addition, the data can be used to compare the costs of privately contracted and publicly operated transit services, although these comparisons must be treated cautiously due to unknown differences in operating environment and service profile.

Methodology

Using information obtained from state DOT's and a previously published UMTA transit directory, efforts were made to identify and contact every public transportation provider in each of the 50 states, with the exception of systems which are targeted exclusively at an elderly and handicapped, social service agency-oriented clientele. Judging by the comprehensiveness of the information provided by the states, it seems likely that at least 95 percent of all transit services in the U.S. were included in the survey, and possibly as many as 98 to 99 percent. Survey forms were sent to each of the providers; a copy of the data collection instrument is included in Appendix B. As many as two follow up letters were sent to each agency in a effort to maximize the response rate. Telephone follow up was also occasionally used. The combination of a one page survey form and extensive follow up has produced an excellent response rate, approximately 75 percent. Of 938

systems identified and contacted prior to January 1, 1986, responses were received from 706 systems. If an agency did not respond after repeated contacts, Section 15 data, when available, was used for that agency. In a few cases, such as California and Minnesota, information provided by the state was of sufficient quality that it could be used when a system did not respond to the survey. In this fashion, information was obtained on an additional 131 systems. A list of agencies included in the survey is contained in Appendix A.

The survey form asked the public transportation sponsor to provide the following information: (1) which types of transit services (e.g., fixed route, demand responsive) are provided, and whether they are operated by the public agency or a private contractor; (2) aggregate operating statistics for all of the agency's transit services; (3) operating statistics for each contracted service; (4) sources of funding; (5) vehicle ownership for contracted services; and (6) the nature of the contractor selection process (e.g., competitive bidding) and the length of the contract. Respondents were asked to supply 1983-84 operating statistics whenever possible.

At present, the data base consists of 837 transit systems. Approximately 800 systems have supplied reasonably complete data.

Extent and Magnitude of Service Contracting

Approximately 35 percent of all the public agencies included in this survey contract for at least a portion of their transit service. Table 1 indicates that there is not a large difference in the use of contracting by different types of public agencies, with 27 to 44 percent

TABLE 1

Amount of Contracting vs. Type of Sponsor

	Amount of Contracting			
Type of Sponsor	All	Some	None	N
Transit Agency	13.0%	20.5%	66.5%	254
City	31.7	5.3	63.1	398
County	16.3	11.2	72.4	98
Other	37.5	6.3	56.3	48
All Types	24.2%	10.9%	64.9%	798
N	193	87	518	

contracting for at least some service in each public agency category. However, there is a significant difference among types of agencies in whether they contract for all or some of their service, as shown in Table 1. Municipalities which contract typically do so for all their transit service, whereas about 60 percent of transit agency contracting is for only a portion of the total service delivery system.

There is a definite relationship between system size and whether a public agency engages in service contracting. Somewhat surprisingly, small public transportation systems, those with 50 or fewer vehicles, are less likely to contract for service than systems with more than 50 vehicles. But as Table 2 reveals, most of the service contracting by medium and large transit systems is for only a portion of their service, whereas the bulk of contracting by small systems is for the entire transit service. Among systems with 50 or fewer vehicles, 83 percent of contracting is for the entire system, whereas among systems with more

TABLE 2

Contracting vs. System Size

System Size	Any Service Contracting	Contract All Service	Contract Some Service
1-50 Vehicles	34.0%	28.1%	5.9%
51 or more vehicles	46.4%	8.7%	34.7%
All Systems	35.9%	25.0%	10.9%

than 50 vehicles, only 19 percent of the contracting is for an entire system. The most likely explanation of why the smaller agencies engage in a lower overall level of contracting is their size--these systems are often so small that it makes most sense to either operate the entire service in-house or to contract for all service. Thus the alternative of contracting only a portion of the system is frequently not feasible.

Table 3 provides a breakdown of contracted services by the type of service, as well as the ratio of private to public service provision for each category. It should be noted that the data is presented on the basis of service, not agency. Since many agencies provide more than one type of service, the total number of services is much larger than the number of agencies. Demand responsive transit services are most likely to be contracted, both as a percentage of all contracted services and as a percentage of contract service for each service type. Demand responsive transit contracting (DRT-EH and DRT-GP in Table 3) represents 58 percent of all service contracting by these agencies. Moreover, one-third of all Demand responsive transit services are contracted. Nonetheless, there is a surprisingly large amount of contracting for

TABLE 3

Number of Transit Services Privately Contracted By Service Type

	Type of Provider			
Service	Public	Private	Both	Portion Privately Contracted*
FRT (All Day)	433	112	17	23.0*%
DRT-EH	216	117	13	37.5
DRT-GP	223	98	11	32.8
Commuter	40	14	1	27.3
Weekend/ Evening	74	7	3	11.9
Other	15	13	2	50.0
All Services	1001	361	47	29.0%

*Portion privately contracted = "private" + "both" divided by row sum.

fixed route service, with over 140 such services (including commuter service and weekend/evening service) contracted to private operators, representing 22 percent of these services. Overall, approximately 29 percent of all separate transit services provided by the agencies included in the sample are contracted to private operators.

Because contracted services tend to be relatively small scale, the amount of contracting measured in dollar and mileage terms is considerably smaller than the percentage of all services which are contracted. Among the agencies included in the data base, service contracting represents 5.1 percent of total operating expenditures and approximately 8.6 percent of total revenue vehicle miles of service produced. Although much smaller than the percentage of services

contracted, these measures nonetheless indicate that service contracting is already a phenomena of significant import. This is particularly the case for municipally provided transit services, as more than 27 percent of all operating expenditures for such systems represent privately contracted services.

Service contracting occurs in at least 41 states, but is most prevalent in a relatively small number of states. One-half of all the systems which contract for service are contained in California, Massachusetts, and Minnesota, even though these three states contain only 34 percent of the transit systems in the survey. Other states where a substantial amount of contracting occurs include Connecticut, Illinois, Iowa, Michigan, North Carolina, Ohio, Pennsylvania, Texas and Wisconsin. Collectively, these 12 states account for 80 percent of all systems which engage in some form of service contracting, compared to containing 69 percent of all the systems included in the survey.

The survey identified several notable examples of large scale service contracting. At least 17 public agencies contract for service involving 50 or more vehicles. The largest contracted service, using 480 buses is in Honolulu, Hawaii, where a $55 million (annual operating cost) fixed route transit service is contracted to private operators. The entire Phoenix transit system, with 350 buses, is also contracted to two private operators. Massachusetts contains three large privately contracted services, in the Lowell, Brockton, and Springfield metropolitan areas. Other large contract services are those which have been previously identified in the literature, such as the entire transit system in Westchester and Suffolk Counties in New York, the Houston and Dallas commuter bus programs, and the demand responsive services of Orange County Transit District and Omnitrans (San Bernardino) in California.

Patterns of Service Contracting

As noted previously, service contracting is most prevalent among public agencies which sponsor small scale public transportation services. As Table 4 illustrates, the percentage of average agency expenditures for contract operations sharply declines as system size increases. This decline reflects the fact that larger systems typically contract for only a small portion of their service, if any at all, whereas small transit systems usually contract for either all their service or for none at all.

TABLE 4

Percent Operating Expenditures for Contract Service by System Size

System Size	Average Agency Percentage Contract Expenditures for Size Category	N
1-10 vehicles	29.7%	435
11-25 vehicles	24.3%	156
26-50 vehicles	19.3%	94
51-100 vehicles	9.6%	58
100-300 vehicles	11.1%	44
More than 300 vehicles	7.3%	35

When public agencies do contract for service, they tend to award short term contracts, often only one year in length. Table 5 provides the percentage distribution of contract lengths for the three major types of contracted services. One year contracts are the norm for all three service types, although 42 percent of the fixed route operation had a

contract of at least 3 years duration. In contrast, only 23 percent of the DRT operations had a contract of this length. In addition, the duration of the average fixed route contract is nearly 50 percent greater than the average DRT contract. Vehicle ownership is the most likely explanation of why fixed route service tend to have longer contracts. Nearly 40 percent of all fixed route systems require the contractor to provide the vehicles, and the economic advantages of amortizing over a several year period the relatively expensive buses used in such systems is one major reason for contracts of 3 or more years duration. Many fixed route contract operations, morever, have been in existence for several years or more, so perhaps the sponsor also has sufficient confidence in the contractor's performance to implement a relatively long contract.

The survey results indicate that formal competitive bidding is used in slightly less than 50 percent of all cases to select a contractor, with the remainder split evenly between negotiated contracts and contract renewals (Table 6). It is our assumption that contract renewals are not competitively bid unless the agency explicitly stated so, in which case the selection process was categorized as competition. The results shown in Table 6 reveal that specialized DRT services and commuter services are most likely to be competitively bid.

It bears noting that long term contracts are the most likely to be competitively bid. Among the major types of contracted service (DRT and all day fixed route service), a competitive process is used to award 67 percent of all contracts of 3 or more years, and 75 percent of those for 4 or more years. In contrast, only 43 percent of all 1 year contracts are awarded competitively. Many one year contracts, however, are

TABLE 5

Contract Length vs. Type of Contracted Service

Length of Contract (years)	Type of Service: Fixed Route	DRT-GP	DRT-E+H
1	48.9%	66.7%	60.6%
2	8.7	11.7	14.9
3	25.0	11.7	18.1
4+	17.4	10.0	6.4
Average Length	30.9 mos.	21.4 mos.	20.9 mos.

renewals of an existing contractor. This operator may have initially been selected by a competitive process. If renewals are disregarded, 69 percent of one year contracts are awarded through competitive bidding. It appears likely, therefore, that competitive bidding is the norm for contract awards unless an agency has developed an on-going relationship with a contractor which has proved mutually beneficial. In such cases, one year renewals of the contract become a popular option (38 percent of all one year contracts are renewals.)

Information obtained on vehicle ownership indicates that more than 50 percent of all vehicles used in contracted services are owned by the private operators which provide the service (Table 7). Most vehicles used for fixed route services are owned by sponsors, whereas contractors own the bulk of the vehicles used in DRT systems. Table 8 provides a further breakdown of vehicle ownership by system (as opposed to total

TABLE 6

Contractor Selection Process by Type of Service

Type of Service	Selection Process: Competitive Bid	Negotiation	Renewal*	% Competitive Bid
FRT	48	25	25	49.0%
DRT-GP	24	19	21	37.5
DRT-E&H	58	22	24	55.8
Commuter	9	4	1	64.3
Weekend/Evening	2	1	0	66.7
Other	3	1	4	37.5
All	144	72	75	49.5%

*Unable to ascertain whether contract renewal was competitively bid or negotiated, although strong implication that contract was negotiated with the existing provider.

vehicles) for each of the service types. This reveals that contractor ownership is the most prevalent for commuter services, whereas sponsors own the vehicles used by contractors in the majority of all day fixed route services. Sponsors own some or all of the vehicles in 40-45 percent of DRT systems.

These different ownership conventions presumably reflect the high cost of the large buses often used for fixed route service compared to the relatively inexpensive vehicles used for DRT. A major reason that commuter service contractors typically own the (expensive) vehicles used by the contract operation is that they can use the buses for other private (e.g., charter) services at other times of the day or week.

TABLE 7

Vehicle Ownership for Contracted Services by Service Type

Type of Service	Number of Vehicles Owned by: Sponsor	Contractor	Percent Owned by Sponsor
FRT	2066	505	80.4%
DRT-GP	340	870	28.1
DRT-E&H	515	1739*	22.8
Commuter	7	203	3.3
Weekend/Evening	0	18	0.0
Other	28	75	27.2
All	2956	3410	46.4%

* In some cases, vehicles included in this category represent taxicabs used for a variety of services, not just service sponsored by public agency. This number thus overstates vehicles dedicated to transit service.

The survey was not specifically designed to obtain information on why public agencies contract for transit service, but the available data does provide some limited insight into this issue. It has been previously suggested that public agencies which face budgetary constraints, or can use transit subsidies for other local government purposes, are most likely to contract for transit service. The results of the survey are consistent with this hypothesis. Among the 131 public agencies in the sample which had access to only state or local funds to subsidize transit, 53 percent contract for service. In contrast, among the 388 agencies which had access to all three of state, local and federal sources of subsidy, only 33 percent contracted. Moreover, most of the service contracting by the former group was for the entire transit

TABLE 8

System Ownership of Vehicles by Service Type

Service Type	Entity Which Owns Vehicles: Sponsor	Contractor	Both
FRT	55.6%	38.7%	5.6%
DRT-GP	41.3	55.4	3.3
DRT-E+H	34.7	59.3	5.9
Commuter	21.4	78.6	--
Weekend/ Evening	--	100.0	--
Other	46.2	53.8	--

system, whereas among the latter group the overwhelming use of contracting was for a small portion of the service package (hence the total subsidy savings from contracting was small).

Characteristics of Contract Services

The public agencies in the sample were divided into three categories: (1) those which contract for essentially all of their transit service; (2) those which contract for only some of their service, and for whom public agency operation is the primary mode of service delivery; (3) those which contract for no services. Table 9 provides relevant statistics on the annual operating cost, revenue vehicle miles and number of vehicles for transit services in each of these three categories. Both mean and median measures of central tendency are used. The mean values are strongly biased upwards, as reflected by the very large differences between mean and median values. The differences

between the large mean and the small median values reflects the fact that while each of the contracting categories contain several very large systems, resulting in high mean values, many contracted systems are quite small, leading to low median values. Neither measure is an accurate indicator of the "representative" contracting situation, although the median is probably closer to being representative than is the mean.

As Table 9 indicates, the average fully contracted system is only 27 percent as large (as measured by revenue vehicle miles) as the average system which contracts for no service. Annual operating expenditures are only 16 percent as great. The median sized fully contracted system is about one-half as large as the median sized non-contracted system.

Contracted services which represent only a fraction of the entire service delivery system are slightly smaller in scale, averaging 92 percent of the operating cost of the fully contracted systems. These services, moreover, typically represent a very small portion of a transit system's total service package, with a mean value of 4.2 percent of operating expenditures and 7.5 percent of revenue vehicle miles. In addition, the agencies which engage in only partial service contracting are much larger than the other two types, with average annual operating costs of over $21 million, and median operating expenditures of $4.6 million.

The picture which emerges from Table 9 is that large transit agencies are likely to contract for a small amount of service, usually some type of DRT service, whereas small transit providers are likely to either operate all services through a public agency or contract for the entire service package.

TABLE 9

Operating Statistics by Level of Service Contracting

		Amount of Service Contracting		
MEAN VALUES	ALL	SOME		NONE
		All Services	Contract Service	
Op. Cost	$969,724	$21,293,632	$898,350	$6,063,346
Rev. Veh. Mi.	499,074	6,436,869	481,924	1,840,381
Vehicles	19.8	204.5	23.4	58.4
MEDIAN VALUES				
Op. Cost	$207,000	$4,600,000	$140,700	$315,649
Rev. Veh. Mi.	154,871	1,980,300	105,878	294,984
Vehicles	6.5	65.5	6.1	8.6
N	193	87	87	518

Table 10 provides a further breakdown of the contracted services, illustrating that most partial service contracting is for DRT service -- 77 percent of all services contracted by the partial contracting agencies--whereas a substantial amount of total service contracting is for all day fixed route service and commuter service -- 41 percent of all services in totally contracted systems.

Table 10 also reveals that contracted fixed route services are likely to be much larger in scale than other types of contracted services. All day fixed route service and commuter service have much larger average operating costs and revenue vehicle miles than do the DRT services. Nonetheless, contracted fixed route services tend to be

TABLE 10

Contracted Service Operating Cost by Type of Service

Transit System is Totally Contracted

Service Type	Mean	Median	% of all Systems	N
FRT	$1,631,079	$498,605	38.8%	93
DRT - GP	221,332	139,728	29.6	71
DRT - E&H	255,718	15,000	27.1	65
Commuter	177,315	107,000	2.1	5
Weekend/Evening	151,391	151,391	1.0	2
Other	104,238	55,125	1.7	4

Transit System Contracts for Some Service Only

Service Type	Mean	Median	% of all Systems	N
FRT	$728,311	$89,635	16.3%	16
DRT - GP	486,740	90,420	28.6	28
DRT - E&H	638,620	176,385	48.0	47
Commuter	4,423,415	1,123,000	5.1	5
Weekend/Evening	68,364	68,364	2.0	2

smaller by a considerable amount than public agency provided fixed route operations.

Cost Comparisons

The results of the survey shed some additional light on the issue of the difference between public and private operator costs for comparable transit services. This issue can be examined with respect to both fixed route and DRT services.

A total of 407 all-day fixed-route transit services with adequate data are currently included in the sample. These include 337 publicly operated systems and 70 privately contracted services. These systems were disaggregated based on the number of vehicles, and compared on the basis of cost per revenue vehicle mile and cost per revenue vehicle hour. The results are shown in Table 11. Note that costs are for public systems and private services. The survey provides no direct information on the size of the private contracting firm. Thus the size categories give comparisons of public transit operators with private services.

This comparison indicates that differences in unit operating costs between public and private operators are strongly related to size. There is essentially no difference in unit costs between public and private operators for systems of 25 or fewer vehicles. As the size of service increases, however, public agency costs increase markedly, whereas private contractor costs level off quickly, at a level below public agency costs. Of course, few large privately contracted systems exist. So the sample sizes are too small to infer that large contracted systems are necessarily less expensive than large public agency operated systems.

TABLE 11

Public Agency vs. Private Contractor
Operating Costs For Fixed Route Transit by Size of System

	Cost/RVM	Cost/RVH	N
25 or fewer vehicles			
Private Contractor	$1.90	$27.05	51
Public Agency	1.91	26.98	159
26 to 50 vehicles			
Private Contractor	2.21	30.62	9
Public Agency	2.33	30.12	66
51 to 250 vehicles			
Private Contractor	2.38	33.75	6
Public Agency	2.67	36.95	79
251 to 500 Vehicles			
Private Operator	2.05	29.09	4
Public Agency	3.26	48.87	10
More than 500 Vehicles			
Private Contractor	N/A	N/A	N/A
Public Agency	4.11	53.09	23

Much the same phenomena of similar unit costs for both public and private operators of small (25 or fewer vehicles) systems also holds for demand responsive service. There is little difference between cost levels of public and private DRT operators in the sample, even when adjusting for vehicle ownership costs for many of the privately contracted DRT systems.

Although these results seemingly indicate that there is little cost savings potential for contracting out small transit services, such a conclusion is probably incorrect. This is because it is not known what the cost levels would be of those public agency operated services that never existed because the service sponsor initially decided to contract the service to a private operator. Such costs would undoubtedly be higher than private contracting. Moreover, many of the public agencies which do operate small transit services themselves seek to maintain costs at levels competitive with private sector contracting. In this portion of the sample, therefore, costs of actually existing public and privately operated services tend towards a common level, even as many public agencies which do contract enjoy cost savings compared to in-house operation.

The results do indicate convincingly that cost savings from contracting are most likely to occur in cases where a large public agency contracts a portion of service to a private operator. The average cost per vehicle mile for public systems with more than 500 vehicles is $4.11. If those privately contracted systems of more than 50 vehicles are considered to be representative of the cost of a contractor which would operate 10 percent of the service of a large agency, then the relevant unit costs are $2.25 per vehicle mile. This is 45 percent less than the average unit costs of the large bus operators in the sample. These cost differences are indeed the relevant ones, for if contracting does become commonplace among larger transit systems, it will undoubtedly involve only segments of the system and thus not require large private operations.

TABLE 12

Differences in Average Cost Per Revenue Vehicle Mile
Between Public Agency Fixed-Route Systems
and Privately Contracted Services of Different Sizes

Size of Privately Contracted Service	Number of Vehicles Operated by Public Agency Service				
	1-25	26-50	51-250	251-500	500 or More
1 - 25 vehicles	0%	18.4%	28.8%	41.7%	53.8%
26 or more vehicles	NA	4.3%	16.1%	31.6%	45.7%

In view of this likely eventuality, an important comparison is between public agency costs for systems of different sizes and private contractor costs for contracted services of less than 25 vehicles and for more than 25 vehicles. The smaller contracted services can be reasonably compared to public agency operated systems of 250 or fewer vehicles, while the larger contracted services are best compared to the public agency services of 250 or more vehicles. This comparison is shown in Table 12, and indicates cost differences of 0 to 30 percent for systems of fewer than 250 vehicles, and 31 to 45 percent for systems of more than 250 vehicles.

As these comparisons indicate, there is a relatively low likelihood of significant cost differences occurring in situations involving small transit systems, particularly those of 50 or fewer vehicles. Such systems, however, represent only 5 percent of total operating expenditures for all federally assisted bus transit services (Table 13). Thus the minimal potential cost savings for this size system has virtually no financial repercussions for the transit industry as a whole.

TABLE 13

Total Operating Expenditure Shares by Agency Size

Size	Share of Total Bus Operating Expense
25 or fewer vehicles	1.8%
26 to 50 vehicles	3.2
51 to 100 vehicles	5.4
101 to 250 vehicles	10.2
251 to 500 vehicles	10.0
500 or more vehicles	69.2

In contrast, the finding that private contractors could potentially save as much as 45 percent of the costs of a contracted service for a large agency has enormous financial significance. Nearly 80 percent of all bus transit operating expenditures for federally assisted systems are consumed by systems of 250 or more vehicles. Thus if contracting could save an average of 30 percent of the cost of a service package representing 20 percent of an agency's total service, adoption of this service delivery option by all large operators would reduce industry expenditures on bus transit by nearly 5 percent, and necessary subsidies by an even larger percent. This amounts to approximately $310 million per year in potential subsidy reductions. Yet if <u>every</u> small public operator contracted for <u>all</u> of its services and saved 20 percent as result, the national impact would be only a 1 percent reduction in operating costs. It is apparent, therefore, that the greatest potential for cost savings from contracting is in introducing private operators into medium and large transit operations.

CHAPTER THREE

Review of Contracting for Non-Transit Public Services

Chapter Summary

This chapter presents the results of a survey of literature which examines various aspects of contracting with the private sector to deliver public services. The literature reviewed was limited to books, journal articles, and selected reports completed within the past 20 years. Since the project examines the experience of bus transit in detail, works on this subject are not included in this literature review.

The major conclusions of these studies are as follows:

1. Contracting is used for a variety of public services, including trash and garbage collection, fire protection, police services, school transportation, vehicle and facility maintenance, and different types of social services.
2. Cost savings resulting from private sector operation of such services under competitive contracting conditions, based on either actual experience or estimated from comparisons of public sector and potential private sector operators, are substantial. The mean cost savings is approximately 30 percent with a range of 15 to 50 percent.
3. Most studies emphasize that competition, not private operation per se, is the key factor in reducing costs. This indicates the need

for the sponsoring agency to continually encourage competition and to avoid dependence on one or a few contractors. The question of how many bidders are required for effective competition is not addressed. Indeed, the issue of contestibility of a market, as contrasted with overt competition (in the form of actual bidders) is not mentioned in the literature. Given the relative ease of entry into the charter bus business (a major potential source of transit contractors) and the large number of small firms in this industry, this is a serious gap in knowledge.

4. To insure that the contractors actually provide the desired service, the output must be easily specified and monitored. Bus transit meets these criteria very well, and recent advances in sensing and microcomputer technology will improve control, management and planning functions in bus transit.

5. Competitive contracting necessitates additional management costs. In typical situations these costs amounted to approximately 3 percent of contract costs, but could be as high as 12 percent when conditions require substantial managerial oversight.

6. A few studies observed that contracting for a portion of the public service leads to lower public agency costs over time. In fact, in some cases public agency costs may decline as a result of competition and approach those of the private contractor. This implies that the costs for an entire public system may be reduced by contracting out only a relatively small portion of the service. Even though contracting may expand gradually, the effects on public sector costs may be far greater than the direct cost savings for the services contracted.

Introduction

Local governments, faced with budgetary cutbacks and taxpayer demands for fiscal austerity, have increasingly turned to the private sector for the provision of services traditionally performed by public agencies. Contracting for services with private firms has become a popular method of achieving cost savings for financially strapped agencies which must provide their constituents with public services. Cost savings of approximately 30 percent have been estimated for a variety of services, with a range of savings between 15 and 50 percent (Mercer, 1983; Bennett & Johnson, 1980; Bennett & Johnson, 1979).

The cost advantages of private sector contracting are assumed to result from the greater efficiency of private firms as well as from competition among potential contractors enabling public agencies to purchase service at the lowest possible cost (Bennett & Johnson, 1979; Fisk, Keisling & Miller, 1978; Kirlin, Reis & Sonenblum, 1977; McGuire & Van Cott, 1984). Competitive bidding is the preferred method of obtaining service from private firms for this reason. When competitive bidding is not required, market contestibility--the availability of alternative service providers--provides the assurance that the public agency is receiving the service for a reasonable price.

Contracting is used for a variety of public services formerly provided by public employees (Bennett & Johnson, 1980; Savas, 1982; Savas, 1977; Savas, 1974; Fisk, et. al., 1978; Kirlin, et. al., 1977). Trash and garbage collection are frequently provided under contract with private firms. School bus transportation and demand-responsive transit are also frequently provided in this manner. During 1979-80, almost half

the school buses in the United States were owned and operated by private contractors (McGuire & Van Cott, 1980). In Southern California, where demand-responsive transit is provided in numerous localities, over 75 percent of the systems are operated by private firms, mostly taxicab companies (Teal, et. al., 1980). Municipal governments contract for vehicle maintenance, custodial services, landscape and street maintenance and a variety of social services.

What Makes Services Amenable to Contracting?

Specific technological, managerial and marketplace characteristics make certain services amenable to contracting with the private sector. Table 1 presents a summary of the most relevant characteristics which are discussed in detail in the following sections.

TABLE 1

Characteristics of Services Which Make Them Amenable to Contracting

Managerial Characteristics

1. The performance of the contractor is easily monitored.
2. Service quality is easily determined and can be quantified.

Marketplace Characteristics

3. The service contract is awarded competitively.
4. Alternative contractors are available to perform the service.
5. Easy entry into the business is available (also a function of technology).

Technological Characteristics

6. The need for service fluctuates over time which would reduce the public agencies requirement for equipment or manpower.
7. The need for the public agency to maintain a back-up service is minimal.
8. There is no need for a high degree of trust between the service contractor and the user.

Managerial Issues

The ease of defining and monitoring a service contract is clearly very important. Niskanen (p. 59, 1971) states that:

> "The potential use of profit-seeking firms to supply these (public) services is primarily dependent on contracting and monitoring problems rather than on any inherent limitation of the type of goods and services that can be supplied by such firms."

The private sector, generally consisting of for-profit organizations, seek to maximize profit by providing only the level and quality of service required by the contract. Developing performance standards and monitoring becomes essential for agencies which desire to maintain a given level of service (Delaat, 1982; Fisk, et. al., 1978; Fitch, 1974; Kirlin, et. al., 1977; Savas, 1974). The service standards must be clearly laid out in the contract specifications so that the bidders are aware of the requirements before assigning a cost to their service package proposals. Follow-up monitoring throughout the length of the contract ensures that the provider continues to perform adequately.

The use of precise, quantifiable performance specifications in contracts is recommended (Delaat, 1982; Fisk, et. al., 1978; Kirlin, et. al., 1977; Savas, 1974). Even then, the measures are susceptible to circumvention (Fitch, 1974). Social service contracts, especially for education, counseling and the like, are especially difficult to define and monitor. In contrast, it is relatively easy to prepare performance indicators for trash collection, highway and landscape maintenance, and other tasks with well-defined outputs, and subsequently to monitor these services.

Marketplace Issues

The marketplace is a second area which influences the feasibility of contracting for public services. Competition among potential service providers who are engaged in the bidding process for service contracts helps lower the cost of services (Fisk, et. al., 1978; Fitch, 1974; Ho, 1981; McGuire & Van Cott, 1984; Savas, 1974; Savas, 1977). Without reasonable levels of competition, a private supplier enjoys a monopolistic situation and can drive up prices to the point where contracting is no longer a less costly alternative to public provision. The ease of entry into the market by new providers is an essential factor in maintaining a competitive situation over the long term (Hughes, 1977; McGuire & Van Cott, 1984).

Technological Issues

The nature of the service also affects the feasibility of contracting. Services which have seasonal or daily fluctuations by nature require excess equipment or manpower which remains idle during nonpeak periods. Contracting for services during the peak periods lessens the cost to the public entity (Fisk, et. al., 1977; Kemp, 1982; Kirlin, et. al., 1974).

A second issue, related to the requirements placed on the public sector, is the possible need for the agency to maintain a back-up service capability when the entire service is contracted to the private sector. Services which are indespensible, such as police and fire protection, must have contingency plans in case the contract terminates

unexpectedly. Other services which are not as indispensible (e.g., trash removal, landscaping, social services) do not require contingency planning of the same magnitude (Delaat, 1982).

The relationship between the service provider and the consumer or user is also important. Especially amenable to contracting are those services in which the provider and user have little or no contact (e.g., trash collection, maintenance, custodial services and other services of similar nature) (Delaat, 1982; Fisk, et. al., 1978). Contracting for services which require closer contact (e.g., school bus transportation, social services and police protection) places the responsibility on the contractor to hire employees who respond well to the public.

Are Transit Services Amenable to Contracting?

Transit service contracting appears to be quite feasible given the above considerations. Transit services are easily defined and monitored. The service desired can be specified clearly by routes and schedules, vehicle characteristics, and requirements for adherence to the planned service. Current technology such as vehicle locator systems, automatic vehicle identification at key locations, and advanced communications make even close monitoring feasible.

Competition in the transit industry has been shown to exist in several areas. The charter bus industry, intercity bus lines, school bus operations, sightseeing lines, airport limousine services and demand responsive transit companies all compete in their respective markets. Entry into the industry is not difficult. When contracting situations are structured so that potential contractors do not have to make large capital outlays in order to participate in service delivery, there is

likely to be a strong response to competitive contracting opportunities from private operators. Thus public agencies can help insure that sufficient competition will exist for contracts to keep prices at the lowest level possible.

Given the peaking conditions in the transit industry, capital and labor costs would be reduced substantially by contracting for peak hour services. This would allow the public agency to efficiently utilize its fleet and work force and reduce the number of trippers and full-time employees.

Evidence of Cost Savings for Contracted Services

Table 2 presents a sample of studies which compares service delivery costs of the public and private sectors. Average cost savings of approximately 30 percent were found in the 11 studies which reported such data. The majority of research focuses on solid waste collection. Several of the studies will be reviewed in detail in the following section.

Refuse Collection. Kemper and Quigley (1976) analyzed the cost of trash collection in various Connecticut cities and reported that collection cost appeared to vary by the type of service arrangement. Private collection, in which individual households contract directly with private firms, was about 30 percent more costly than municipal collection which, in turn, was about 25 percent more expensive than contract collection. The difference between private contractor and municipal cost is probably biased in favor of the municipalities, according to the authors, because cities generally tend to underestimate their costs of

TABLE 2 - QUANTITATIVE STUDIES OF COMPARING SERVICE DELIVERY COSTS

Type of Research Method Study (Reference)	Percent Savings	Comparison Measure	Number of Sites/Firms	Controls for Service Quality/ Similarity
Comparison Studies				
1. Solid Waste Collection - Fairfax Co., VA. (Bennett and Johnson, 1979)	30%	cost/year/household	1 site 29 firms	Housing type; Front or rear collection; Number of collections/week
2. Solid Waste Collection - New York City (Savas, 1974)	30 - 50%	cost/ton; tons/hr.	1 site 450 firms	Vehicle type; Type of waste; Expense category
3. Solid Waste Collection - St. Paul (Fisk, p. 20)	0%*	NR	1 site	NR
Before/After Studies				
4. Solid Waste Collection - Minneapolis (Savas, 1977)	35 - 51% 0% After*	$/ton; $/hdhd; tons/truck/shift	1 site	Same service specified in the contract; Housing type; Number of complaints
5. Solid Waste Collection - Birmingham, England (Economist)	34% 0% After*	NR	1 site	NR
6. Custodial Service - Little Rock, Ark. (Mercer)	50%	$/work unit	1 site	"Similar service"
7. Public Works Maintenance - Lafayette, CA (Goodin)	15%	NR	1 site	NR
Statistical Cost Averages				
8. School Bus Service - Indiana (McGuire and Van Cott)	12%*	$/trip/ $/student $/mi; $/student-mi	275 sites	Trip length; Students/trip
Regression Analyses				
9. Solid Waste Collection - Columbia Study (Delaat; Fisk)	16 - 30%	$/ton	100 sites	Wages; Weather; City size; Waste/household; Population density; Service level
10. Solid Waste Collection - Connecticut (Kemper and Quigley)	13 - 30%	$/hshd; $/ton	145 sites	Service frequency; Service type; Population density; Wages
11. Fire Protection Services - Scottsdale (Bish and Nourse, p. 196)	30 - 50%	$/capita	1 site 44 firms	Population; Area; Insurance rates; Wages; Number of ladder trucks; Number of fire stations; Value of structures; Number of full-time and volunteer firemen; % sub-standard housing; Number of aid cars
Case Study				
12. Solid Waste Collection - Pittsburgh area (Delaat)	Not relevant	Monitoring costs; Wages and benefits; $/ton; $/hshd; Number of complaints	8 sites 6 firms	Not relevant

* Competitive environment between the public and private service deliverers.

NR - not reported.

vehicle operations and maintenance, interest and depreciaton. Hartford, for example, underestimated its costs by 41 percent. Economies of scale may account for the difference between the two types of private operating systems. Private firms operating under contract in a specific area can provide less costly service than a firm which serves individual households when economies of scale are present.

Bennett and Johnson (1979) studied refuse collection costs in Fairfax County, Virginia where the County Division of Public Works and 29 private firms provided trash collection services. The average yearly cost to homeowners for public service was significantly higher than prices charged by private firms, $126.80 vs. $85.76. Only one firm charged as much as the government. Thus private cost levels were 32 percent less.

School Bus Transportation. A statewide study of school bus transportation in Indiana was completed by McGuire and Van Cott (1984). The authors collected cost and output (trip) data from most school districts in the state and compared cost per vehicle trip and cost per mile. Public provision was found to be 12 percent more costly than private bus service.

Fire Protection. Although fire protection services are generally provided by the public sector, Scottsdale Arizona, contracts for this service with a private firm. Ahlbrandt (1973) used regression analysis to compare costs of fire service provision in 44 cities and five districts in Washington with the Scottsdale system. The Washington data

was calibrated and verified for cities in Arizona and was then used to predict costs for Scottsdale. The model predicted costs of $7.10 per capita. The actual cost was $3.78, a savings of approximately 47 percent.

Conclusions from Cost Studies. These studies suggest that contracting with the private sector rather than public provision of services may result in significant cost savings. Considerable savings in the areas of refuse collection, fire protection and school bus transportation were confirmed.

Two additional areas of concern not addressed by the cost issue also need to be explored. The issues of service quality and competition influence the effectiveness of contracting by the private sector and are addressed in the following sections.

Service Quality

The issue of service quality is often cited by opponents of contracting as a major obstacle to service provision by the private sector. Private firms, supposedly interested only in making a comfortable profit, are alleged to provide as little service as possible with minimal regard to quality. Studies have indicated, however, that many other factors affect the issue of the quality of service (Poole, 1983; Fisk, et. al., 1978). Contracting for services requires public agencies to define service objectives and performance measures, often for the first time. This forces the municipality to examine the outputs

of the service in relation to the inputs (costs) and to assess the service in a new way. Public officials have often found contractors to be more responsive and concerned about the quality of service than municipal employees, who are not motivated by the incentive of a renewed contract based upon the satisfaction of the sponsoring agency.

These findings imply that contract monitoring is of paramount importance. Contractors will provide quality service if they know that their performance is being closely monitored by the public agency. Service objectives must be clear, easily monitored and fair to both parties. Several studies (Ahlbrandt, 1974; Bennett & Johnson, 1979) have considered quality of service when comparing public and private service provision and found that private firms provided service equal to or better than the public agency. For example, trash was collected more frequently and the level of complaints about the quality of service were comparable. In Scottsdale, the private fire department was compared with public departments in terms of service. Scottsdale ranked number one in speed of response to alarms, comparable fire insurance rates and comparable fire losses (Ahlbrandt, 1974).

Competition in Contracting

Competition is a critical factor in obtaining low cost contracts. Studies confirm that the existence of a competitive market generally results in relatively low bidded prices because firms must compete with each other to win the contract (Savas, 1977; Bennett & Johnson, 1980; Kirlin, et. al., 1977; Fisk, et. al., 1978). However, other studies (Hain, 1983) point to the difficulties involved in maintaining a

competitive market. They suggest that the private market mechanisms are inadequate for sustaining competition, that oligopolistic or monopolistic situations can evolve with long-term contracts and that bid rigging and other anti-competitive practices can drive up prices. Adequate cost information and economic controls to assure competition are mandatory to make contracting effective.

Several studies (Savas, 1977; Hughes, 1982; Davies, 1977; Bennett & Johnson, 1980) investigated the effect of competition on public and private costs for services. Savas (1977) points to the effect of competition between private contractors and the municipal government of Minneapolis, Minnesota. The city contracted for part of its trash collection and provided the remainder of this service itself. Initially, the private firms showed superior productivity in terms of labor hours per household, tons per man-hour and households serviced per shift. The private firms also had significantly lower costs. Over a five-year period, the city department improved to the level of its competitors. The City of Phoenix contracts for a number of municipal services. City departments, in fact, directly compete with the private sector in a competitive bid process. The city contracts for garbage collection, chip sealing of streets, fixed route public transit, Sunday dial-a-ride services, and median island maintenance. Contracting has trimmed costs for those services provided by the private sector and has led to lower costs in the public sector as well. The city government has found ways to tighten the budget and to be more productive (Hughes, 1982).

These studies indicate that competition and private sector involvement can affect costs of public services other than those provided directly by the private contractor. In fact, in Minneapolis and Phoenix

public sector costs for service provision approached those of private contractors. Contracting for only a portion of the public service may also lead to overall lower public agency costs. These spillover effects of contracting (sometimes called the "ripple effect") can be very significant in terms of overall public sector cost reduction.

Conclusions

Private sector contracting for public services has been a generally successful endeavor. This method of service provision is common in the areas of trash collection, demand responsive transit, school bus transportation, park and landscape maintenance, vehicle maintenance, custodial services, traffic signal maintenance, road repairs, and a number of other services typically provided by the public sector.

Several issues are related to the success of contracting with the private sector. Competition is probably the most critical component in obtaining high quality, inexpensive service. Competition among bidders for a contract will help reduce the cost of service. Sufficient competition should be available in the marketplace or entry should be easy so that additional firms can provide service if the need arises. Competition between the public and private sectors often results in the public sector becoming more cost conscious, efficient and productive.

The service which is being considered for private sector provision should have performance standards which are easily measured. The ability to monitor performance of the vendor is critical in obtaining high quality services.

Public services which meet these caveats have been shown to benefit from contracting. Cost savings averaging 30 percent have been obtained, mostly in solid waste management. Other services which meet the stated criteria would probably also benefit from private sector competition.

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CHAPTER FOUR

Results of Actual Experiences of Competitively Contracted Fixed-Route Transit Service

Chapter Summary

This chapter presents results of the analysis of competitively contracted fixed-route transit systems performed by researchers at the University of Pennsylvania. The purpose of the research is to develop a model for estimating probable service contracting cost savings based on characteristics of the service, the service area, and bidding procedures. Model development and testing is currently in progress.

The analysis reported here is based on an in-depth survey of competitively contracted systems in the U.S. Sufficient data was available from 17 systems for inclusion in the analysis. Two analyses were performed. The bid analysis focused on patterns of bidding which occurred in the contracting process. Major findings were that bids received averaged 3 per contract, the range of bid prices was large, and the chosen bid was below the average but not necessarily the lowest bid. The cost savings analysis focused on the difference between public and private service cost. These were cost differences reported by the service sponsor. They were based on comparing the contract cost, adjusted to reflect additional monitoring cost, with a comparable public transit service. Reported savings ranged up to 50 percent, with an

average of 29 percent and standard deviation of 18 percent. Reported cost differences were smallest for very small systems and largest when small private firms were compared with large public systems. These findings compare favorably with previous studies of contracting in other public services.

Introduction

A major task of this research is the development of models for estimating potential cost savings of service contracting. As one component of this task, researchers at the University of Pennsylvania are developing a model which predicts a range of possible national savings based on reported costs of competitively contracted services currently in operation. In developing this model, information has been obtained on the actual pattern of bids and cost savings from systems that are now competitively contracting fixed route service. This information is reported here. Model development and application is still in progress.

Survey of Agencies which Competitively Contract for Fixed Route Transit

The nationwide survey of all public transit entities reported on in Chapter 2 identified those fixed-route transit services that are competitively contracted. Nationwide, 52 such systems were identified, but only 42 of these were identified in time for inclusion in the University of Pennsylvania survey of agencies which competitively contract for fixed route service. (Eight of the 10 systems recently identified are in California, in which 15 of the original 42 systems are located.) Responses to this survey have been received from 31 of the 42 systems, including systems in metropolitan areas from the largest (New York area) to very small ones, and over most the U.S. Of these 31 systems, 17 have provided sufficient data to date for inclusion in this analysis. The survey consisted of both mail and telephone contacts.

Information on the following items was collected:

- service operating characteristics
- number and amount of bids
- winning bid amount
- service, monitoring and related costs
- vehicle ownership and characteristics
- changes in services and/or prices since initiation of contract
- estimates of cost savings compared to public agency operation

Service Characteristics

The survey was restricted to fixed route systems. The systems range in size from very small to moderately large . Most provide all-day service, but with a wide range of peak-to-base ratio. The general pattern of division of responsibility between the service sponsor (public agency) and contractor (winning bidder) was that the service would be operated by the bidder while the sponsor plans and finances the service. Contractors operated the vehicles, and in virtually all cases maintained them. In roughly half the situations the contractor provided the vehicles, otherwise the sponsor provided them. The division of responsibility for other aspects of the service, such as information on schedules, varied.

Bid Analysis

Significant results from the analysis of bids are as follows. First, an important question is the degree of competition present, of which one indicator is the number of bids received. The range is one to six bids, with an average (or mean) of 3.1. bids. The distribution is

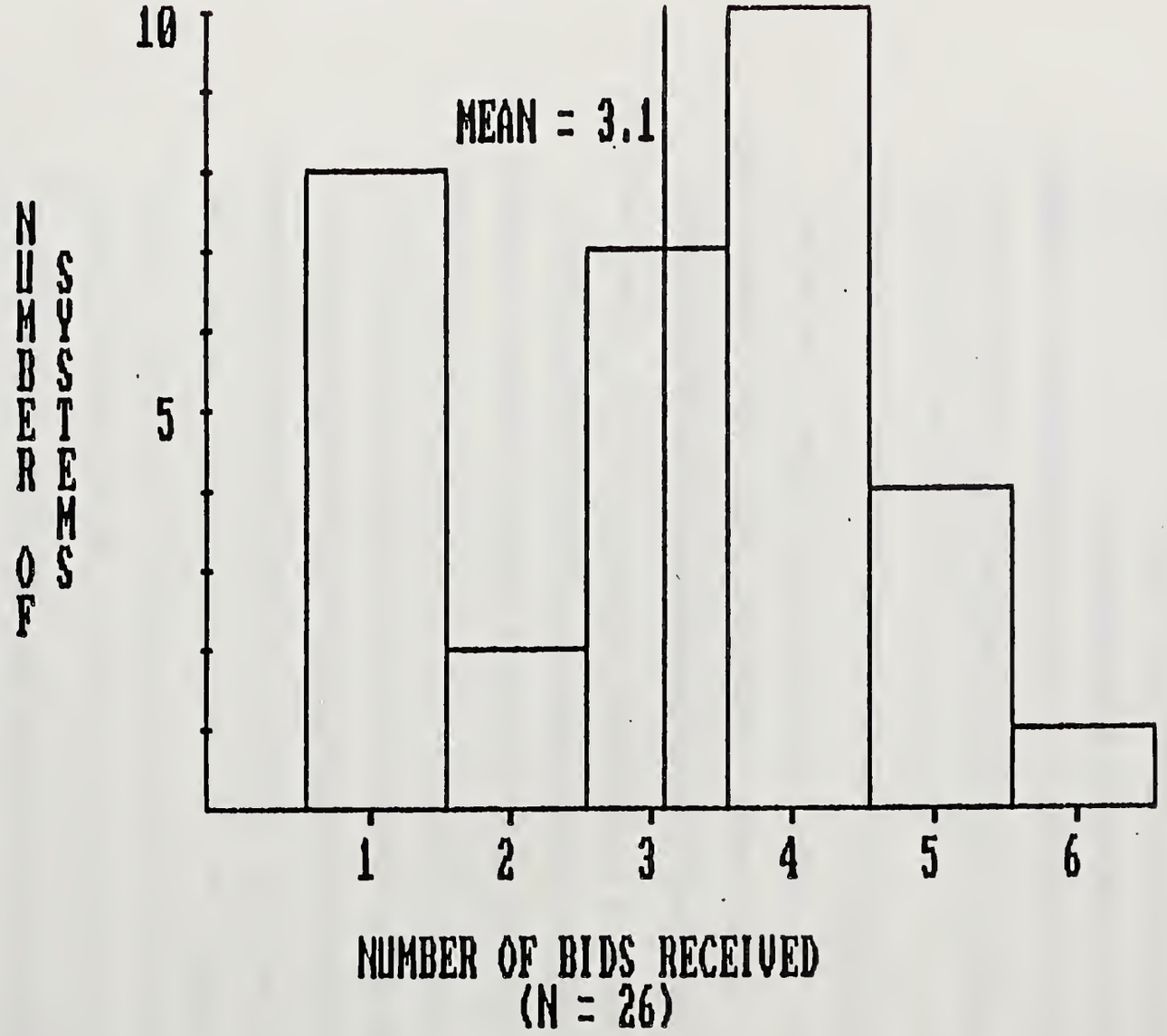

Figure 1. DISTRIBUTION OF BIDS RECEIVED

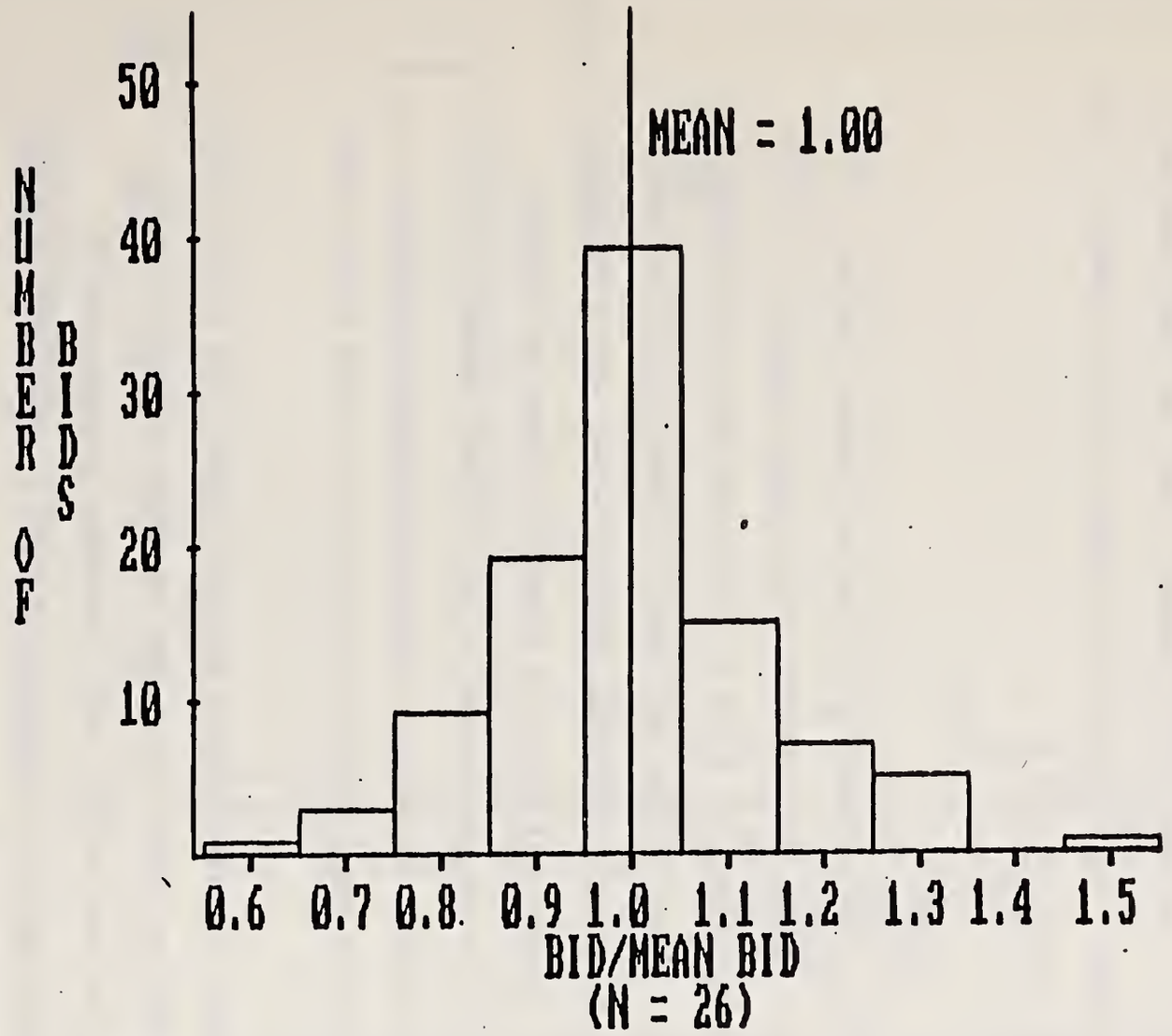

Figure 2. DISTRIBUTION OF BID VALUES RELATIVE TO THE MEAN BID FOR THE CORRESPONDING SYSTEM

shown in Figure 1. Second, the pattern of these bids with respect to cost is very revealing, and is shown in Figure 2. Each bid is included as the ratio of itself to the average bid on that particular contracted service. The range of this ratio is quite large, from 0.6 to 1.5. This indicates that local transit systems have considerable discretion in choosing the cost of contracted service, through the choice of which bid to accept. Third, the bids actually chosen to date (by those voluntarily electing to contract) are well below the average, but not necessarily the lowest bid, as shown in Figure 3.

Cost Savings

Cost savings, as estimated by the service sponsor, varied considerably. In some cases, reported cost savings appeared to be the result of detailed estimates, while in other cases they were judgmentally based estimates. These savings were based on comparing the contract cost, adjusted to reflect additional monitoring cost, with a comparable public transit service. It should be noted that these are primarily systems in which the service sponsor is not a transit operator and did not previously operate the service. Thus cost savings are based on comparisons with the former public provider cost, or with similar public transit cost.

The range of reported savings was quite large; from almost zero to 50 percent. The very small savings are for small systems in small communities. The mean was 29%, with a standard deviation of 18%. Vehicle ownership was not a significant factor, as the range for systems with contractor-provided vehicles was no different from that of systems with sponsor-provided vehicles. The range and magnitude of cost savings

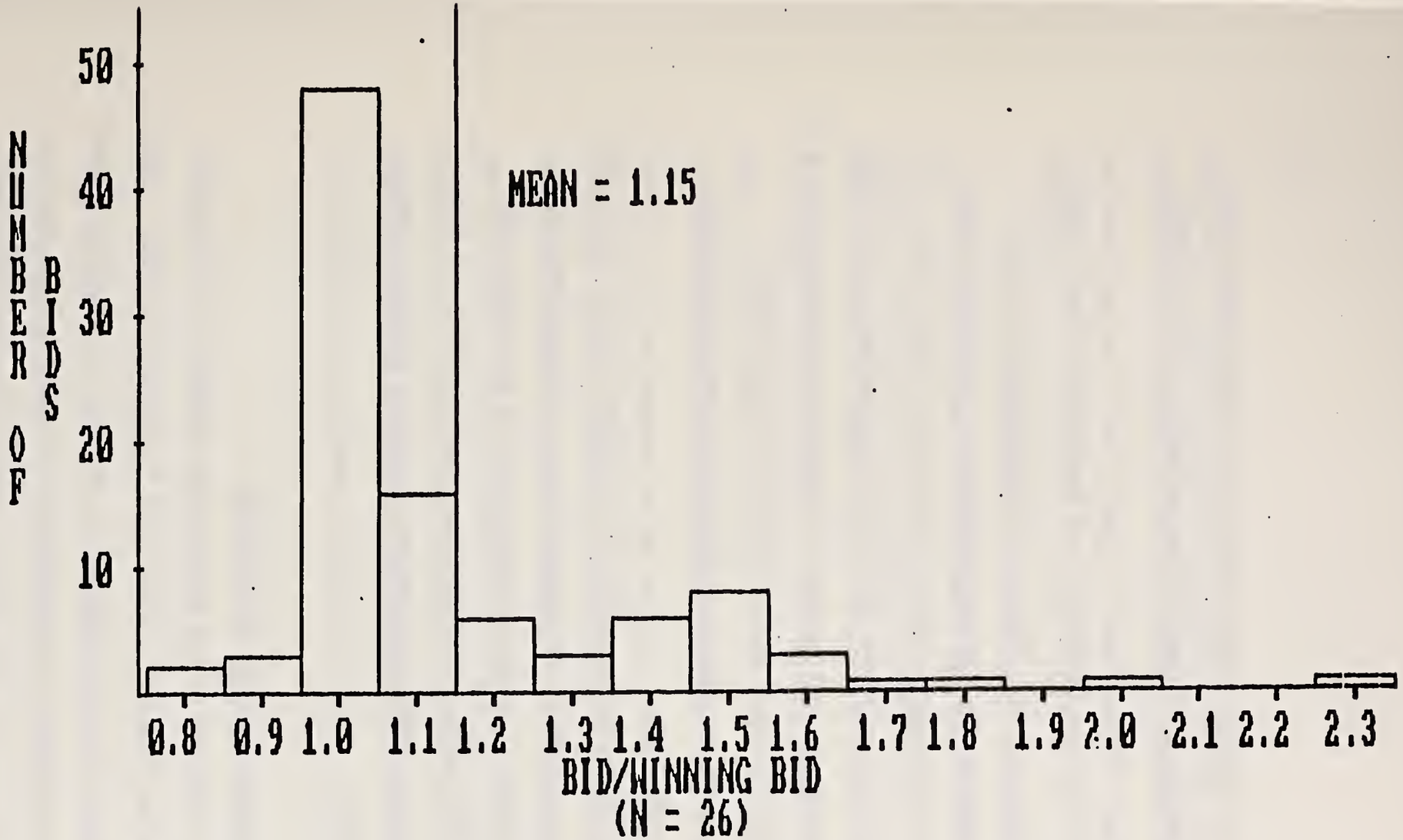

Figure 3. DISTRIBUTION OF BID VALUES RELATIVE TO THE WINNING BID FOR THE CORRESPONDING SYSTEM

are similar to those which have been achieved in other types of public services where competitive contracting has replaced a public monopoly arrangement.

The winners of service contracts were predominantly small firms, operating 25 vehicles or less. This is not surprising, for cost is a major factor in selecting the winning organization, and small transit firms tend to have costs substantially below those of larger firms and authorities. Thus the involvement of "tiny" organizations is one factor potentially explaining the cost savings. Theoretical considerations, and empirical observations related to other industries with similar underlying technological properties, suggest small service providers would have a cost advantage.

Costs of monitoring are reported, in all cases but one, to be quite small (less than 11 percent of contracting costs). Average monitoring cost was about 5 percent. Indeed, in many cases it was stated that monitoring was handled within the parent government by the same people who would have been involved in monitoring the public authority had it provided the service.

Assessment of Potential National Cost Savings

The overall objective of the Pennsylvania research is to estimate the range of potential national cost savings from the survey data. Cost savings are defined as the net reduction in the cost of providing a given transit service, considering the reduced cost of actually operating the service and any increase in administrative costs resulting from contract management. Transition costs such as severance pay (if any) to employees are not included. In assessing the potential national savings, it is

important to take into account differences between the private and public sectors in the treatment of certain costs, including grants for vehicles and other capital stock, taxes, and user fees for roads and other public services.

The savings estimation model has been developed and is being tested with the existing data. At the same time, the data set is being expanded so that final results can be based on a larger sample. However, the sample is bound to remain small since only a limited number of fixed-route transit systems are known to be competitively contracted, and cost savings estimates are available for only some of these. It is therefore important to ascertain the degree to which these levels of savings would be expected on the basis of other evidence. The cost comparison results from both the nationwide transit contracting survey and the literature review of contracting of other public services are consistent with the cost savings estimates obtained to date from these agencies which competitively contract for fixed route service. There is thus a reasonable likelihood that the cost savings estimates from the final sample will represent actually achievable savings.

CHAPTER 5

Conclusions

This report has presented results to date of a comprehensive study of public transit service contracting. Using a variety of analytical approaches, this research has provided insight on both the scope and potential of transit service contracting.

The results of the nationwide survey of nearly 1,000 public transportation agencies indicated that transit service contracting is already a widespread practice in the U.S.--about 35 percent of all the public agencies utilize some form of service contracting--but that it represents a very small portion of total transit operating expenditures, approximately 5 percent. Patterns of service contracting are quite distinct. Cities are more likely than either transit agencies or counties to contract. When contracted, small systems (50 vehicles or less) are more likely to be entirely contracted, whereas contracting only a portion of the service is more likely for larger systems. Type of service is also important; demand-responsive services make up almost 50 percent of all contracted services. Contracted services tend to be relatively small scale, which is why they represent such a small proportion of total service operating expenses.

The survey results also indicate that private operators of fixed route transit can produce service significantly less expensively than the typical medium to large transit agency. The average cost per revenue vehicle mile for privately contracted fixed route service, among systems with 25 or more vehicles, was $2.24 in FY 1984. In contrast, the average

cost per mile for public agency operators with 250 or more vehicles was $3.85 in FY 1984. Thus the small privately contracted services enjoy a 42 percent cost advantage compared to the larger public operators. The comparison with the larger public operators is relevant as these are the agencies with the greatest potential for cost savings. They account for the largest proportion of transit operating expenditures, and they would typically contract only a portion of their service. The cost differences found in the survey thus represent actual potential savings, as private operators with the cost levels observed are currently available to contract for public agency services which are being operated by transit authorities at the cost levels observed.

The review of literature on public service contracting showed that contracting is widespread and well established in a number of public service areas. Several conclusions were drawn from the literature review. First, the characterists of a public service which make it amenable to service contracting generally apply to bus transit. Second, cost savings from private contracting range from 15 to 50 percent, with a mean of 30 percent. Third, competition is the key to cost-effective contracting; thus sponsors should avoid granting exclusive rights to contractors or being dependent on only one or a few private providers. Fourth, effective contracting requires that service be easily specified and monitored. Bus transit has these characteristics. Contracting does have monitoring costs, but these generally are small: about 3 percent of the contract cost. Finally, there is some evidence that contracting for a portion of the public service leads to lower public agency costs over time.

The analysis of existing competitively contracted fixed route services showed that, on average, private contracted service cost is about 29 percent lower than comparable public transit service. The range of cost differences was very wide: from zero to 50 percent. The smallest savings were among the smallest services. This is expected, since transit service cost (both public and private) is positively related to firm size. Thus the situations of greatest potential cost savings are those in which medium to large public transit agencies contract for segments of service from a private operator. The bid analysis showed that an average of three bids was received, and these generally had a wide range of bid prices. Bids chosen tend to be below average, but not necessarily the lowest bid.

This study to date has provided substantial evidence that service contracting has potential for significantly reducing transit service costs. Indirect evidence provided by the national survey data and reported cost differences among the competitively contracted systems for which data are available give similar results--cost differences of the magnitude of 30 percent or more. In addition, previous research by one of the researchers found cost savings ranging from 12 to 49 percent in a comparison of the same or similar service by private and public operators (Teal, 1985).

While this research has demonstrated that cost savings from service contracting are potentially significant, the precise cost impact of widespread service contracting in the transit industry cannot be directly predicted from these findings for two reasons. First, the national survey is a cross-sectional sample (e.g., it gives costs for all services operating in 1984) whose results supply information on average cost

differences between public and privately provided systems, not average cost savings for individual systems. Second, the reported cost savings from existing competitively contracted fixed route service are in fact estimates of cost differences for situations in which the public transit service sponsor is not a public transit service provider. These cost savings are actually realized by the sponsor, but are not necessarily the same as those which would result from substitution of a private contractor for an existing agency operated service. Nevertheless, the evidence indicating substantial cost differences--up to 50 percent--between public and private providers is so persuasive that there is no serious reason to doubt that significant cost savings would result from service contracting, particularly for medium and large transit operators.

The final task of this research is intended to produce estimates of actual cost savings by developing a method for determining changes in cost resulting from contracting out selected, existing transit agency services. This method has been developed and tested on data from four different transit agencies. Preliminary results indicate cost savings ranging from 12 to 39 percent. Further review and refinement of these results is in progress.

This research has employed a variety of approaches to investigate the potential of transit service contracting, with encouraging results. From a merely conceptual perspective, introduction of competition within the transit industry should lead to reduced service costs. More importantly, empirical evidence from transit operations indicates that privately contracted services are typically less expensive than public agency operated services. Moreover, experience with other public

services further demonstrates that private contracting often results in lower service costs. The available evidence thus indicates that increased, competitive participation of the private sector in public transit is likely to result in a significant beneficial impact on transit service costs and subsidy requirements.

APPENDIX A

Public Agencies with 1-25 Veh

Agency Name	No. of Veh	Contract? 1=yes 2=no	Amount 1=all 2=some 3=none
Palo Alto, CA	0	1	1
Pasadena, CA	0	1	1
Rio Vista, CA	1	1	1
El Centro, CA	1	1	1
Woodlake, CA	1	1	1
Lindsay, CA	1	1	1
Imperial, CA	1	1	1
Oakdale, CA	1	1	1
Gridley, CA	1	1	1
National City, CA	1	1	1
Benicia Bay Connection, CA	1	1	1
San Fernando, CA	1	1	1
Santa Fe Springs, CA	1	1	1
So County Area Trans, San Luis Obispo, CA	2	1	1
Needles, CA	2	1	1
Claremont, CA	2	1	1
St Helena, CA	2	1	1
Poway, CA	2	1	1
Ceres, CA	2	1	1
Exeter, CA	2	1	1
Lemon Grove, CA	2	1	1
Lakeport, CA	2	1	1
LaPuente, CA	2	1	1
South Gate, CA	2	1	1
San Luis Obispo RTA, CA	3	1	1
Ridgecrest, CA	3	1	1
Tuolumne Co, Sonora, CA	3	1	1
Fillmore, CA	3	1	1
Imperial Co, El Centro, CA	3	1	1
Pico Rivera, CA	3	1	1
Rancho Palos Verde, CA	3	1	1
Whittier, CA	3	1	1
Hawthorne, CA	3	1	1
Redondo Beach, CA	3	1	1
Lawndale, CA	3	1	1
Rosemead, CA	3	1	1
Monrovia, CA	3	1	1
West Covina, CA	3	1	1
Glenn Co, Willows, CA	4	1	1
Bellflower, CA	4	1	1
El Monte, CA	4	1	1
Roseville, CA	5	1	1
Porterville, CA	5	1	1
Paradise, CA	5	1	1
Chula Vista, CA	5	1	1
Ventura Co, Ventura, CA	6	1	1

Agency Name	No. of Veh	Contract? 1=yes 2=no	Amount 1=all 2=some 3=none
Chico, CA	6	1	1
Clearlake, CA	6	1	1
Roseville, CA	7	1	1
Lodi, CA	7	1	1
Clovis, CA	7	1	1
Turlock, CA	7	1	1
Madera, CA	7	1	1
Lancaster, CA	7	1	1
Corona, CA	7	1	1
Covina, CA	7	1	1
Petaluma, CA	8	1	1
Dinuba, CA	8	1	1
Napa, CA	8	1	1
Union City, CA	8	1	1
La Mirada, CA	9	1	1
Glendale, CA	9	1	1
Barstow, CA	10	1	1
Strand Express, Coronado, CA	12	1	1
Fairfield TS, CA	12	1	1
Santa Clara, CA	12	1	1
Livermore, CA	13	1	1
Delano, CA	13	1	1
Arcadia, CA	13	1	1
Richmond, CA	14	1	1
Yolo Co, Woodland, CA	15	1	1
LaMesa,CA	15	1	1
San Leandro, CA	16	1	1
Eureka, CA	16	1	1
Redding Area Bus Authority, CA	19	1	1
Sunnyvale, CA	19	1	1
South Coast Org Oper Trans, Chula Vista, CA	19	1	1
San Jose, CA	20	1	1
El Cajon, CA	22	1	1
Mesa Co User-Side Subsidy Prog, Gr Junction, CO	1	1	1
Summit Stage, Breckenridge, CO	13	1	1
NB Trans, Bristol, CT	3	1	1
No East Trans, Wallingford, CT	4	1	1
North East Trans, Meriden, CT	4	1	1
Dattco Inc, New Britain, CT	6	1	1
Middletown Area Trans, New Britain, CT	7	1	1
NB Trans, New Britain, CT	11	1	1
Connecticutt DOT, Hartford, CT	22	1	1
Marshalltown, IA	3	1	1
Ottumwa TA, IA	7	1	1
Libertyville, IL	0	1	1
Milton Township, IL	1	1	1
Proviso COA, IL	2	1	1
Waukegan Township, IL	4	1	1
Plus Inc, Elgin, IL	4	1	1
Park Forest, IL	4	1	1
Danville, IL	8	1	1

Agency Name	No. of Veh	Contract? 1=yes 2=no	Amount 1=all 2=some 3=none
Newport, OR	2	1	1
Shenango Valley Shuttle Service, PA	4	1	1
Borough of Pottstown, PA	6	1	1
Washington, PA	10	1	1
Westmoreland Co TA, PA	10	1	1
Tazewell Co, VA	1	1	1
Brattleboro, VT	2	1	1
Platteville Taxi, Platteville, WI	1	1	1
Portage Cab Co, Portage, WI	1	1	1
Ripon Taxi Serv, Ripon, WI	2	1	1
Hanson's Taxi Serv, Stoughton, WI	2	1	1
600 Radio Cab Inc, Marshfield, WI	3	1	1
Bay Area RTS, Ashland, WI	3	1	1
Yellow Cab Co, Rhinelander, WI	4	1	1
Watertown TS, WI	4	1	1
Duluth TA, Superior, WI	9	1	1
Waukesha Metro Trans, Waukesha, WI	14	1	1
Juneau, AK	12	1	2
San Diego, CA	0	1	2
Mariposa Co, CA	2	1	2
Camarillo, CA	2	1	2
Stanislaus Co Trans, Modesto, CA	4	1	2
Lompoc, CA	5	1	2
Nevada Co, CA	6	1	2
Fremont, CA	7	1	2
Tulare Co, Visalia, CA	10	1	2
Western Contra Costa Co TA, Pinole, CA	14	1	2
Victorville, CA	14	1	2
Macomb, CA	17	1	2
Kern Co, Bakersfield, CA	17	1	2
Eastern Contra Costa TA, Antioch, CA	18	1	2
Fresno Co RTA, Fresno, CA	20	1	2
Hawaii Co MTA, Hilo, HI	18	1	2
Sioux City TS, IA	25	1	2
Metro Evansville TS, IN	23	1	2
Owensboro TS, KY	8	1	2
Cape Ann TA, Gloucester, MA	9	1	2
Ishpeming Trans, MI	4	1	2
Kalamazoo HS Dept, MI	12	1	2
Marquette Co TA, MI	14	1	2
Excelsior Springs, MO	5	1	2
Missoula UTD, MT	21	1	2
Wilson, NC	7	1	2
Blue Rivers Area AOA, Beatrice, NE	16	1	2
COAST, Durham, NH	25	1	2
Columbia Co Bd Comm, Lisbon, OH	16	1	2
Alexandria TA, VA	17	1	2
Hot Springs Intracity Trans, AR	11	1	3
Shasta Co, CA	1	1	3
Thousand Oaks, CA	4	1	3
Modoc Co, CA	4	1	3

Agency Name	No. of Veh	Contract? 1=yes 2=no	Amount 1=all 2=some 3=none
Schaumburg, IL	8	1	1
Union Co Bd Comm, Liberty, IN	3	1	1
Hammond TS, IN	10	1	1
Bedford, MA	1	1	1
Natick, MA	2	1	1
Needham, MA	2	1	1
Martha's Vineyard RTA, MA	4	1	1
Lexington, MA	4	1	1
Massachusetts Bay TA, Boston, MA	10	1	1
Montachusett RTA, Fitchburg, MA	21	1	1
Washington Co Planning Comm, Milbridge, ME	2	1	1
Alpena, MI	6	1	1
Ingham Co, Mason, MI	6	1	1
Adrian DAR, MI	6	1	1
Holland, MI	10	1	1
Hopkins Hop-A-Ride, Hopkins, MN	0	1	1
Columbia Hts Shared Ride, Columbia Hts, MN	0	1	1
Hopkins, MN	0	1	1
Virginia, MN	0	1	1
Pipestone Public Taxi, Pipestone, MN	1	1	1
Albert Lea City Bus, Albert Lea, MN	1	1	1
Cloquet, MN	2	1	1
Brainerd City Bus, Brainerd, MN	3	1	1
Bemidji Bus Line, Bemidji, MN	3	1	1
Hibbing Area Trans, Hibbing, MN	3	1	1
Northfield, MN	3	1	1
Fairlakes Transp, Fairmont, MN	4	1	1
Willmar TS, MN	5	1	1
Winona TS, MN	9	1	1
Mooshead, MN	14	1	1
No Suburban Lines,Inc, Minneapolis, MN	16	1	1
St Cloud MTC, MN	24	1	1
Rochester, MN	25	1	1
Blue Springs, MO	3	1	1
Nevada, MO	6	1	1
Cape Girardeau, MO	13	1	1
Rocky Mount, NC	8	1	1
Wilmington TA, NC	18	1	1
Fargo Metro Area Trans, Fargo, ND	21	1	1
Greater Nashua TS, Nashua, NH	9	1	1
Nashua, NH	14	1	1
Santa Fe MPO, NM	22	1	1
Dutchess Co LOOP Bus Sys, NY	16	1	1
Massillon, OH	3	1	1
Logan, OH	3	1	1
Ashtabula Bd of Co Comm, OH	9	1	1
Springfield, OH	10	1	1
Lancaster Parks & Rec, Lancaster, OH	10	1	1
Richland Co TA, Mansfield, OH	22	1	1
Portage RTA, Kent, OH	25	1	1
Astoria, OR	1	1	1

Agency Name	No. of Veh	Contract? 1=yes 2=no	Amount 1=all 2=some 3=none
Del Norte Co, Crescent City, CA	5	1	3
Lake Co, CA	5	1	3
Kings Co PTA, Hanford, CA	6	1	3
Vacaville, CA	6	1	3
Roseville, CA	8	1	3
Merced Co, CA	9	1	3
Hub Area TA, Yuba City, CA	16	1	3
Connecticutt DOT, New Britain, CT	11	1	3
Bettendorf TS, IA	6	1	3
Loves Park TS, IL	17	1	3
St Bernard Parish Police Jury, Chalmette, LA	4	1	3
Greater Attleboro Taunton RTA, MA	19	1	3
Hoboken, NJ	2	1	3
Muskingun PTA, Zanesville, OH	9	1	3
Corvallis TS, OR	4	1	3
Beverly Hills, CA	4	2	1
Medicine Lake Lines, Minneapolis, MN	22	2	1
Choctaw TA, Philadelphia, MS	7	2	1
Watauga Co TA, Boone, NC	25	2	1
Advance Transit Inc, Lebanon, NH	22	2	1
Lorain Co Trans Board, Elyria, OH	6	2	1
Kibois Area TS, Stigler, OK	17	2	1
Ketchikan Gateway Borough, Ketchikan, AK	1	2	3
Fort Yukon MTS, AK	1	2	3
Bethel, AK	2	2	3
Gadsden, AL	5	2	3
Tuscaloosa Co PTA, AL	15	2	3
Verde Valley TA, Jerome, AZ	2	2	3
Navajo Nation, Window Rock, AZ	10	2	3
Monterey Park, CA	1	2	3
Lomita, CA	1	2	3
Antioch, CA	1	2	3
California City, CA	1	2	3
Dixon, CA	1	2	3
Tehachapi, CA	1	2	3
Blythe, CA	1	2	3
Folsom, CA	1	2	3
Isleton, CA	1	2	3
Ripon, CA	1	2	3
Adelanto, CA	1	2	3
King City, CA	1	2	3
Corcoran, CA	1	2	3
Carpinteria, CA	1	2	3
Greenfield, CA	1	2	3
Palo Verde Valley, CA	1	2	3
Waterford, CA	1	2	3
Trinity Co, CA	1	2	3
Soledad, CA	1	2	3
Cloverdale, CA	1	2	3
McFarland, CA	1	2	3
Duarte, CA	1	2	3

Agency Name	No. of Veh	Contract? 1=yes 2=no	Amount 1=all 2=some 3=none
Lassen Co, CA	2	2	3
Inyo, CA	2	2	3
Sebastopol, CA	2	2	3
Auburn, CA	2	2	3
Wasco, CA	2	2	3
Santa Barbara Co Trans, CA	2	2	3
Lake Elsinore, CA	2	2	3
El Cerrito, CA	2	2	3
Arvin, CA	2	2	3
Healdsburg, CA	2	2	3
Glendora, CA	2	2	3
Lynwood, CA	2	2	3
Hermosa Beach, CA	2	2	3
Daly City, CA	2	2	3
El Segundo, CA	2	2	3
Manhattan Beach, CA	2	2	3
Davis Special Services, Davis, CA	3	2	3
San Luis Obispo Co, CA	3	2	3
Banning, CA	3	2	3
Lincoln, CA	3	2	3
San Pablo, CA	3	2	3
Inyo Co, Independence, CA	3	2	3
Bell, CA	3	2	3
Lakewood, CA	3	2	3
Trans Assist Joint Powers Agency, CA	3	2	3
N Coastal Trans, San Luis Obispo, CA	4	2	3
Tracy, CA	4	2	3
Pleasanton, CA	4	2	3
Plumas Co, CA	5	2	3
E San Gabriel Valley Consrtm, CA	5	2	3
Solano Co, Fairfield, CA	5	2	3
Beaumont, CA	5	2	3
Arcata & Madriver TS, Arcata, CA	5	2	3
Concord, CA	5	2	3
Sacramento Co, Sacramento, CA	5	2	3
Hollister, CA	5	2	3
Compton, CA	5	2	3
San Luis Obispo Co, San Luis Obispo, CA	6	2	3
Colusa, CA	6	2	3
Downey, CA	6	2	3
South Lake Tahoe, CA	7	2	3
Simi Valley, CA	7	2	3
Siskiyou Co, Yreka, CA	7	2	3
El Monte, CA	8	2	3
Amador RTS, Jackson, CA	8	2	3
Amador RTS, CA	8	2	3
Martinez, CA	8	2	3
Placer Co, CA	9	2	3
Riverside, CA	9	2	3
Victor Valley TA, CA	10	2	3
Laguna Beach, CA	10	2	3

Agency Name	No. of Veh	Contract? 1=yes 2=no	Amount 1=all 2=some 3=none
Merced, CA	10	2	3
Placer Co, Auburn, CA	10	2	3
Humboldt TA, Eureka, CA	11	2	3
Sunline TA, Riverside, CA	14	2	3
El Dorado Co Trans, Placerville, CA	15	2	3
Santa Rosa, CA	24	2	3
Fresno Co RTA, CA	25	2	3
Colorado City Metro Dist, CO	1	2	3
Mountain Express, Crested Butte, CO	6	2	3
Steamboat Springs Trans, CO	10	2	3
Summit Stage System, Breckenridge, CO	13	2	3
Snowmass Village Free Shuttle, CO	15	2	3
Pueblo TC, CO	25	2	3
North East Trans, Waterbury, CT	4	2	3
Milford TD, CT	6	2	3
Housatonic Area Trans, Danbury, CT	12	2	3
Valley TD, Derby, CT	14	2	3
Westport TD, CT	14	2	3
Norwalk TD, CT	22	2	3
Dover, DE	5	2	3
Winter Park, FL	3	2	3
Smyrna TS, New Smyrna Bch, FL	4	2	3
Key West Port&TA, Key West, FL	8	2	3
Lakeland Area MTD, Lakeland, FL	11	2	3
Lee Co TS, Ft Myers, FL	24	2	3
Suwanee Valley TA, Live Oak, FL	25	2	3
Vienna, GA	1	2	3
Glascock Co Comm, Gibson, GA	1	2	3
Warren Co, Warrenton, GA	3	2	3
Muscatine,IA	9	2	3
Clinton MTA, IA	10	2	3
Coralville, IA	10	2	3
Burlington, IA	14	2	3
Mason City, IA	16	2	3
Davenport, IA	19	2	3
Seaport Citizens Area Trans, Lewiston, ID	8	2	3
Pocatello, ID	10	2	3
Boise Urban Stages, ID	25	2	3
Deerfield Township, IL	1	2	3
Wayne Township, IL	1	2	3
Nunda Township, IL	1	2	3
River Grove, IL	1	2	3
Peotone, IL	1	2	3
Calumet Township, IL	1	2	3
Crestwood, IL	1	2	3
Ela Township, IL	1	2	3
Vernon Township,IL	1	2	3
Palatine Township, IL	1	2	3
Oak Park Township, IL	1	2	3
Palos Hills, IL	1	2	3
Bremen Township, IL	1	2	3

Agency Name	No. of Veh	Contract? 1=yes 2=no	Amount 1=all 2=some 3=none
Bolingbrok, IL	1	2	3
Franklin Park, IL	1	2	3
Orland Park, IL	1	2	3
Frankfort Township, IL	1	2	3
Tinley Park, IL	1	2	3
Norridge, IL	1	2	3
Lemont Township, IL	1	2	3
Romeoville, IL	1	2	3
Pekin, IL	2	2	3
Marengo, IL	2	2	3
Lake Villa Township, IL	2	2	3
Rich Township, IL	2	2	3
St Charles/Geneva, IL	2	2	3
Harvard, IL	2	2	3
Stickney Township, IL	2	2	3
Worth Township, IL	2	2	3
Forest Park, IL	2	2	3
McHenry, IL	2	2	3
Woodstock, IL	2	2	3
Avon Township, IL	2	2	3
Bloomingdale, IL	2	2	3
Thornton Township, IL	3	2	3
Lyons Township, IL	3	2	3
Bloom Township, IL	3	2	3
Bensenville, IL	4	2	3
Galesburg, IL	5	2	3
Crystal Lake, IL	5	2	3
Joliet, IL	12	2	3
Quincy Trans Lines, IL	13	2	3
Bloomington-Normal PTS, IL	23	2	3
Goshen, IN	1	2	3
Mitchell TS, Mitchell, IN	1	2	3
Washington TS, IN	2	2	3
TA of Stone City, Bedford, IN	3	2	3
New Castle on Wheels PTS, New Castle, IN	5	2	3
Marion TD, Marion, IN	6	2	3
E Chicago Public Trans, East Chicago, IN	6	2	3
Municipal Coach Service, Michigan City, IN	8	2	3
Columbus, IN	9	2	3
TransPorte, Laporte, IN	9	2	3
Rose View TS, Richmond, IN	11	2	3
Columbus MTS, IN	11	2	3
Anderson Trans System, Anderson, IN	12	2	3
Kankanee-Iroquois RPC, Francesville, IN	12	2	3
Kosciusko Access Bus Serv, Warsaw, IN	13	2	3
Terre Haute TA, IN	14	2	3
Bloomington PTC, IN	17	2	3
Greater Lafayette PTC, Lafayette, IN	22	2	3
Kansas City, KS	18	2	3
Morehead Area Trans, KY	1	2	3
Maysville, KY	3	2	3
Jackson Co PTS, McKee, KY	3	2	3

Agency Name	No. of Veh	Contract? 1=yes 2=no	Amount 1=all 2=some 3=none
Frankfort, KY	3	2	3
Henderson, KY	4	2	3
Murray-Calloway Co TA, Murray, KY	4	2	3
Frankfort, KY	5	2	3
Ashland City Bus Lines, Ashland, KY	6	2	3
Paducah TA, KY	7	2	3
Lincoln Parish Police Jury, Ruston, LA	4	2	3
Lake Charles, LA	17	2	3
Monroe TS, LA	21	2	3
Lafayette, LA	22	2	3
Franklin RTA, Greenfield, MA	11	2	3
Greenfield Monague TA, Greenfield, MA	20	2	3
Frederick, MD	4	2	3
Allegany Co TA, Cumberland, MD	13	2	3
Washington Co TC, Hagerstown, MD	15	2	3
Annapolis PTD, MD	18	2	3
Belding, MI	3	2	3
Saugatuck Township Interurban Trans, MI	3	2	3
Dowagiac DAR, MI	3	2	3
Greenville, MI	4	2	3
Marshall, MI	4	2	3
Ionia DAR, MI	4	2	3
Hillsdale, MI	5	2	3
Ogemaw Pub Trans, West Branch, MI	5	2	3
Davison Area TS, Davison, MI	5	2	3
Schoolcraft Co Pub Trans, Manistique, MI	5	2	3
Alma, MI	5	2	3
Kewenaw Bay TA, Baraga, MI	5	2	3
Hillsdale DART, MI	5	2	3
Ontonagon Co Pub Trans, Ontonagon, MI	6	2	3
Branch Area Rural Bus Sys, Coldwater, MI	6	2	3
Yates Township, Baldwin, MI	6	2	3
Van Buren Co. Trans, Bangor, MI	6	2	3
Kalkaska, MI	6	2	3
Otsego Co Bus Sys, Gaylord, MI	7	2	3
Barry Co Trans, Hastings, MI	7	2	3
Iosco Trans Corp, East Tawas, MI	7	2	3
Big Rapids DAR, Big Rapids, MI	8	2	3
Crawford Co TA, Grayling, MI	8	2	3
Sanilac Trans Corp, Sandusky, MI	8	2	3
Charlevoix Co PT, Boyne City, MI	8	2	3
Cadillac/Wexford TA, Cadillac, MI	8	2	3
Ludington MTA, MI	9	2	3
Rosco Mini Bus Sys, Prudenville, MI	10	2	3
Antrim Co, Bellaire, MI	10	2	3
Eastern Upper Peninsula TA, Kincheloe, MI	10	2	3
Alger Co, Munising, MI	10	2	3
Gladwin City-Co Trans, Gladwin, MI	11	2	3
Midland, MI	12	2	3
Mecosta Osceola Co Trans, Big Rapids, MI	12	2	3
Houghton, MI	12	2	3

Agency Name	No. of Veh	Contract? 1=yes 2=no	Amount 1=all 2=some 3=none
Harbor Trans, Grand Haven, MI	13	2	3
Huron Trans Corp, Bad Axe, MI	14	2	3
Twin Cities Area TA, Benton Harbor, MI	14	2	3
Eaton Co TA, Charlotte, MI	17	2	3
Muskegon Area TS, N.Muskegon, MI	17	2	3
Manistee Co Trans,Inc., Manistee, MI	20	2	3
Bay Area TA, Traverse City, MI	23	2	3
Battle Creek Transit, MI	25	2	3
Big Stone Co Trans, Ortonville, MN	1	2	3
Pine River Community Van, Pine River, MN	1	2	3
Clearwater Co Trans, Bagley, MN	1	2	3
Pelican Rapids Trans, MN	1	2	3
Appleton TS, MN	2	2	3
Benson TS, MN	2	2	3
Cottonwood Co TS, Windom, MN	2	2	3
Chisago Co, Center City, MN	2	2	3
Lincoln Co TP, Ivanhoe, MN	2	2	3
Marshall Taxi System, Marshall, MN	3	2	3
Scott Co TS, Shakopee, MN	3	2	3
Carver Area RT, Chaska, MN	3	2	3
Hutchinson, MN	3	2	3
Hastings, MN	3	2	3
Fairibault TS, MN	3	2	3
White Bear Area Trans, White Bear Lake, MN	4	2	3
Red Wing Public Services Dept, MN	4	2	3
Morris, MN	4	2	3
Montevideo, MN	5	2	3
Mankato, MN	14	2	3
Mankato Urban System of Government, MN	15	2	3
Bloomfield, MO	1	2	3
Marshfield, MO	1	2	3
El Dorado Springs, MO	1	2	3
New Madrid, MO	2	2	3
East Prairie TS, MO	2	2	3
Area Trans Serv,Inc, Clinton, MO	2	2	3
Sedalia PTD, MO	5	2	3
St Joseph, MO	16	2	3
Jefferson, MO	17	2	3
Columbia Area TS, MO	24	2	3
Claiborne Co PTA, Port Gibson, MS	2	2	3
Hattiesburg, MS	8	2	3
Mississippi Coast TA, Gulfport, MS	14	2	3
Powder River Commercial Club, Broadus, MT	1	2	3
McCone Co Trans, Circle, MT	2	2	3
Helena, MT	3	2	3
Ft Peck TS, Poplar, MT	5	2	3
Butte-Silver Bow TS, Butte, MT	7	2	3
Great Falls TD, MT	15	2	3
Billings MET, MT	15	2	3
Gastonia, NC	7	2	3
Salisbury, NC	8	2	3

Agency Name	No. of Veh	Contract? 1=yes 2=no	Amount 1=all 2=some 3=none
High Point Trans, High Point, NC	19	2	3
Fayetteville Area TS, Fayetteville, NC	20	2	3
Minot, ND	13	2	3
Minot, ND	13	2	3
Morrill Co, Bridgeport, NE	1	2	3
Webster Co TS, Red Cloud, NE	1	2	3
Crawford, NE	1	2	3
Wayne, NE	1	2	3
Grant-Arthur Co, Hyannis, NE	1	2	3
Seward Co, Seward, NE	1	2	3
Saunders Co HandiVan, Wahoo, NE	1	2	3
Guide Rock, NE	1	2	3
Sidney, NE	1	2	3
Tecumseh HandiBus, Tecumseh, NE	1	2	3
Papillion, NE	1	2	3
Columbus, NE	1	2	3
Fremont, NE	2	2	3
Ogallala, NE	2	2	3
Box Butte Co, Alliance, NE	2	2	3
Central City MiniBus, Central City, NE	2	2	3
Bellevue, NE	2	2	3
North Platte, NE	3	2	3
Sheridan Co PTS, Chadron, NE	3	2	3
Scotts Bluff Co Handi Bus, Gering, NE	8	2	3
Lincoln Co Trans, Caliente, NV	2	2	3
Las Vegas Transit, NV	25	2	3
Mechanicville, NY	1	2	3
Incorporated Village of Patchogue, NY	1	2	3
Albany TS, NY	3	2	3
Spring Valley Jitney Bus, NY	3	2	3
Greater Glenn Falls TS, NY	6	2	3
Clarkstown, NY	8	2	3
Chemung Co TS, NY	25	2	3
Wilmington City Cab Serv, Wilmington, OH	2	2	3
Sidney,OH	3	2	3
Wooster City TS, OH	5	2	3
Steubenville, OH	5	2	3
Chillicothe, OH	6	2	3
Pickaway Co Comm, Circleville, OH	7	2	3
Marion, OH	8	2	3
Middletown, OH	10	2	3
Allen Co RTA, Lima, OH	12	2	3
Hamilton City Lines, Hamilton, OH	17	2	3
Clermont Co TransBoard, Williamsburg, OH	23	2	3
Laketran, Painesville, OH	24	2	3
Call-A-Ride Pub Trans, Ada, OK	4	2	3
Carter Co PTS, Ardmore, OK	4	2	3
Woodburn TS, OR	2	2	3
Basin TS TD, Klamath Falls, OR	5	2	3
Rogue Valley TD, Medford, OR	15	2	3
DuFAST, DuBois, PA	5	2	3

Agency Name	No. of Veh	Contract? 1=yes 2=no	Amount 1=all 2=some 3=none
New Castle Area TA, PA	13	2	3
York Area TA, PA	20	2	3
Williams Port TB, PA	21	2	3
Berkeley Co PTS, Moncks Corner, SC	7	2	3
Sanborn Co Rural Bus, Woonsocket, SD	1	2	3
Cheyenne River Sioux Tribe, Eagle Butte, SD	1	2	3
Bristol Trans, TN	5	2	3
Johnson City TS, TN	11	2	3
Gatlinburg, TN	12	2	3
Jackson TA, TN	12	2	3
Wichita Falls, TX	9	2	3
Port Arthur Transit, TX	10	2	3
San Angelo TS, TX	11	2	3
MIDTRAN, Midland, TX	15	2	3
Abilene TS, TX	17	2	3
Amarillo, TX	20	2	3
Waco TS, TX	20	2	3
James City Co, Williamsburg, VA	6	2	3
Danville, VA	10	2	3
Winchester, VA	11	2	3
Petersburg, VA	14	2	3
Charlottesville, VA	14	2	3
Staunton TC, VA	16	2	3
Central W Virginia TA, Clarksburg, VA	17	2	3
Dept Parking & Trans Serv, Charlottesville, VA	20	2	3
JAUNT Inc, Charlottesville, VA	21	2	3
Blacksburg Trans, VA	24	2	3
Harrisonburg, VA	25	2	3
White River TS, Randolph, VT	11	2	3
Marble Valley RTD, Rutland, VT	17	2	3
Merrill-Go-Round, Merrill, WI	4	2	3
Round Tower TS, Rice Lake, WI	5	2	3
Stevens Point TS, WI	6	2	3
Manitowoc TS, WI	7	2	3
Beloit TS, WI	10	2	3
Fond du Lac Area TS, WI	12	2	3
Eau Claire TS, WI	20	2	3
Janesville TS, WI	22	2	3
Wausau Area TS, Wausau, WI	24	2	3
Eastern Panhandle TA, Martinsburg, WV	8	2	3
Gateway RTA, Bluefield, WV	8	2	3
Preston Co RTA, Kingwood, WV	9	2	3
Mid-Ohio Valley TA, Parkersburg, WV	10	2	3
Potomac Valley TA, Petersburg, WV	20	2	3
Morgantown Trans, WV	20	2	3
Wheeling-Ohio Valley RTA, Wheeling, WV	21	2	3
Ohio Valley RTA, Wheeling, WV	21	2	3

Public Agencies with 26-50 Vehicles

Agency Name	No. of Veh	Contract? 1=yes 2=no	Amount 1=all 2=some 3=none
Sonoma Co Trans, Santa Rosa, CA	26	1	1
Pomona Valley Comm Services, LaVerne, CA	29	1	1
Alemeda, CA	30	1	1
Butte Co, Oroville, CA	34	1	1
Modesto, CA	35	1	1
Vallejo, CA	45	1	1
San Diego Co, CA	47	1	1
No East Trans, Waterbury, CT	33	1	1
Delaware Admin For Spec Trans, Dover, DE	48	1	1
Johnson Co TD, Olathe, KS	32	1	1
Fitchburg-Montachusett RTA, Fitchburg, MA	28	1	1
Lowell RTA, MA	50	1	1
Berrien Co DART, Berrien, MI	30	1	1
Mid-America Regional Council, Kansas City, MO	50	1	1
Greensboro, NC	30	1	1
Beaumont, TX	28	1	1
Lubbock, TX	41	1	1
Torrance, CA	31	1	2
Mendocino TA, Ukiah, CA	33	1	2
Bay Area Rapid Trans Distr, Oakland, CA	50	1	2
Colorado Springs, CO	50	1	2
Iowa City Trans, IA	29	1	2
Springfield MTD, IL	42	1	2
Metro Mobility, Minneapolis, MN	37	1	2
Durham, NC	40	1	2
Broom Co Trans, NY	45	1	2
Yakima Trans, WA	35	1	2
Tri-State TA, Huntington, WV	28	1	2
Cedar Rapids, IA	39	1	3
Decatur PTS, IL	49	1	3
Chapel Hill, NC	33	1	3
Centre Area TA, PA	30	1	3
Montgomery Area TS, AL	28	2	3
Mobile TA, AL	42	2	3
Phoenix Human Res Dept, Phoenix, AZ	36	2	3
Culver City Municipal Bus Lines, CA	28	2	3
Norwalk TS, CA	29	2	3
Paratransit Inc CTSA, Sacramento, CA	29	2	3
Torrance, CA	30	2	3
Marin Co, CA	34	2	3
SunLine Transit Agency, PalmSprings, CA	38	2	3
South Coast Area Trans, Oxnard, CA	40	2	3
Gardena Municipal Bus Lines, CA	46	2	3
National City, CA	47	2	3
Montebello Municipal Bus Lines, CA	49	2	3
Greeley, CO	26	2	3
SEAT TD, Norwich, CT	31	2	3
Stamford Conn Trans, CT	33	2	3

Agency Name	No. of Veh	Contract? 1=yes 2=no	Amount 1=all 2=some 3=none
Escambia Co, FL	27	2	3
Sarasota Co Area Trans, Sarasota, FL	27	2	3
Brevard TA, Brevard, FL	30	2	3
East Volusia TA, Daytona Beach, FL	37	2	3
Manatee Co, Bradenton, FL	41	2	3
Gainesville RTS, Gainesville, FL	45	2	3
Metro TA, Waterloo, IA	29	2	3
Ames TA, Ames, IA	33	2	3
Boise, ID	26	2	3
Rockford MTD, IL	40	2	3
Muncie Public Trans Corp, Muncie, IN	28	2	3
Topeka MTA, KS	33	2	3
Alexandria TS, LA	30	2	3
Ocean City, MD	37	2	3
Isabella Co TC, Mt Pleasant, MI	30	2	3
Jackson PTC, MI	33	2	3
Saginaw TS, MI	43	2	3
City Utilities' TS, Springfield, MO	42	2	3
Raleigh, NC	40	2	3
Asheville, NC	45	2	3
Manchester TA, NH	34	2	3
Atlantic Co TA, NJ	49	2	3
Regional TC/Citifare, Reno, NV	37	2	3
Utica TA, NY	40	2	3
Canton RTA, OH	49	2	3
Cambria Co TA, Johnstown, PA	29	2	3
Altoona MTA, PA	31	2	3
Red Rose TA, Lancaster, PA	38	2	3
Lackawanna Co TS, PA	40	2	3
Santee Waterdee RTA, Sumpter, SC	43	2	3
Mid-Cumberland Hum Res Ag, Nashville, TN	27	2	3
Upper Cumberland Hum Res Ag, Algood, TN	41	2	3
Brownsville, TX	26	2	3
Laredo, TX	26	2	3
Corpus Christi TS, TX	36	2	3
Greater Lynchburg TC, Lynchburg, VA	26	2	3
Greater Roanoke TC, Roanoke, VA	35	2	3
Chittenden Co TA, Berlington, VT	28	2	3
Oshkosh TS, WI	26	2	3
Green Bay TS, WI	29	2	3
LaCrosse Municipal Trans Utility, WI	29	2	3
Kenosha TS, WI	30	2	3
Sheboygan TS, WI	34	2	3
Valley Trans, Appleton, WI	38	2	3
Belle Urban System, Racine, WI	39	2	3
Mountain TA, Summerville, WY	26	2	3

Public Agencies with 51-100 Veh

Agency Name	No. of Veh	Contract? 1=yes 2=no	Amount 1=all 2=some 3=none
Anchorage, AK	55	1	1
Delaware TA, Dover, DE	64	1	1
Brockton Area TA, Brockton, MA	79	1	1
Berkshire RTA, Pittsfield, MA	95	1	1
Suffolk Co, NY	70	1	1
Anchorage TS, AK	90	1	2
Stockton MTD, CA	77	1	2
N San Diego Co Trans Dev Bd, CA	86	1	2
Delaware Admin Reg Trans, DE	100	1	2
Taltran, Tallahassee, FL	61	1	2
South Bend PT, IA	59	1	2
Wichita MTA, KS	65	1	2
Shreveport TS, LA	60	1	2
Worcester RTA, MA	80	1	2
Merrimac Valley RTA, Haverhill, MA	80	1	2
Worcester RTA, MA	89	1	2
Ann Arbor TA, MI	62	1	2
Flint MTA, MI	70	1	2
Kalamazoo Metro TS, MI	73	1	2
Capital Area TA, Lansing, MI	93	1	2
Lincoln TS, NE	77	1	2
Lane Co MTD, Eugine, OR	75	1	2
Austin TS, TX	99	1	2
Clark Co PTBA, Vancouver, WA	99	1	2
Lexington TA, KY	51	1	3
Jefferson Parish, Metairie, LA	76	1	3
Erie MTA, PA	77	1	3
Clark Co PTBA, Vancouver, WA	99	1	3
Central Arkansas Trans, Little Rock, AR	72	2	3
Monterey-Salinas Trans, CA	52	2	3
Santa Barbara MTD, CA	65	2	3
Central Costa Co TA, Walnut Creek, CA	76	2	3
Santa Cruz MTD, CA	95	2	3
Greater Bridgeport TD, CT	66	2	3
Tri Co. Trans, Orlando,FL	65	2	3
Palm Bch Co TA, Palm Beach, FL	83	2	3
Columbus TS, GA	56	2	3
Champaign-Urbana MTD, Urbana, IL	51	2	3
Rock Island Co Metro MTS, Rock Island, IL	55	2	3
Greater Peoria MTD, Peoria, IL	57	2	3
Ft Wayne Public Trans Corp, Ft Wayne, IN	68	2	3
No Kentucky TA, Ft Wright, KY	98	2	3
New Bedford SERTA, New Bedford, MA	96	2	3
Flint, MI	75	2	3
Duluth TA, MN	95	2	3
Jackson TS, MS	53	2	3
Winston-Salem TA, NC	77	2	3
Western Reserve TA, Youngstown, OH	53	2	3

Agency Name	No. of Veh	Contract? 1=yes 2=no	Amount 1=all 2=some 3=none
Salem Area MTD, Salem, OR	52	2	3
Berks Area Reading TA, Reading, PA	58	2	3
Luzerne Co TA, Wilkes-Barre, PA	64	2	3
Capital Area Trans, Harrisburg, PA	71	2	3
LANTA, Northampton, PA	78	2	3
PeeDee TA, Florence, SC	75	2	3
K-Trans/Knoxville TA, Knoxville, TN	56	2	3
Chattanooga Area RTA, TN	69	2	3
Kanawba Valley RTA, Charleston, WV	70	2	3

Public Agencies with 101-250 Veh

Agency Name	No. of Veh	Contract? 1=yes 2=no	Amount 1=all 2=some 3=none
Outreach & Escort, Inc, San Jose, CA	155	1	1
Pioneer Valley TA, Springfield, MA	243	1	1
Charlotte DOT, NC	116	1	1
Tucson, AZ	191	1	2
Omnitrans, San Bernadino, CA	157	1	2
Long Beach Trans, CA	199	1	2
Des Moines Metro TA, IA	118	1	2
Omaha TA, NE	214	1	2
SunTran, Albequerque, NM	107	1	2
Central NY RTA, NY	191	1	2
Metro RTA, Akron, OH	124	1	2
Nashville MTA, TN	157	1	2
Memphis Area TA, Memphis, TN	234	1	2
El Paso, TX	139	1	2
Peninsula TDC, Hampton, VA	110	1	2
Tidewater RT, VA	230	1	2
Grand Rapids Area TA, Grand Rapids, MI	108	1	3
Rochester Genesee RTA, NY	211	1	3
Capital District TA, NY	220	1	3
Ft Worth TA, TX	144	1	3
Birmingham-Jefferson Co TA, AL	165	2	3
Fresno, CA	103	2	3
Santa Monica Municipal Bus Lines, CA	136	2	3
Sacremento RTS, CA	183	2	3
New Haven Conn Trans, CT	126	2	3
Pinellas Suncoast TA, Clearwater, FL	154	2	3
Hillsborough Area RTA, Tampa, FL	167	2	3
Broward Co. Mass Trans Div, Ft Lauderdale, FL	198	2	3
Jacksonville TA, Jacksonville, FL	215	2	3
Bi-State Metro Dev Distr, St Louis, MO	145	2	3
Gary PTC, IN	110	2	3
Bay Metro Transit, Bay City, MI	102	2	3
Kansas City Area TA, Kansas City, MO	221	2	3
Toledo Area RTA, OH	222	2	3
Miami Valley RTA, Dayton, OH	226	2	3
Tulsa Trans, OK	112	2	3
So. Carolina Elec & Gas Co, Columbia, SC	123	2	3
Greater Richmond TC, VA	200	2	3
Madison Metro, WI	194	2	3

Public Agencies with 251-500 Veh

Agency Name	No. of Veh	Contract? 1=yes 2=no	Amount 1=all 2=some 3=none
Phoenix PTD, AZ	351	1	1
Honolulu DOT, HI	480	1	1
Golden Gate Bridge TD, San Francisco, CA	275	1	2
San Mateo Co TD, Burlingame, CA	296	1	2
Southwest Ohio RTA, Cincinnati, OH	379	1	2
VIA Metro Trans, San Antonio, TX	477	1	2
Utah TA, Salt Lake City, UT	273	1	2
Santa Clara Co TD, CA	398	2	3
Indianapolis PTC, IN	251	2	3
River City TA, Louisville, KY	311	2	3
SEMTA, Detroit, MI	432	2	3
Metro Suburban Bus Auth, NY	400	2	3
Niagara Frontier MTS Inc, NY	473	2	3

Public Agencies with 501-1000 Veh

Agency Name	No. of Veh	Contract? 1=yes 2=no	Amount 1=all 2=some 3=none
OCTD, CA	682	1	2
Metro-Dade Trans, Miami, FL	717	1	2
New Orleans RTA, LA	536	1	2
Metro TA, Houston, TX	800	1	2
Tri-Met, Portland, OR	724	1	3
AC Trans, Oakland, CA	800	2	3
MARTA, Atlanta, GA	757	2	3
Mass Trans Admin, State of MD	889	2	3
Detroit DOT, MI	754	2	3
Bi-State Development Agency, St Louis, MO	902	2	3
Dallas TS, TX	811	2	3
Milwaukee Co TS, Milwaukee, WI	594	2	3

Public Agencies with more than 1000 Veh

Agency Name	No. of Veh	Contract? 1=yes 2=no	Amount 1=all 2=some 3=none
New Jersey Trans, NJ	1149	1	2
Greater Cleveland RTA, OH	1004	1	2
Port Authority of Allegheny Co, PA	1576	1	2
Southeastern Penn TA, PA	2580	1	2
Metro, Seattle, WA	1062	1	2
Twin Cities/Metro TC, Minneapolis, MN	1120	1	3
San Francisco Muni, San Francisco, CA	1110	2	3
So Cal RTD, Los Angeles, CA	3426	2	3
Washington Metro Area TA, Washington,DC	1648	2	3
New York CTA, Brooklyn, NY	4573	2	3

APPENDIX B

UNIVERSITY OF CALIFORNIA, IRVINE

INSTITUTE OF TRANSPORTATION STUDIES
IRVINE, CALIFORNIA 92717

TRANSIT CONTRACTING SURVEY

Name of Public Agency (Sponsor) _____

Type of Organization ☐Transit Agency ☐ City Govt. ☐ County Govt. ☐ Other _____

Contact Person _____ Phone _____

CHECK ONE BOX FOR EACH TYPE OF SERVICE

Type Service	Provided by Public Operator	Provided by Private Contractor	Not Provided
Fixed Route, Regular	☐	☐	☐
Weekend/Evening	☐	☐	☐
Commuter Service Only	☐	☐	☐
Demand responsive, General Public	☐	☐	☐
Demand Responsive, Specialized	☐	☐	☐
Other _____	☐	☐	☐

PROVIDE INFORMATION FOR THE ENTIRE SYSTEM (FY 83-84)

Vehicles _____ Annual Operating Costs _____ Annual Revenue Veh. Hrs. _____

Annual # Pax _____ Annual Fare Revenues _____ Annual Revenue Veh. Mi. _____

Source of Funds: ☐ Local ☐ State ☐ Federal ☐ Other _____

IF YOU CONTRACT FOR SERVICES PLEASE COMPLETE THE REST OF THIS SURVEY

How long has your agency been involved in contracting for transportation services? _____

ANSWER FOR EACH SERVICE WHICH IS CONTRACTED (FY 83-84)

Type Service	# of Veh Owned by:	Annual Operating Costs*	Annual Revenue Veh Hrs	Annual Revenue Veh Mi	Annual # Pax	Annual Fare Revenues
Fixed Route, Regular	____ ☐ Sponsor ☐ Contractor	☐Yes ☐No				
Weekend/Evening	____ ☐ Sponsor ☐ Contractor	☐Yes ☐No				
Commuter Service Only	____ ☐ Sponsor ☐ Contractor	☐Yes ☐No				
DRT, General Public	____ ☐ Sponsor ☐ Contractor	☐Yes ☐No				
DRT, Specialized	____ ☐ Sponsor ☐ Contractor	☐Yes ☐No				
Other _____	____ ☐ Sponsor ☐ Contractor	☐Yes ☐No				

*DOES THIS INCLUDE VEHICLE CAPITAL COSTS? (Check Yes or No)

Contractor's Name and Phone	Address	Type Service Provided	Contract Selection Process	Length of Contract
_____	_____	_____	☐ Competitive Bid	_____
( ) - _____	_____		☐ Negotiation	
			☐ Renewal	
		_____	☐ Competitive Bid	_____