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16. Abstract This report updates prior national research related to the private-for-hire vehicle (PHV) industry. The first section of the report provides an overview of the PHV industry in Texas and the perspectives of transit providers, both within Texas and nationally, on the use of these businesses in operating transit services. The second section of the report contains five Texas case studies where PHV companies are providing demand - responsive, circulator, fixed-route replacement, and medical transportation services in support of public transit operators. The final section of the report provides guidelines for the effective incorporation of contracted services using PHV companies, with a focus on addressing issues raised by public agencies as documented in the first section.					
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# **THE ROLE OF PRIVATE-FOR-HIRE VEHICLES IN TRANSIT IN TEXAS**

by

Jeffrey C. Arndt  
Research Scientist  
Texas Transportation Institute

and

Linda K. Cherrington  
Research Scientist  
Texas Transportation Institute

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The Texas A&M University System  
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## **DISCLAIMER**

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## INTRODUCTION AND PURPOSE

The Texas State Transportation Code's new Chapter 461 focuses on maximizing the benefits of the State's investment in public transportation through the coordination of services. In response, the Texas Transportation Commission, under the leadership of Commissioner Hope Andrade, established the Regional Planning and Public Transportation Study Group. The Study Group recommended that each region of the state develop and submit a regional coordinated public transportation service plan to the Commission by December 2006.

Private-for-hire vehicles (PHVs) are an important existing and potential component of Texas' public transportation mix. Recent national research indicates that PHVs are a cost-effective and possibly underused method of service delivery. This research project builds on the national study and examines the PHV industry within Texas and the role of PHVs in a coordinated public transportation system.

This project report is divided into three sections. **Section 1** describes information outreach efforts with both the PHV industry and with public transportation providers. The PHV industry results are compared with national PHV industry research conducted in Transit Cooperative Research Program (TCRP) Report 75 – The Role of the Private-for-Hire Vehicle Industry in Public Transit to profile the size and configuration of that industry in Texas (1). Further, **Section 1** contains findings of the combined outreach effort in identifying opportunities and challenges regarding use of PHVs in transit.

**Section 2** includes case studies of PHV use in public transportation in Texas. Case studies include examples of PHVs providing Americans with Disabilities Act (ADA) mandated paratransit; general public paratransit; feeder/distribution services to/from rail stations; overnight bus service substitution; and medical transportation. These studies include information on procurement and contracting practices as well as lessons learned.

**Section 3** contains guidelines for the use of PHVs in public transit. Guidelines include circumstances under which PHVs are a likely cost-effective alternative to consider, and procurement/contracting considerations.



## **SECTION 1. INFORMATION OUTREACH EFFORTS AND RESULTS**

### **WHAT ARE PRIVATE-FOR-HIRE VEHICLE SERVICES?**

Private-for-hire vehicle (PHV) services, as defined in TCRP Report 75, are an “assortment of private services . . . . primarily taxicabs, bus shuttles, limousines and jitneys are also included” (1). Their primary characteristics are as follows:

- They provide surface transportation for passengers.
- They are owned by private, for-profit firms.
- They generate revenues through fares, scrip, or contracts.

The types of services commonly considered PHV include:

- taxicabs,
- shuttles,
- limousines,
- jitneys,
- liveries/car services,
- executive sedans,
- ambulettes, and
- children’s transportation services.

Note that these services may be defined differently in different jurisdictions. For example, “jitney” is defined in TCRP Report 75 as “a vehicle operating on a fixed-route, nonscheduled basis.” Houston METRO implemented a pilot jitney service project with vehicles operating in a route-deviation mode within a fixed distance from an existing transit corridor.

### **INFORMATION GATHERING METHODOLOGY**

#### **Data Collection Instrument**

This portion of the research project was designed to emulate and expand upon the national research project conducted for TCRP. Therefore, the baseline data collection instrument was the one administered in late 1998/early 1999 for TCRP Report 75. This baseline document was modified to incorporate additional items of interest suggested by the project committee and a pre-test by a major taxicab company in Houston. Changes from the 1998 instrument included the following:

- Inclusion of “shuttle,” “circulator,” and “public contracted” as additional service types.
- Inclusion of “driver training” and “drug/alcohol testing” as potential areas of governmental regulation.
- Inclusion of “mobile data terminal” as a dispatch communication option.

- Inclusion of “social service agency” as an optional governmental agency with whom the PHV provider may contract.
- Request of separate tabulation of fleet with respect to ADA compliance.
- Inclusion of “reduced fare for disabled” as a fare system option.
- Addition of questions regarding the types of public transit services provided and interest in partnering with public transportation providers.
- Request for responders to list barriers to working with public transportation providers, and additional clarifying comments.

The data collection instrument was entered into Survey Monkey, a commercial web-based service that provides for online collection of data. The online survey was designed so that sections of questions that could be deemed not applicable based upon a prior response were skipped. For example, if a respondent answered the question *Does your agency operate taxicabs?* “NO,” then the detailed questions regarding the use of taxicabs were skipped. Note that the qualifying question (in *italics* in the example above) appeared only in the online instrument. The printed version contained a header specifying the reference type of vehicle associated with each set of questions.

### **Dissemination of the Instrument**

The Internet was the fundamental data collection instrument dissemination media. The web-based survey was designed to allow respondents to complete the instrument quickly and efficiently.

Lists of PHV companies were acquired through the International Taxicab and Livery Association (ITLA). The ITLA is a trade organization, and membership is elective. Therefore, a mailing list was also purchased from American Business Information, Inc. (ABI), a step also taken in the national research. Businesses in the ABI database are assigned primary and secondary business category codes. The following codes, in either a primary or secondary designation, were used to generate the source list:

- airport transportation,
- shuttle service,
- handicapped transportation,
- limousine service,
- transportation sharing service,
- transportation service,
- taxicabs,
- children’s transportation,
- buses – charter, and
- local passenger transportation.

The national research did not gather ABI data on all potential PHV operators. The only significant category omitted in that past effort was taxicabs. All companies contained in the ITLA list were also contained in the ABI list.

The source list for Texas contained 1658 entries of which 1529 were potentially PHV operators as their primary business. A review of the businesses listing a PHV function as a secondary function only revealed that such businesses were not likely part of the market of interest (for example, funeral homes listed “transportation service” as a secondary function). Therefore, the baseline list of organizations included only the 1529 companies listing a PHV function as their primary business function.

Several business function categories had marginal markets (less than 2 percent of the state’s total). Therefore, the categories of shuttle service, handicapped transportation, transportation sharing service, local passenger transportation, children’s transportation and charter buses were combined into a single “other” category. “Other” businesses represented 3.6 percent of all businesses.

Company mailing addresses were similarly concentrated. Any locations housing fewer than 2 percent of all businesses were also rolled into an “other” category. Businesses located in “other” locations represented 18.9 percent of all businesses.

Table 1-1 displays the distribution of PHV companies in the baseline source list by company type and geographic location. Urban areas with greater than 1 percent of the total market share are listed individually.

**Table 1-1. Baseline PHV Industry Source List: Number of Companies.**

	<b>Airport Transportation</b>	<b>Limousine</b>	<b>Transportation Services</b>	<b>Taxicab</b>	<b>Other</b>	<b>Total</b>	<b>%</b>
Austin/San Marcos	4	50	11	12	4	81	5.3%
Brownsville/Harlingen	2	5	0	34	0	41	2.7%
Dallas	36	223	75	54	12	400	26.2%
El Paso	1	13	27	8	5	54	3.5%
Fort Worth/Arlington	10	48	22	9	5	94	6.1%
Houston/Galveston	30	225	64	75	17	411	26.9%
Laredo	0	2	22	9	0	33	2.2%
McAllen area	2	2	8	47	2	61	4.0%
San Antonio	3	38	5	16	3	65	4.3%
Other	13	87	68	114	7	289	18.9%
Total	101	693	302	378	55	1529	100%
Percentage (%)	6.6%	45.3%	19.8%	24.7%	3.6%	100%	

It is important to note that these data almost certainly overstate the number of operators in the state. As noted in the national research, PHV operators often use multiple business names. The mailing list included 270 instances of agencies showing the same owner, address, or telephone number, indicating potential double counting of those providers. Thus, the number of PHV companies in Texas most likely falls within a range of 1400 to 1500 companies.

The fluidity of the industry that was noted in the national research also surfaced in this effort. Each of the 1529 companies in the baseline source list received a letter explaining the purpose of

the research and providing the website address of the data collection instrument. Of the 1529 letters mailed, 319 were returned or 20.9 percent. The return rate on the national mailing was 7.3 percent; however, the national source list contained fewer companies gleaned from the ABI listing, which is likely more vulnerable to containing businesses that have dissolved than a listing from trade organizations.

There were three additional outreach efforts. First, a portion of the businesses on the source list also had website listings. For those companies, a copy of the mailing including a hot link to the data collection instrument was sent to a primary contact listed on the business’s website (if available).

Second, ABI also offers e-mail contact opportunity. Companies on their listing may opt-in to their e-mail blast system. ABI does not provide the purchaser the e-mail listing but instead blasts the message itself to those companies in order to preserve confidentiality of their actual e-mail address. A total of 236 companies were contacted in the e-mail blast, with only 9 e-mails returned as undeliverable. Eighty-one (81) companies opened the e-mail and 16 companies clicked on the link. Based upon the time of receipt of information, an estimated 10 companies completed the instrument as a result of this process.

Finally, companies were contacted by telephone, with an offer to e-mail the link to the web-based instrument or to mail a printed version. All companies in the major markets (greater than 5 percent market share) were contacted, with companies in the remaining markets contacted at random.

These combined efforts generated 59 responses or 4.9 percent of companies receiving the mailing. In the prior national research effort, 30 Texas companies responded to their survey, with a median response rate of 1.1 percent and a mean response rate of 2.0 percent.

Tables 1-2 and 1-3 display the number of companies in the baseline mailing, the mailing net of returned envelopes, and responses arrayed by business type and geographic area, respectively.

**Table 1-2. PHV Companies: Percentage Distribution by Business Type.**

MODE	Percentage of Businesses providing....		
	Baseline = 1529	Net = 1210	Responses = 59
Airport Transportation	6.6%	6.0%	5.1%
Limousine Service	45.3%	49.3%	50.8%
Transportation Service	19.8%	18.4%	15.3%
Taxicab	24.7%	23.5%	20.3%
Other	3.6%	2.8%	8.5%

Looking at service mode (Table 1-2), the percentage distribution by mode did not alter substantially moving from the baseline list to the list net of returned mailings. Actual responses were somewhat stronger from the “other” category, although that group was still substantially smaller than the limousine and taxicab industries. From a mode perspective, the responses appear to reasonably represent the modal distribution in the state.



**Table 1-3. PHV Companies: Percentage Distribution by Geographic Area.**

GEOGRAPHIC AREA	Percentage of Businesses in....		
	Baseline = 1529	Net = 1210	Responses = 59
Austin/San Marcos	5.3%	5.8%	3.4%
Brownsville/Harlingen	2.7%	2.7%	0.0%
Dallas	26.2%	28.1%	13.6%
El Paso	3.5%	4.0%	3.4%
Fort Worth/Arlington	6.1%	6.9%	1.7%
Houston/Galveston	26.9%	28.1%	13.6%
Laredo	2.2%	2.2%	1.7%
McAllen area	4.0%	4.0%	0.0%
San Antonio	4.3%	4.3%	6.8%
Other	18.9%	13.8%	55.9%

Geographic distribution, displayed in [Table 1-3](#), did not alter appreciably between the baseline mailing and the net list. The returned mail rate was higher in the “other” category, reflecting perhaps greater fluidity in the PHV sector in smaller urban areas. However, responses from those “other” areas were very strong; while representing only 13.8 percent of those receiving the mailing, they represented almost 56 percent of responses. The two largest markets of Dallas and Houston, containing 56.2 percent of net PHV businesses, generated 27.2 percent of responses. All PHV companies on the net mailing list in both Dallas and Houston were notified by telephone, while companies in the “other” markets were called on a random basis. This process might have led to an over-representation of the major markets; instead, those markets are under-represented.

## SUMMARY OF RESULTS

A summary of the results of the data collection on PHV organizations follows. For the majority of summary data, service types are collapsed into three summary categories, consistent with the data reporting in TCRP Report 75 (*I*). In any comparison of the current Texas sample and the TCRP Report 75 sample, the following limitations must be considered:

- The Texas sample is much smaller than the national sample, and both are relatively small percentage samples of total markets. It is difficult to determine the degree to which these data are fully representative of the total PHV industry.
- The national data were collected in late 1998, while the Texas data were collected in 2006. Therefore, differences may reflect industry changes over time or differences between PHV providers in Texas and the average of the nation.

## FLEET SIZE

Table 1-4 displays the number of vehicles operated by service type.

**Table 1-4. Number of Vehicles Operated by Service Type.**

<b>Service Type</b>	<b>Sedans</b>	<b>Mini-Vans</b>	<b>Vans</b>	<b>Mini-Buses</b>	<b>Buses</b>	<b>Ave. Vehicle</b>
Taxicab	456	470	17	0	5	79
Limousine/Executive Sedan	303	305	16	5	5	21
Other	438	438	224	178	236	89
All PHVs	1197	1213	257	183	246	
% of Total PHVs	39%	39%	8%	6%	8%	

The 59 responding PHV agencies reported operating 3096 total vehicles, for an overall average of 52.5 vehicles per operator. This average is relatively comparable to the national survey results, but far exceeds historical estimates generated for the taxicab industry (26.9 vehicles per agency in a 1986 study and 17.8 vehicles per agency in a 1992 study (1)). Therefore, as with the TCRP work, it is difficult to estimate the size of the entire PHV fleet in the state.

To estimate the PHV fleet conservatively, the lowest average taxi fleet size (1992 study) can be applied. Using this extremely conservative approach and assuming 1400 PHV firms in Texas, the state has a fleet of at least 16,400 private-for-hire vehicles. If the average fleet size of the Texas respondents is truly reflective of the overall market, the state's fleet would be estimated at 73,500 PHVs.

The 1998 national survey indicated that about 75 percent of PHV fleets were comprised of sedans. The Texas sample indicates about an even split between sedans and mini-vans. This increase in use of mini-vans may reflect an increased move toward accessible vehicles over the time since the national survey was conducted.

## ORGANIZATIONAL STRUCTURE

Table 1-5 displays the organizational structure of the responding PHV companies. Private corporate ownership is the predominant form of ownership except for limousine services, which are predominantly sole proprietorships. The results for limousine services in the Texas data differ from the national survey results where private corporate ownership accounted for nearly 70 percent of organizations, and sole proprietorships accounted for 23 percent (almost the inverse of the Texas results).

**Table 1-5. Percentage Distribution of Organizational Structure of the Responding PHV Companies, by Service Type.**

<b>Organizational Form</b>	<b>Taxicabs</b>	<b>Limousines</b>	<b>Other</b>	<b>All</b>
Private Corporation	66.7	27.8	61.1	54.3
Public Corporation	22.2	0.0	5.6	3.7
Partnership	0.0	5.6	13	12.3
Association	0.0	5.6	7.4	6.1
Cooperative	0.0	5.6	5.6	4.9
Sole Proprietorship	22.2	61.1	33.3	38.2

## CONTRACTING

Tables 1-6 and 1-7 display data related to PHV companies' contracts for service with private and public organizations. Each table represents the percentage of respondents having any service contract with each entity type.

**Table 1-6. PHV Contracts with Private Entities.**

	<b>Company</b>	<b>School</b>	<b>Hospital</b>	<b>Delivery</b>	<b>Hotel</b>	<b>Citizen</b>
Taxicab	73%	36%	73%	45%	45%	73%
Limousine/ Executive Sedan	65%	26%	30%	13%	48%	74%
Other	64%	39%	41%	24%	45%	68%

**Table 1-7. PHV Contracts with Public Entities.**

	<b>Transit</b>	<b>School</b>	<b>Hospital</b>	<b>Medicaid</b>	<b>Local Gov't.</b>	<b>Social Service</b>
Taxicab	50%	38%	60%	88%	75%	88%
Limousine/ Executive Sedan	30%	50%	39%	30%	70%	50%
Other	25%	46%	25%	29%	46%	40%

## COMMUNICATION

Table 1-8 displays the types of dispatching system and infrastructure reported in the 2006 Texas PHV data compared to the national data collected in 1998. Service categories have been collapsed so that the 2006 data can be directly compared to the summary 1998 data, which was tabulated across three service types — taxicab, limousine, and other. Note that individual companies may make use of multiple types of equipment or systems.

**Table 1-8. Percentage Utilization of Types of Dispatching System and Infrastructure.**

Types of Dispatching	Taxicab		Limousine		Other		All	
	1998 National	2006 Texas	1998 National	2006 Texas	1998 National	2006 Texas	1998 National	2006 Texas
Two-way Radio	83.7%	64.7%	42.6%	100.0%	72.1%	69.1%	70.8%	76.2%
Computer-Aided	18.2%	23.5%	28.9%	22.2%	22.1%	25.9%	22.0%	26.7%
Fully Computerized	12.9%	17.6%	10.2%	33.3%	7.4%	12.3%	9.5%	15.8%
Pagers	13.5%	0	49.75	11.1%	36.9%	4.9%	32.1%	4.9%
Mobile Phones	27.8%	94.1%	71.6%	66.6%	50.0%	84.1%	46.9%	89.1%
None	4.4%	0	8.6%	0	4.8%	4.9%	5.3%	4.9%
GPS	4.4%	11.8%	2.5%	33.3%	3.0%	16.0%	3.3%	18.8%

The data in [Table 1-8](#) reflect the growth in the application of technology in all forms of transportation over the past five to 10 years. Mobile phones are now ubiquitous, while in 1998 under half of PHV companies used mobile phones for communication. Concurrently, the use of Global Positioning System (GPS) technology grew strongly across all sectors and particularly the limousine industry (where in-vehicle navigation systems are likely to be standard equipment).

## **THE TRANSIT INDUSTRY AND CONTRACTED SERVICES**

The use of PHVs in public transportation ultimately involved developing a service contract between the public or not-for-profit agency and the PHV company. The concept of service contracting has been controversial since transit moved from private to public ownership. At the federal level, the Department of Transportation promulgated regulations to encourage “privatization” of transit services during the Reagan administration, while the Clinton administration de-emphasized that concept. The legislature in Colorado mandated complete contracting of transit services in Denver and then moved back to requiring only 25 percent of services to be contracted. The April 2006 strike of public transit workers in Denver resulted in renewed discussion regarding the benefits of service contracting.

Within the varying and sometimes contradictory environment, the 1998 Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) directed the Transportation Research Board (TRB) of the National Academy of Sciences to study contracting for public transit services. TRB published the findings of the Committee for a Study of Contracting Out Transit Services in Special Report 258: Contracting for Bus and Demand-Responsive Transit Services – A Survey of U.S. Practice and Experience in 2001 (2).

One specific area of study was the surveying of general managers throughout the United States to assess their perspective on the reasons for and against service contracting. The national survey was complemented by a broader cross-section of constituents (Union officials, Board members) at five agencies.

General managers in 144 agencies that currently contract fixed-route or demand-responsive services were asked to categorize each of 10 reasons for contracting as a primary, important, minor, or irrelevant factor in making a decision to contract for service. [Table 1-9](#) displays the

percentage of respondents rating each reason as “primary” (since respondents could choose multiple reasons as “primary,” totals exceed 100 percent).

**Table 1-9. Primary Reasons General Managers Contract for Transportation Services.**

<b>Reason</b>	<b>% “primary”</b>
Start new service	44.0
Reduce cost	40.0
Improve cost-efficiency	34.7
Create competitive environment	17.3
Expand services	16.0
Board direction	14.7
Allow more flexibility	13.3
Provide higher-quality service	13.3
State mandate or law	4.0
Federal emphasis	2.7

Reasons for contracting services fell into three sets. Three reasons were viewed as “primary” most consistently – start new service, reduce cost, and improve cost-effectiveness. On the other hand, state and federal mandates or emphasis did not play a leading role in decisions to contract service.

An analogous process was used with general managers who decided to not contract service. In this case, they were requested to provide their rating of a number of reasons for not contracting, again using the categories of primary, important, minor, or irrelevant. [Table 1-10](#) displays the percentages of respondents rating each reason as “primary.”

**Table 1-10. Primary Reasons General Managers Do Not Contract for Transportation Services.**

<b>Reason</b>	<b>% “primary”</b>
Maintain control	37.9
Not cost-effective	25.3
No reason to change	20.7
Lack of qualified firms	12.6
Board direction	11.5
Union contract	8.0
Federal labor rule (Section 13c ) prevents	9.2
Too few bidders	8.0
Proposed bids too high	6.9
State labor law	0.0

Three top reasons emerged – maintain control, not cost-effective, and no reason to change. Interestingly, improving cost-effectiveness was one of the primary reasons to contract for service. Again, state laws have not been a primary reason for making decisions.

Lastly, general managers who were currently contracting for service were asked to provide advice to other agencies regarding service contracting. This was an open-ended question, as opposed to the multiple choice format employed in the previous two questions. Further, general managers could provide more than one suggestion. [Table 1-11](#) displays a summary of the advice provided and the corresponding percentage of responding general managers who offered that advice for responses made by more than 10 percent of general managers.

The top three pieces of advice reflect application of basic management principles to the contracting process, consistent with how in-house operation would be approached. Private providers or internal employees need to have expectations clearly communicated, performance levels defined and measured, and actual performance reviewed. The remaining suggestions relate to the processes used to select a contractor and types of contracting provisions.

**Table 1-11. Advice Offered by General Managers Who Contract for Transportation Services.**

<b>Advice</b>	<b>% offering</b>
Outline specific duties/responsibilities	46.2%
Specify performance requirements	40.2%
Monitor contract performance	32.5%
Scrutinize contractors beforehand	20.5%
Talk to other agencies	19.7%
Teamwork/communication with contractor	17.1%
Competitive procedure based on more than cost	16.2%
Combine rewards and penalties	15.4%
Have a clear mechanism for making changes	12.0%
Identify elements to contract re: agency goals	12.0%
Specify wage rates/cost escalation	11.1%
Penalty clauses/liquidated damages	10.3%
Begin with internal cost analysis	10.3%

## **TEXAS SERVICE PROVIDERS' PERSPECTIVE ON USE OF PHVS**

Data were collected from transit providers to establish their viewpoint on incorporation of PHVs in their service mix. A statewide planning process provided a vehicle for identifying providers and gathering information. The Texas Department of Transportation (TxDOT) initiated a statewide regional service coordination planning effort in 2005. Planning groups were defined by Council of Government areas, resulting in 24 groups. Each group then identified a lead agency to serve as a point of contact.

Part of the technical support provided by TxDOT to the regions was the preparation and dissemination of a data collection instrument to develop an inventory of the public transportation resources available in the state. A public transportation provider was defined as any entity that receives governmental subsidy to provide transportation. Thus, the inventory would not be limited to public transit operators only, but would include medical and social service agencies, public school districts, and other client-based organizations.

The data collection instrument contained questions about areas served, types of service, span of service, fleet configuration, ridership, and purchased/sold transportation. The instrument included two open-ended questions relating to the respondent's perspective on PHVs and their use in public transportation.

These data can be compared to the results of the national survey of general managers conducted by the special committee of TRB. The following differences should be noted and considered in comparing these two sets of data:

- The TRB survey was directed to general managers. The Texas inquiry to service providers may have been completed by a staff member other than the general manager. However, large transit properties typically forward these kinds of questionnaires to responsible staff in the subject area; thus, although the comments of the TRB survey are ascribed to general managers, the comments may reflect the experiences and opinions of other staff members as well.
- The TRB survey was distributed only within the traditional public transportation industry. The Texas inquiry was distributed among all providers reflecting the broadened definition used in the service coordination planning process.
- The TRB survey provided reasons and asked for ratings. The Texas data collection effort was open-ended, permitting full choice of reasons.
- The TRB survey was focused on the broad issue of contracting for service. The Texas data reflect responses specifically focused upon contracting with PHV providers for service.

The data collection period remained open through October 2006. During the period of April 2006 to August 2006, 230 providers responded. The following results reflect those respondents.

***What do you see as the benefits of using private-for-hire vehicles (e.g., vans, sedans, taxicabs) as a part of your service delivery mix?***

Respondents listed 51 benefits in response to this question. Responses clustered as follows:

Flexibility	18
Cost savings	14
Relieved of responsibility	7
Additional resource	5
Backup service	4
Faster/direct service	3

Flexibility is the most commonly ascribed benefit of use of PHVs. Respondents noted that PHVs could be used to provide service during times of low demand, in sparsely populated areas, and in times of peak demand. PHV operations were seen as more capable to respond to sudden changes and immediate needs. These responses mirror the "new service" high priority response from the national survey.

Cost savings was the second most commonly ascribed benefit of use of PHVs. Several respondents noted that the PHV industry offers a variety of vehicle types that can be used to

tailor services to specific markets or needs. Again, the national survey results echoed these results.

Seven respondents outside the traditional transit arena saw the potential to use PHV organizations as their transportation provider so that they could be relieved of the direct responsibility. The desire to transfer vehicle maintenance and administrative responsibilities was specifically mentioned.

The remaining respondent comments focused on opportunities. Five comments reflected simply the benefit of having additional resources available in the region. Four comments noted the potential to use PHVs specifically as a backup resource, covering service when a vehicle breaks down or handling excess demand. Three comments recognized that PHV-based service is likely to be designed to provide faster, more direct trips than fixed-route services.

There were 17 additional comments to this question regarding benefit. These comments generally all stated that there are no benefits of the use of PHVs in transit. Of the 17, one school district stated that they can only use yellow buses; two agencies stated that PHV service would be more costly; and one stated that PHV service was “not needed.” One respondent provided three disbenefits to the use of PHVs – drivers are untrained, companies present a liability problem, and drivers are not tested for alcohol/drug use.

The second open-ended question related to the challenges of use of contracted PHVs in transit.

***What do you see as the challenges of incorporating private-for-hire vehicles into your service delivery mix?***

Respondents provided 70 challenges to use of PHVs in transit. Responses clustered as follows:

Maintaining accountability/service quality	13
Client concerns	11
Funding	9
Coordination/oversight	7
No need/intent to change	5
Lack of area providers	4
Non-compliance with state standards	4
Potential for abuse	3
Lack of accessible vehicles	3
High cost per trip	3
Others	8

The top concern regarding incorporating PHVs into transit services related to control issues, a top priority issue in the national survey. Respondents were concerned about being able to maintain the PHV company’s accountability and, in turn, service quality. There was a stated belief that the PHV profit motive would potentially result in poor service.

A second major concern was voiced primarily by client-based providers. They felt that the special needs of their clients might not be met by PHV drivers. These needs included both the



ability of the driver to deal with client behavior and concerns regarding preserving client confidentiality. The TRB special committee survey was not directed at client-based providers and thus does not reflect this concern (2).

The next concern listed was funding, possibly viewed from the perspective that use of PHVs would be additive to current services. Concerns regarding the need to coordinate and oversee another service company in some respect reflect again the issue of control, as does concern regarding abuse.

Several other concerns are related to the resources of PHV companies. Some are concerned about the quantity of companies, some are concerned about the quantity of accessible vehicles, and some are concerned about the quality of drivers. Finally, companies are concerned that the cost per trip could be too high.

## **SUMMARY OF PERCEIVED BENEFITS AND CHALLENGES TO INCORPORATION OF PHVS IN PUBLIC TRANSPORTATION IN TEXAS**

Despite difference in methodologies and targets, there are points of commonality between the TRB national research on contracted transit services and the results of the questionnaire to Texas public transportation providers regarding the benefits and challenges to incorporation of PHVs into their service mix. Areas of benefits include the following:

- PHVs afford an opportunity to introduce new services cost-effectively, particularly when larger vehicles are not needed. These vehicles can be used flexibly to meet travel needs during hours or in areas when traditional transit may not be cost-effective.
- PHVs afford an opportunity to increase cost-effectiveness of existing services.
- Particularly among client-based organizations, PHV companies may allow agency staff to focus on other aspects of client services and leave transportation to a contractor.
- The use of PHVs may result in more direct and faster trips for customers compared to shared-ride services in larger capacity vehicles or fixed-route services.
- PHVs may also serve as a resource to assist agencies with demand overflow, emergency needs, or service backup.

Areas of concern expressed by Texas providers include the following:

- The agency no longer would have direct control of the PHV operations, which could lead to diminished service quality or abuse. A related concern relates to the cost and effort of administrative and quality assurance oversight associated with use of a private contractor.
- Client-based agencies believe that special needs of clients may not be adequately met by PHV drivers.
- PHV resource concerns include the lack of PHV companies, the lack of accessible equipment, and the lack of drivers meeting DOT standards.

The guidelines in [Section 3](#) include strategies to address these areas of concern reflecting the advice offered by general managers who have experience with contracted services.

## SECTION 2. CASE STUDIES IN THE USE OF PRIVATE-FOR-HIRE VEHICLES IN PROVIDING PUBLIC TRANSPORTATION IN TEXAS

### INTRODUCTION

[Section 1](#) contained a profile of the PHV industry in Texas and a summary of the perceived benefits and challenges of incorporating private-for-hire vehicles in the service mix of public transportation providers.

[Section 2](#) will examine actual experiences of Texas public transportation providers in use of private-for-hire vehicles. These case studies reflect PHV use in varying service modes and configurations as follows ([Table 2-1](#)).

**Table 2-1. PHV Use in Varying Service Modes and Configurations.**

<b>Contracting Agency</b>	<b>Service Type</b>	<b>Service Mode</b>	<b>PHV Company</b>
METRO, Houston	ADA paratransit	Demand-responsive	Greater Houston Transportation
Harris County	Paratransit for disadvantaged	Demand-responsive	Greater Houston Transportation; Liberty Cab; Pasadena Taxicab
The “T,” Fort Worth	Commuter rail shuttles (two)	Fixed-route	SuperShuttle; Yellow Cab
VIA, San Antonio	Late-night bus “replacement”	Demand-responsive	Yellow Checker Cab
TxDOT - Lubbock Transportation Service Center	Non-emergency medical	Demand-responsive	Sexton Enterprises (Yellow Cab)

PHV companies typically operate in a demand-responsive mode, sending vehicles in response to individual trip requests. Their predominant use in demand-responsive services is therefore consistent with their typical business model. However, they are not restricted to serving in that mode.

Further, the types of demand being met in demand-responsive mode vary. Greater Houston Transportation provides pre-scheduled trips for Houston METRO and immediate-demand trips for both Houston METRO and Harris County. In Lubbock, cabs meet pre-scheduled and same-day trips for eligible Medicaid clients. In San Antonio, anyone residing in a designated area can schedule a taxicab trip. The “T” in Fort Worth has used taxicabs to run a shuttle route to a commuter rail station.

# PHV CASE STUDY 1: METROLIFT SERVICES, METROPOLITAN TRANSIT AUTHORITY (METRO), HARRIS COUNTY

## METRO History and Background

In 1978, the voters of Houston and the western two-thirds of Harris County, Texas, voted to increase their area’s sales tax by 1 percent to fund the Metropolitan Transit Authority of Harris County. METRO assumed the assets of the City of Houston’s transit operation and became responsible for the region’s public transit services on January 1, 1979. At that time, existing services were contained primarily to the approximately 600 square miles within the City of Houston; the new METRO service area covers 1279 square miles (see Figure 2-1).

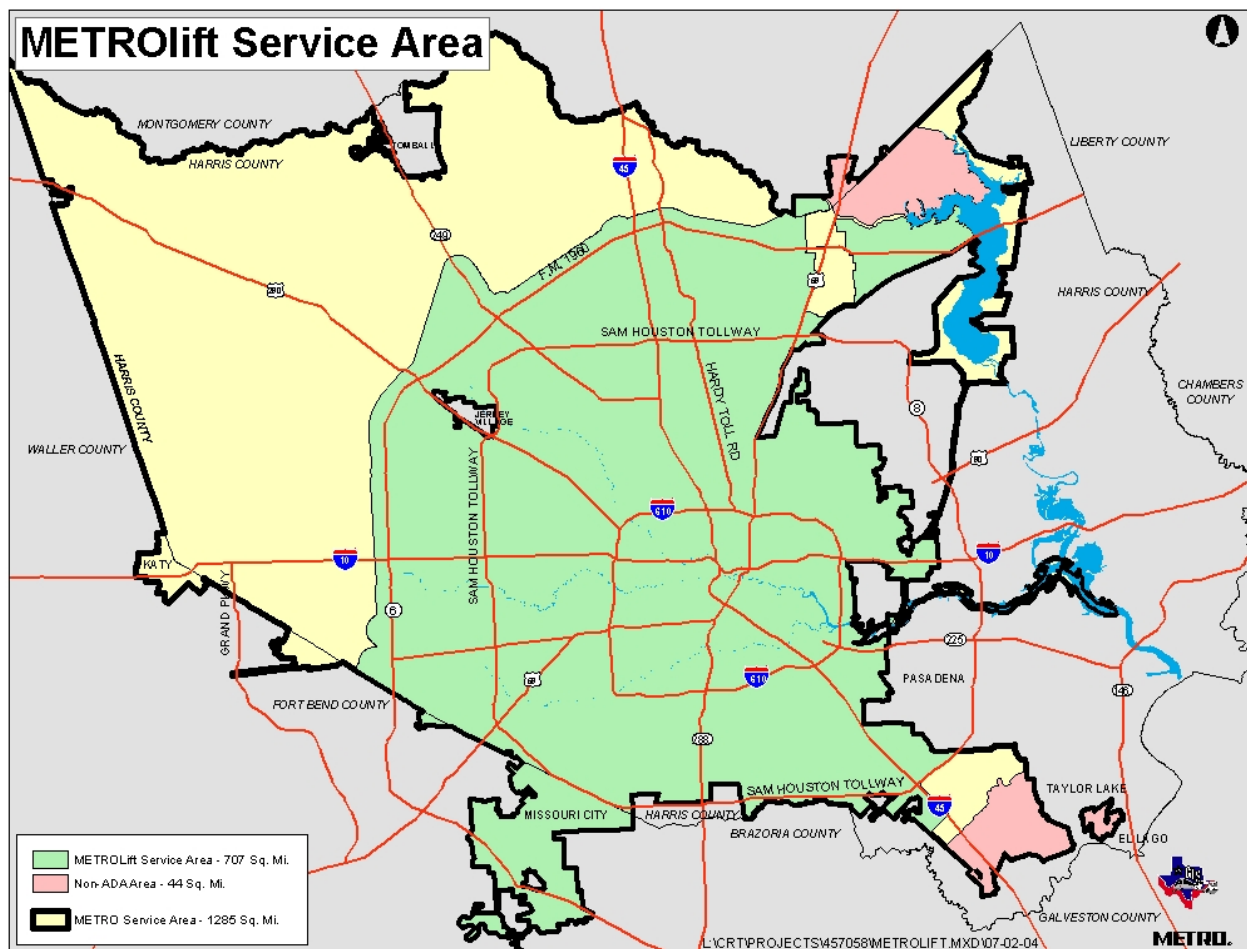


Figure 2-1. METRO and METROLift Service Areas.

During METRO’s first 25 years, the region’s transit system grew dramatically. The 1979 bus system pull-out was 350 vehicles from a single maintenance facility, a former streetcar barn originally erected in 1910. Today, METRO owns six state-of-the-art bus maintenance facilities and the weekday bus pull-out has grown to 1150. METRO operates 26 park and ride lots offering 30,200 parking spaces. These lots largely support the system of over 100 miles of

barrier-separated high-occupancy vehicle lanes in six freeway corridors. And on January 1, 2004, METRO introduced another mode to Houston's transportation mix – a 7.5 mile light rail line that carries over 32,000 passenger trips daily after just 18 months of service.

In 1979, METROLift was the *sole* METRO service for people with disabilities. METROLift served 16,135 passenger trips in its 50 square mile service area in 1979; 10 years later, as the passage of ADA approached, these numbers had reached 588,028 trips in a 398 square mile service area.

In 1989, the METRO Board of Directors resolved that all future bus procurements would require accessibility features. The first accessible buses began operation in May 1990 and by 2002 the entire fixed-route fleet was accessible. METROLift demand continued to grow during this period despite the introduction of a new service option. During the period from 1989 through 2004, paratransit passenger trips served more than doubled to 1,502,572. The METROLift service area nearly doubled to 752 square miles (see [Figure 2-1](#)), primarily in order to serve the new area receiving fixed-route services.

METRO began utilizing taxicabs in 1985 as a part of the METROLift program. Today METRO utilizes taxicabs in providing public transportation in four programs:

- METROLift Subsidy Program,
- METROLift taxicab backup,
- Guaranteed ride home service, and
- METROLift paratransit sedan service.

### **METROLift Subsidy Program**

The inclusion of taxicab-based services was first introduced in METROLift in 1985 as a user-side subsidy program called METROLift Subsidy Program (MSP). In the time immediately prior to the Americans with Disabilities Act, MSP attempted to address the disabled community's concern that METROLift did not provide for spontaneous travel options (METROLift paratransit services require a minimum prior day's scheduling) and late night service options (paratransit service is not available between 11 p.m. and 5 a.m. on weekdays). MSP was introduced enabling METROLift patrons to call any one of four local cab companies to arrange a trip at any time, day or night. METRO subsidizes the taxicab meter fare for trips that are arranged between that customer and pre-selected service providers. METRO staff is not involved in the trip outside of selecting the qualified providers and certifying the eligibility of customers.

As a budget control, METRO issues each qualified company a limited number of travel vouchers monthly. If a voucher is available and the passenger is on the current METROLift eligibility list, the trip is dispatched. The passenger pays the first \$1 of the metered fare and everything over \$9; METRO's subsidy has been capped at \$8 per trip since 1985. Because a patron can potentially pay more than twice the local fixed-route bus fare (\$1.00) for their trip, which is the limit imposed by ADA, the MSP service is considered a non-ADA service.

MSP is attractive to patrons as it is spontaneous and not a shared ride service. The fare system encourages patrons to use MSP for short trips traveling under the \$9.00 meter fare threshold for \$1.00. Longer trips can be made on the traditional METROLift paratransit service for \$1.15 total fare regardless of trip length. METRO benefits from patrons making trips on MSP as it decreases demand on the more expensive ADA paratransit system.

In Fiscal Year 2005 (FY05), MSP represented 12 percent of all METROLift trips. MSP has seen a decline in demand over the last 10 years as meter fare increases have dropped the distance a patron can travel for the \$9.00 threshold from 5.1 miles in 1996 to 3.7 miles in 2006. MSP passenger trips have dropped over this same 10-year span from 243,000 in 1996 to an estimated 116,000 in 2006. This decline suggests that patrons are moving to the more expensive paratransit service rather than paying the premium on MSP to travel over 3.7 miles.

Because of the minimal staff involvement, taxicab voucher programs are often considered to be risky by transit operators. And indeed the programs can be abused if they are not carefully designed and monitored. First, demand can be surprisingly strong, thereby running up the public subsidy. METRO controlled this aspect by providing each company a fixed number of vouchers to control the budget. In turn, the providers issue a fixed number of vouchers by time of day. Customers are served on a first-call, first-served basis. While this historically led to trip denials, customers still had traditional METROLift services available.

The other predominant concern is that user-side subsidy programs are prone to fraud. For example, there are national examples of programs where vouchers for travel by non-existent customers have been redeemed. METRO carefully crafted MSP to control this risk.

The first level of risk management is through the voucher issuance process. Unlike systems that provide vouchers directly to customers and thereby lose control of when trips are taken, METRO issues vouchers to the taxicab companies, who in turn issue them to their drivers. However, vouchers are useless without the customer's signature and the METRO voucher number. The voucher number is randomly generated by METRO, and a valid list is provided monthly to the taxicab company. When a dispatcher verifies that a trip request is valid (that is, that the customer is METROLift certified), the dispatcher provides the next random number on the list to the driver who responds to the call. The customer signs that numbered voucher at the completion of the trip. This system also benefits the patron, as the patron is not responsible for obtaining and retaining a voucher, ticket, or coupon.

This method minimizes the opportunity for abuse. For example, if a cab driver colludes with a customer to schedule trips and then split the METRO subsidy rather than actually traveling, the dispatcher will likely note that this driver and customer are making multiple trips. Further, METRO staff gathers the vouchers and creates a database so that any unusual pattern of driver/client travel is uncovered.

METRO has worked closely with the taxicab companies to utilize the electronic data captured by the taxicab dispatch system and cashier records. These data capture voucher number, date issued, time issued, driver ID, pickup and drop address, dispatch time, patron ID, cab number, acceptance time, pick-up and drop times, passengers, and meter fare. These data are e-mailed to METRO with the bi-monthly invoice and allow METRO to automate several audits of this MSP

trip database to identify potential fraud. The audits identify unusual driver/passenger patterns, trips that have a time overlap, and trips that appear to string together (in order to increase the METRO subsidy by breaking a single long trip into several short trips). Audits also confirm passenger eligibility.

METRO also worked with the taxicab companies to ensure drivers do not know that the trip is an MSP trip or a short trip before it is accepted by the driver. Once the trip is accepted, the driver must take the trip. Taxicab drivers opt in to several taxicab programs, one being MSP. The trips are dispatched to all drivers that are in the program without identifying the trip type or trip length. Once accepted, the driver is given the information and is required to take the trip.

### *Detailed Voucher Process*

A patron calls for a taxicab ride identifying his/herself as an MSP eligible rider and submits a patron identification (ID) number. The taxicab dispatcher electronically verifies that the patron is on the current eligibility list (updated thru e-mail). A trip is dispatched to the driver with a randomly generated voucher number (list of random numbers provided by METRO). The driver checks the patron's METROLift photo ID upon arrival. The driver fills out a blank voucher with the voucher number and has the patron sign upon completion of the trip. The driver turns in the voucher to the taxicab company in return for payment. Both the original voucher and an electronic copy of the voucher are sent to METRO for payment bi-monthly. When the electronic copy arrives, METROLift staff runs a "Suspension/Validation" report which searches for: 1) suspended patrons/drivers, 2) ineligible patrons, 3) previously paid vouchers or duplicate voucher numbers, and 4) numbers that are not in the original randomly generated voucher numbers. Questionable transactions are all coded for non-payment, and a report is generated for staff to double check.

Staff utilizes a database program to compare each physical voucher to the electronic invoice voucher information. Staff makes edits if needed and codes each voucher for payment or non-payment. After this is completed, several reports called "Conditional Reports" are generated as follows:

- 1) No voucher report — electronically invoiced but no voucher.
- 2) Overlap trips — vouchers with same driver or patron that occurred at the same time.
- 3) Stringed trips — patrons that have more than two vouchers in a two-hour period.
- 4) Impossible trips — vouchers where the drop location and next pick-up location are impossible to achieve due to distance.
- 5) Duplicate trips — patron or driver has two vouchers with the same address at the same time on the same day.
- 6) Check for collusion report — where same driver picks up same patron daily — look for a large number of trips, same meter fares, signatures, etc.

METRO staff also performs desk audits on the vouchers. A sample of vouchers is entered into a mileage/distance system to check for meter fare reasonableness. Staff compares signatures on vouchers to signatures on eligibility applications to verify that customers using the service are truly METROLift clients. Each month staff reviews approximately 10 percent of the vouchers. As a second step, staff contacts about 5 percent of the patrons and confirms with them that a

specific trip was taken. These audit processes require one full-time equivalent (FTE) of staff time annually at a value of \$45,000 compared to the annual MSP program cost of \$900,000.

### *Procurement and Contract Requirements*

METRO procures the METROLift Subsidy Program contract through an Invitation for Bid (IFB) process. The bidders state the number of vehicles available to perform the service and the percent discount off the established Houston meter fare. Historically, the contractors have discounted the meter fare by 4 percent. The IFB requires taxicab companies to have a minimum of 150 taxicabs in their fleet to prevent excessive trip denials due to unavailable taxicab resources and to ensure return trip coverage. The contractor has the option to provide wheelchair accessible vehicles and is paid an additional \$2.00 per trip for trips taken on accessible vehicles. In the event a patron fails to meet the vehicle, METRO pays a standard \$2.00 “no-ride” fee. There is a required 20-minute response time after the driver receives a trip inside the Beltway 8 city limits and 40 minutes outside Beltway 8 for a trip. The contract requires that a specified number of vouchers be allotted and issued at 6:00, 10:00, 14:00, and 18:00 so that the vouchers are available throughout the day and provide “night owl” service. The contractor is required to reserve a return voucher as requested by the patron. METRO relies upon the City of Houston taxicab code to regulate driver and vehicle requirements.

### **Taxicab Backup**

Taxicab backup is a taxicab service used to cover fluctuations in paratransit demand and to cover late or missed trips. With the ADA signed into law in 1990 requiring agencies to accept all service requests (zero trip denials), the taxicab backup program helped to enable METROLift to meet this requirement on a daily basis with fluctuations in service demand. However, backup services historically were limited in scope since taxicabs were not wheelchair accessible. In May 2001, wheelchair taxicabs were introduced allowing METRO to increase the scope of backup services. Increased wheelchair capacity allowed METRO to better handle peak fluctuations in service demand without adding dedicated revenue hours. This feature enables staff to eliminate patron trip denials on METROLift without fear of over scheduling existing services. Backup taxicab services also enable METRO to maintain good service quality by preventing lateness through reassignment of passengers from manifests on vehicles that are running late onto backup vehicles. Taxicab backup trips are dispatched through METRO’s scheduling system directly to the cab company via fax. The contractor ensures each driver completes a voucher with all METRO provided information in addition to the driver signature, and the actual pick-up and drop-off times at the completion of each trip.

Vouchers are paid at the meter rate less a 4 percent discount as per contract agreement. The METROLift scheduling system has a record of dispatching the trip to the taxicab company providing a source to reconcile trip payments. Approximately 42,000 passengers of the 1.5 million passengers carried in METROLift service (less than 3 percent) were transported by taxicab backup in FY05.



## **Guaranteed Ride Home**

The Guaranteed Ride Home program provides METRO eligible commuters an emergency trip home if they use METRO fixed-route bus routes that do not offer a mid-day service or are a part of a METRO car share or vanpool program. METRO's marketing department authorizes trips by faxing a notification to the contractor including patron name, pick-up address, drop-off address, authorization number, date, time, and purpose code. Trips are paid at the full meter rate less the contract-specified percent discount.

## **Contract Procurement – MSP, Taxicab Backup, and Guaranteed Ride Home**

The MSP, Taxicab Backup, and Guaranteed Ride Home programs are procured through one contract as specified previously through an Invitation for Bid process. There are approximately 92 cab companies in Houston, and about 80 of these have only one or two vehicles. Most of these smaller companies have a regular client base and do not have the capability of providing a 20-minute response time to customers outside of this base. Nonetheless, these taxicab programs in Houston have been successful as there are several large taxicab companies that can meet the service coverage requirements of a minimum fleet size of 150, a 20-minute response time requirement, and a guaranteed return trip requirement. These requirements are intended to ensure that patrons are provided with adequate service coverage.

The Houston taxicab industry welcomes programs that generate trips for their drivers and historically offers METRO a 4 percent meter fare discount in their contract bids. From the taxicab company's perspective, the cost of the program is minimal as the voucher is simple for drivers to use and has minimal administration. In addition, it promotes profits for the taxicab company itself. The large taxicab companies in Houston make profits in the purchase and lease of vehicles. Independent cab drivers make their money by trip volume. Because the trip demand in Houston is not as great as it is in cities such as Las Vegas and New York, independent cab drivers are willing to opt into the voucher program to increase trip volume. Taxicab companies attract independent cab drivers to their company by having a variety of programs that will guarantee a trip volume to their drivers and, therefore, increase the number of vehicles leased and sold. As a result, taxicab companies in Houston are willing to give a discount on the meter fare in the contract bid, as the volume of trips is historically significant.

The \$2.00 per trip contract incentive to provide a wheelchair vehicle was designed to encourage cab drivers to lease/purchase wheelchair accessible taxicabs that could benefit patrons and METRO. The program currently transports approximately 75 MSP wheelchair trips per month and 95 backup wheelchair trips per month. The cab companies have purchased rear ramp loading Dodge Caravan vehicles. These vehicles are more attractive to drivers as they do not look like an accessible vehicle. The \$2.00 incentive is offered to offset the increased cost to the driver of a wheelchair accessible vehicle (an estimated additional \$8000 per vehicle). Although the Houston taxicab companies do provide wheelchair accessible vehicles, METRO has found that the \$2.00 incentive has not been an effective means to encourage purchase or lease of a wheelchair accessible vehicle. The growth of wheelchair accessible vehicles in Houston since 2001 is mainly attributed to the paratransit sedan contract requirement to have a portion of the contractor's fleet wheelchair accessible. Accessible vehicles are available to the MSP program when paratransit drivers are not in service and are available for general taxicab business.

## METROLift Paratransit Sedan Service

The rapid growth in METROLift service during the early 1980s prompted consideration of methods to control costs. Even when operated very efficiently, paratransit costs per passenger trip are several multiples higher than a comparable passenger trip on the fixed-route service.

The METROLift customer market was very diverse. The public generally considered METROLift as a service for people in wheelchairs. However, only about 25 percent of customers at that time were non-ambulatory. A number of other conditions, including visual impairment, limited kidney functioning, and cognitive disabilities, contributed to ridership but did not require a wheelchair lift-equipped vehicle. Thus, staff began exploring the option of providing some portion of the pre-scheduled service using sedans (taxicabs) rather than vans, recognizing that taxicabs would likely not be wheelchair lift-equipped. Today, about 33 percent of customers are non-ambulatory (see [Table 2-2](#)).

**Table 2-2. METROLift Client Composition.**

<b>Today's METROLift Client Profile</b>	<b>Percent of Total</b>
Non-ambulatory/limited mobility	33%
Arthritis	15%
Blindness/visually impaired	11%
Heart/blood condition	6%
Diabetic	6%
Kidney failure	5%
Stroke	4%
Partially/wholly paralyzed	4%
Cancer	3%
Lung/breathing problems	1%
Various remaining conditions/other	13%

The use of taxicabs in pre-scheduled paratransit services offers several advantages:

- Taxicab fleets in Houston are widely available, so METRO does not need to acquire a fleet.
- The vehicles can be used in METROLift services and in standard taxicab service, thereby potentially reducing the vehicle cost allocated to METROLift.
- The use of taxicabs would put competitive pressure on the van service providers to manage their pricing or risk loss of service to taxicab contractors.

On the other hand, potential challenges include:

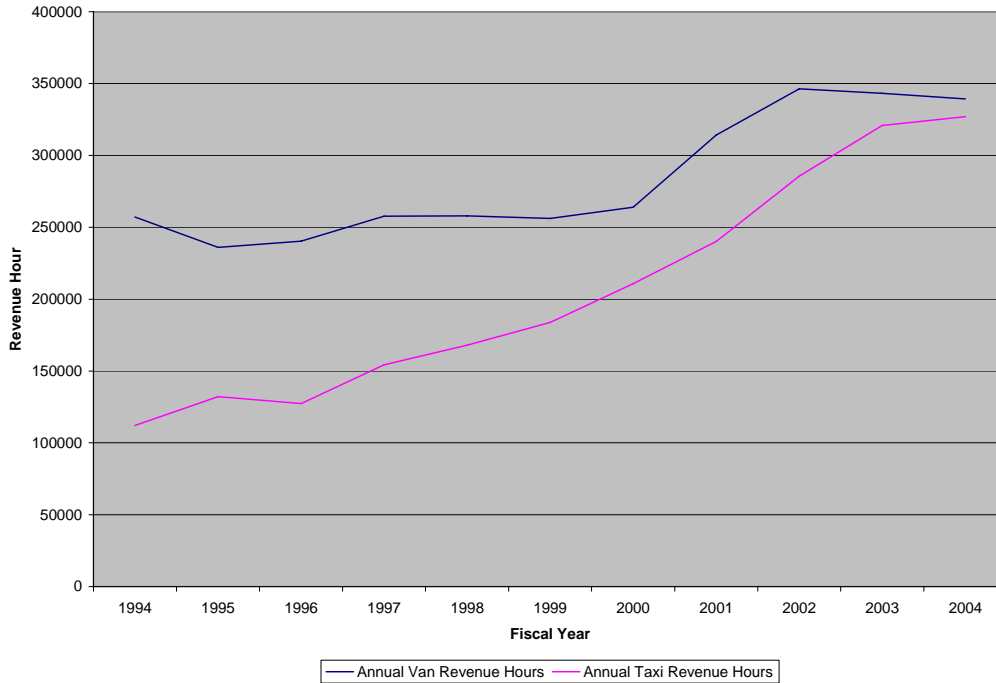
- The traditional taxicab trip-by-trip delivery model is not the same as paratransit trips, which are pre-scheduled on a manifest.
- There is a potential decrease in overall efficiency due to limited taxicab wheelchair capacity removing a portion of the market from use of taxicabs.

- The taxicab project manager requires a different skill set than the traditional taxicab operations manager.
- Taxicab drivers are perceived to be of lesser quality than dedicated paratransit drivers.

Houston METRO benefited strongly from having had a taxicab company operate paratransit in the past. Yellow Cab had operated METROLift service between 1979 and 1985 with special vans that they had procured specifically for the service. They had succeeded in operating under a different service delivery model than their traditional taxicab services and had developed a competent project manager.

The paratransit service contracts for taxicabs are similar to the van service contracts. The primary difference for the taxicab contract is that the taxicab company provides the vehicles itself, while the van service contractor receives vans purchased by METRO. Otherwise, the strategies for managing the services are essentially identical. Initial perceptions that taxicab drivers would not meet the quality standards did not hold true. Because taxicab drivers must buy into their vehicle, they have a strong commitment to the job, which has resulted in low turnover. In addition, taxicab drivers are very familiar with the city streets and are better equipped to navigate difficult addresses, preventing lateness.

Since 1994, the majority of service quantity growth has been through the addition of taxicab/sedan services. [Figure 2-2](#) displays the revenue hour split between contracted van and taxicab services for pre-scheduled service. Revenue hours of taxicab service grew 192 percent, while revenue hours of van service grew only 33 percent. Through use of taxicabs, METRO has achieved major cost savings. The van service cost per hour in FY05 is \$35.73; incorporating an allocation for the van capital costs, this rate becomes \$38.55. The taxicab rate is \$29.78 including the vehicle. During FY05, the use of taxicabs saved the agency \$2.8 million compared to running the same service with a larger fleet of vans only. There were additional savings in avoiding purchases of additional \$60,000 wheelchair-accessible vans, as well.



**Figure 2-2. Growth of METROLift Service: Van versus Sedan.**

### **METROLift Van and Sedan Service Procurement and Contract Requirements**

METRO procures the METROLift van and sedan transportation service contracts through a Request for Proposal (RFP) process. A source evaluation committee evaluates the proposals with the following evaluation factors, weighted more heavily on the qualifications than pricing:

- 1) qualifications/experience of firm/past performance,
- 2) qualifications and experience of personnel,
- 3) project management structure and methodology,
- 4) pricing, and
- 5) small business participation.

After initial proposal scoring, the proposers are asked to make oral presentations, and the committee prepares final scoring.

The contracts are 5-year terms with a phase-in and out period at the beginning and end of the contract to transition vehicles and service to a (possibly) new contractor. The proposal includes price per hour by 12-month period with a fuel adjustment factor if the contractor provides fuel. Proposals also include price per hour adjustments in the event service hours drop more than 10 percent below or grow more than 10 percent above the projected service hours. A performance bond is required to ensure adequate funding in the event the contractor defaults.

Driver requirements include:

- 102 hours of training for accessible sedan service and 120 hours of training for van service,
- quarterly background and motor vehicle record checks,
- a current DOT physical,
- successful completion of a defensive driving course every two years,
- no more than one moving violation or chargeable accident in a consecutive two-year period,
- a four-hour refresher training course if the driver receives more than two verifiable service complaints within a six-month period, and
- passing the federal drug and alcohol screenings.

METROLift contracts include liquidated damage assessments on late trips and service interruptions, equipment tampering and usage, notification of no-rides, management staffing levels, vehicle removals, and ticket collection. Staff evaluates on a daily basis all trips that are late or must be covered by another resource to determine if the contractor is at fault. A weekly review of potential charges is conducted with the contractor to determine final charges. To handle administration of these sections of the contract, METROLift budgets approximately 1.3 FTEs and recovers approximately \$180,000 in liquidated damages annually. Quality of service is maintained through this process.

Additionally, performance incentives and disincentives are included in the contract calculated on each of two factors: 1) accidents per 100,000 revenue miles and 2) complaints per 100,000 passengers (see [Table 2-3](#)). A turnover disincentive factor is also calculated quarterly to ensure drivers are paid adequate wages.

**Table 2-3. METROLift Contract Incentive/Disincentive Standards.**

Incentive/Disincentive Adjustments	Accidents per 100,000 Revenue Miles	Customer Complaints per 100,000 Passenger Trips
+0.5% of total amount paid during 6-month period	0.0 - 0.67	0 - 65
+0.25% of total amount paid during 6-month period	0.68 - 0.87	66 - 70
+0.125% of total amount paid during 6-month period	0.88 - 1.08	71 - 75
no incentive or disincentive adjustment	1.09 - 1.29	76 - 80
-0.125% of total amount paid during 6-month period	1.30 - 1.50	81 - 85
-0.25% of total amount paid during 6-month period	1.51 - 1.70	86 - 90
-0.5% of total amount paid during 6-month period	1.71 and up	91 and up

#### *Wheelchair Accessible Taxicabs in Paratransit Sedan Service*

With the procurement of sedan services in 2001, METROLift sedan paratransit contracts began requiring that a portion of the sedan fleet be wheelchair accessible vehicles. It was estimated through running Trapeze scheduling system scenarios that an additional 150 trips could be scheduled within existing sedan service hours if 75 percent of the sedan fleet was accessible.

Today, Greater Houston Taxicab Company (GHTC) operates 75 percent of its 148 taxicab paratransit fleet with wheelchair accessible vehicles. As indicated previously, these taxicabs are utilized in general public service when not in scheduled paratransit service and are, therefore, a benefit to the community of Houston.

## **Summary**

The utilization of taxicabs in Houston's public transportation system is a balance of achieving cost efficiencies while meeting service quality standards. METRO has had 20 years of experience and has modified and enhanced its use of taxicabs through the years as a result of this experience.

### *Lessons Learned*

- Working closely with the taxicab industry to work within its processes and not adding additional administration requirements helps to keep costs low.
- Requiring qualified paratransit managers helps to ensure pre-scheduled manifest delivery is well managed and on-time.
- Utilizing electronic data helps to improve voucher review, and prevent fraud and abuse.
- Understanding the business of individual taxicab providers in Houston helps to ensure service coverage through fleet size requirements and return trip requirements.
- The competition between sedan and van paratransit service hours helps to keep paratransit contract costs competitive.
- The introduction of wheelchair accessible taxicabs has reduced the need to purchase the accessible van at \$60,000 (van service is still a need as group trips are a large portion of METROLift service).
- Taxicab backup contracts help meet fluctuating demand ADA compliant trip needs while maintaining service quality.
- Guaranteed Ride Home programs provide supplemental service to the general public when fixed-route services are unavailable.

METROLift Subsidy Program's continued decrease in demand is a current concern. The distance a patron is able to travel on the METROLift Subsidy Program is being reduced by the increase in taxicab rates without an increase in subsidy levels. It is interesting to note the demand for MSP service declines when the distance one can travel for \$1.00 is less than four to five miles per trip. The subsidy levels determine the demand of the program.

### *Benefits Outside of METRO*

The taxicab company benefits from partnering with METRO as it provides a source of steady income to its drivers year round with minimal additional administration costs, provides a demand for leasing or purchasing additional vehicles, and generates additional profits.

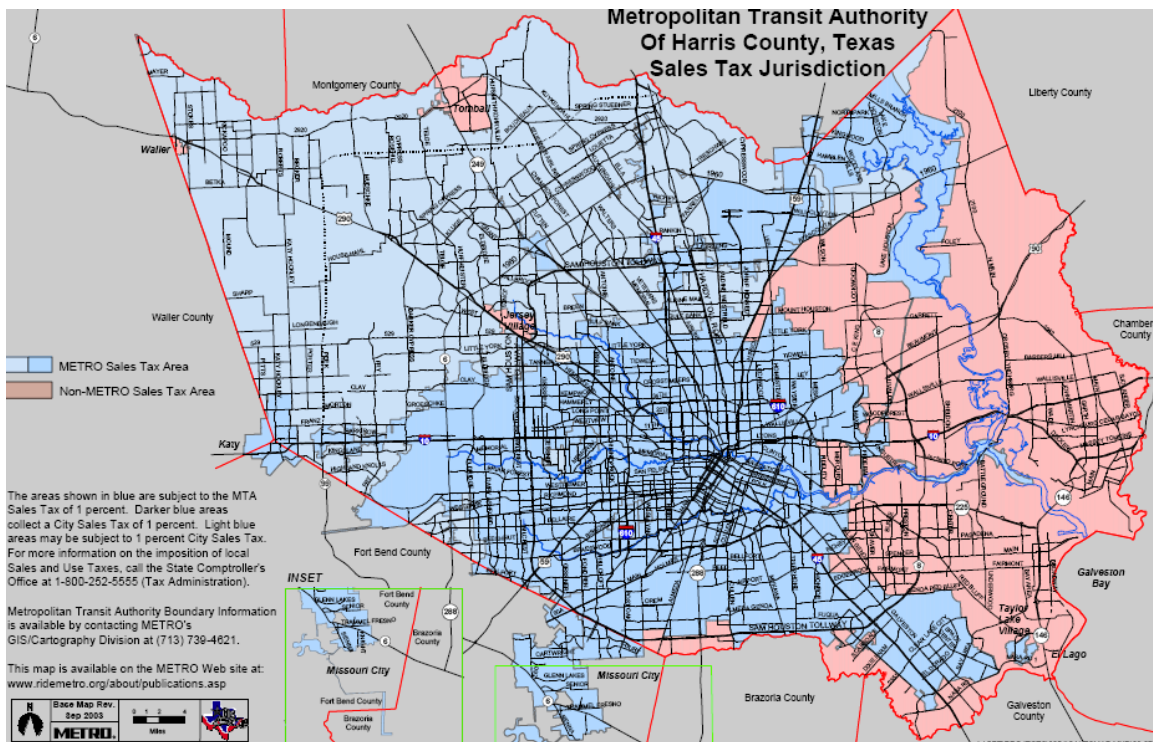
Additionally, the public benefits from METRO's contracts with taxicab companies. Taxicab contracts reduce the total cost of services. The services are easy to use and are integrated with existing fare systems. The contracts result in availability of wheelchair accessible vehicles to the

general public, giving people with disabilities the same opportunity to ride in a taxicab as the general public.

## PHV CASE STUDY 2: HARRIS COUNTY COORDINATED TRANSPORTATION PROGRAM

The Metropolitan Transit Authority of Harris County (METRO) is funded by a one-cent sales tax that was authorized by area voters in 1978. However, not all areas of the county approved the sales tax. The City of Houston and most of the cities and unincorporated areas in the western two-thirds of Harris County passed the sales tax referendum, while cities and unincorporated areas in the eastern third of the county did not pass the sales tax referendum. METRO's service area, as displayed in Figure 2-3 is therefore comprised of only those portions of the county that levied the METRO sales tax.

As a result, several cities (e.g., Pasadena, La Porte, Baytown, and Tomball) as well as sections of unincorporated Harris County do not receive METRO services. The unserved areas are primarily concentrated in the eastern one-third of Harris County.



**Figure 2-3. METRO Service Area.**

In 1999, Harris County led the effort to commission research to estimate the quantity of unmet public transportation needs in Harris County. Unmet need included both trips within the portions of Harris County that are unserved by METRO, and trips within the METRO service area that are not met by METRO. An inter-agency task force met regularly to guide the planning effort and explore implementation options. The Advisory Committee was comprised of representatives

of Houston-Galveston Area Council (H-GAC), the office of County Judge Robert Eckels, METRO, Texas Department of Transportation, Texas Southern University, American Red Cross, Care for Elders, and Just Transportation.

A pilot project emerged from these efforts in October 2003. The Harris County Coordinated Transportation Program (HCCTP) offers curb-to-curb service to eligible persons through a subsidized ticket program. Eligibility is based upon persons meeting one of three criteria (3):

- disabled (using Social Security standard for “disability”),
- elderly (60 years old or older), or
- low income (using Housing and Urban Development standards).

Eligible persons must reside in Harris County and must not be eligible for Medicaid Medical Transportation or METROLift for the trip they request from HCCTP. Since METROLift does not serve the entirety of Harris County, METROLift-eligible persons may use HCCTP to make trips to locations unserved by METRO.

HCCTP offers two levels of transportation services. The first is an advance reservation shared ride program. Trips on the shared ride program must be scheduled from four days to no later than 2 p.m. the day before travel and the fare is distance-based with a maximum charge of six tickets. The second is a subsidized taxicab trip that can be scheduled only 90 minutes in advance of the desired trip time. The fare is meter-based and a maximum of eight tickets (see below) may be used on any one-way trip. Fares above \$40 must be covered by the passenger. Shared ride service is provided by three agencies using vans, and taxicab service is provided by three taxicab companies. Note that this program echoes the structure of the two elements of Houston METRO’s ADA paratransit program, as described earlier. The general METROLift program provides advance scheduled services at a fixed cost, while the METROLift Subsidy Program offers “spontaneous” service with a fixed upper subsidy. Table 2-4 compares the characteristics of the two programs.

**Table 2-4. Comparison of HCCTP Advance Reservation and Same-Day Services.**

	<b>Advance Reservation Service</b>	<b>Same-Day Service</b>
<b>Can reserve no sooner than</b>	Four days in advance	6 p.m. the day before travel
<b>Can reserve no later than</b>	2 p.m. the day before travel	90 minutes in advance
<b>Max. number of traveling companions</b>	1 adult	3 persons
<b>Number of providers</b>	3	3
<b>Type of vehicles</b>	Vans	Sedans (taxicabs)
<b>Days of service</b>	Weekday only	7 days per week
<b>Hours of service</b>	6 a.m. – 7 p.m.*	24 hours a day
<b>Fare Structure</b>	Mileage-based, with 6 ticket max.	Metered rate, maximum 8 tickets with customer paying remainder.

\* American Red Cross operates from 7:00 a.m. to 5:30 p.m. only.



Patrons must be registered and pre-purchase tickets from either HCCTP or one of the following 15 partner community organizations:

- Area Agency on Aging,
- Alzheimer’s Association,
- Bay Area Turning Point,
- Care Management Group,
- City of Baytown,
- City of Pasadena,
- Cypress Assistance Ministries,
- East Harris County Senior Citizens,
- Gate Way to Care (Harris County Hospital District),
- Houston Area Parkinson Society,
- Inner Wisdom,
- Interfaith Caring Ministries,
- Jewish Community Center,
- The Senior’s Place, or
- Sheltering Arms Senior Services – Day Care.

Tickets have a face value of \$5.00 and are sold to individuals and organizations for \$2.50. Each organization has the option to further discount the price; to limit their tickets’ uses to medical trip purposes only; and to set stricter eligibility requirements than those set by HCCTP. Persons may register for the program through one partner organization and directly through HCCTP; they can only buy tickets through one partner organization or directly through HCCTP. Passengers pay drivers using tickets (and cash for taxicab trips over \$40) and must present their photo identification card to verify their proper participation in the program. [Table 2-5](#) displays the rate structure for advance reservation trips. Taxicab trips are priced at the metered rate with each ticket used representing \$5 toward the metered fare up to a maximum of \$40 paid through tickets.

**Table 2-5. Tickets/Fares for Advance Reservation Shared Ride Trips.**

<b>Trip Distance</b>	<b>Number of Tickets</b>	<b>Face Value/Cost to Patron*</b>
1 to 3 miles	1	\$5.00/\$2.50
4 to 5 miles	2	\$10.00/\$5.00
6 to 10 miles	3	\$15.00/\$7.50
11 to 19 miles	4	\$20.00/\$10.00
20+ miles	6	\$30.00/\$15.00

\* Some agencies provide tickets at no cost or reduced cost to patrons.

The pilot program was funded through use of Congestion Management-Air Quality (CMAQ) Improvement Program and Federal Transit Administration (FTA) Section 5310 programs. Farebox revenues, Harris County, and the Area Agency on Aging (AAA) generated the local match to those federal funds. CMAQ funding is limited to providing three years of operating support. Therefore, the program is exploring alternative funding sources including having Harris

County designated an urban transit provider and seeking Federal Transit Administration Section 5307 funds. Figure 2-4 displays the current percentage split among the funding partners.

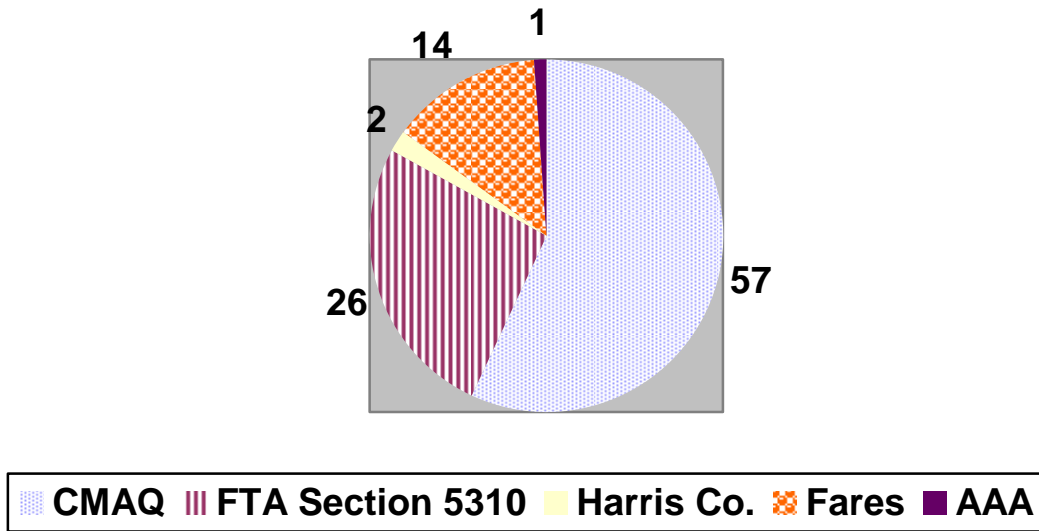


Figure 2-4. Percentage Distribution of Program Funding.

Figure 2-5 displays passenger trips for shared ride and for taxicab services by quarter, beginning October–December 2003.

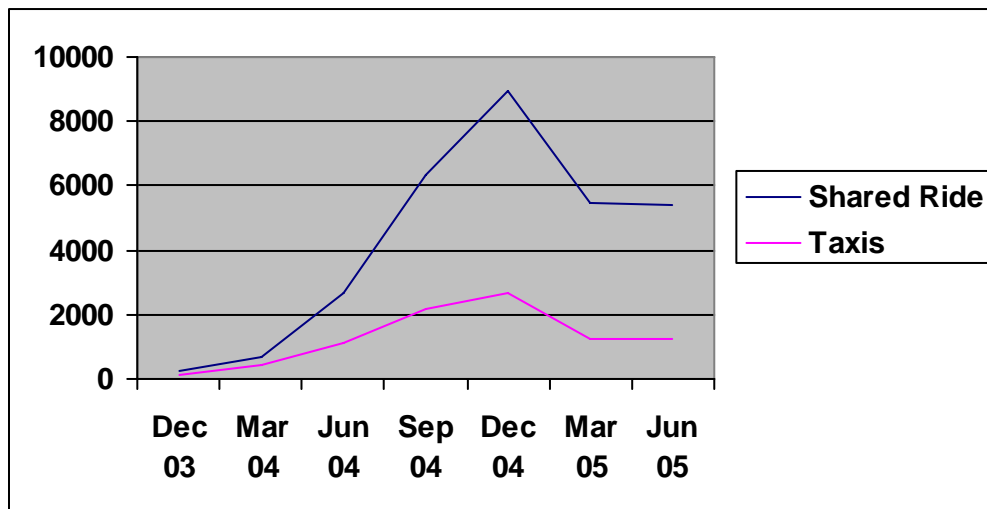


Figure 2-5. Monthly Passenger Trips.

Ridership in the program grew rapidly, going from 353 boardings per quarter in October–December 2003 to 11,577 boardings per quarter in October–December 2004. During that period of time, the face value of tickets was \$2, with the patron paying \$1. In order to manage demand, ticket values were increased to \$5, with the patron paying \$2.50 in January 2005. The number of tickets required for trips did not change; thus, the cost of a short trip, for example, increased 150 percent. Demand immediately contracted to about 6660 boardings per quarter.

Program costs are driven by demand. Shared ride providers are reimbursed based upon mileage and the face value to tickets that should have been collected according to the program rate structure (See [Table 2-5](#) above). Purchased transportation represents approximately 80 percent of HCCTP costs. Administrative staff and office costs represent the remaining 20 percent of HCCTP costs.

### **Use of Private-for-Hire Operators**

Services for both shared ride and taxicab services were procured through a Request for Proposal issued by Harris County. The most recent solicitation was issued in October 2005. This process is designed to result in multiple contractors in each program. The solicitation included the following minimum taxicab contractor qualifications:

- one (1) year in business;
- at least five (5) vehicles and drivers;
- criminal and driving record checks/standards for drivers;
- training including defensive driving, Passenger Assistance Training, and sensitivity training;
- drug and alcohol policy for drug and alcohol-free workplace;
- computer/Internet access; and
- minimum insurance requirements.

The RFP noted that HCCTP clients could request a trip from any location in Harris County to any location in Harris County. Responsibilities of the contractor specified in the RFP (and subsequent contract) include the following:

- Assisting passenger, including helping carry small packages.
- Providing door-to-door service when passenger cannot get to curb independently.
- Arriving for pick-up no earlier than 15 minutes or later than 30 minutes from the agreed-upon pick-up time.
- Documenting no-shows through communication with dispatch.
- Notification of passenger through dispatch of late trips (30 to 60 minutes after agreed-upon pick-up time).
- Documenting missed trips, cause, and related attempts to contact passenger.
- Limiting on-board travel time to 90 minutes or less.
- Confirming eligibility of passenger when scheduling trip.
- Denying service to passengers who cannot be safely transported due to severe disability.
- Providing accessible service to the same standard as ambulatory service.
- Limiting subscription service to 50 percent of total service.
- Communicating to drivers that gratuities should not be expected.
- Responding to customer complaints.
- Taking trip reservations and noting whether trip is for medical purpose or not.
- Providing monthly accounting of no-shows, late trips, and denied trips.
- Maintaining their fleet.

The contract lists the following trip compensation and performance-related penalties:

- Missed trips (more than one hour outside the pick-up time) are not reimbursed unless there is documentation of circumstances beyond the driver's control and the passenger is notified.
- If a trip is falsely reported (fraudulent trip), the contract may be terminated.
- If trip data are incomplete, the trip will not be reimbursed (but may be re-submitted with complete data in subsequent invoice).
- Trips taken outside Harris County cannot be reimbursed.

In March 2006, Nelson/Nygaard Consulting Associates published a two-volume Program Evaluation Report on the HCCTP (3). An element of that evaluation was interviews with the program's transportation providers. Providers noted the following issues with the program:

- The one-year contract also provides for two one-year option periods. However, there are no provisions for adjusting compensation in those option periods. Increases in cost of fuel and insurance have challenged the companies.
- Wheelchair capacity among companies is not sufficient to meet the demand for wheelchair-accessible transportation.
- Long trips that are not pre-scheduled (and therefore provided by taxicab) are very expensive for the patron and can be unattractive for the driver since the driver often ends up needing to return long distances with no fare-generating rider.
- Similarly, if a short trip is needed in a remote area, again the taxicab driver must travel many miles without compensation in order to generate a very small fare. This factor is exacerbated by the requirement that companies be able to serve the entire county, thereby eliminating small taxicab companies serving limited areas from participating in the program.

Nelson/Nygaard made two recommendations that would impact taxicab trip providers with HCCTP. The first recommendation is to add taxicab companies that are permitted to participate in the program only with specific regions (e.g., Pasadena and Baytown taxicab companies). Short local trips that might currently be unattractive to the current taxicab providers might be very attractive to these local firms.

The second recommendation is that future contracts include performance-based incentives and penalties. Nelson/Nygaard, referencing Transportation Research Board's Special Report 258 (2), noted that the most common concern related to contracting service was lack of control. The remedies most commonly applied by transit managers to address contracted service quality issues were increasing the specificity of performance requirements and adding related penalties. Recommended criteria with related incentives and penalties are displayed in [Table 2-6](#).

**Table 2-6. Recommended Performance Standards, Incentives, and Penalties:  
HCCTP Service Provider Contracts (3).**

<b>Performance Standard</b>	<b>Suggested Incentive<sup>1</sup></b>	<b>Suggested Penalty<sup>1</sup></b>
<b>Operations</b>		
<b>On-Time Performance:</b> Contractor shall achieve an on-time performance goal of 95% (i.e., 95% of the pick-up location arrivals shall be no later than 15 minutes after the pick-up time for advance-request trips, and no later than 60 minutes after a taxicab service request is placed).	Percentage of total HCCTP trips provided by contractor x \$1,000 per quarter in which the average on-time performance is 97% or greater.	Percentage of total HCCTP trips provided by contractor x \$1,000 per quarter in which the average on-time performance productivity is less than 93%.
<b>Safety:</b> Contractor shall maintain a safety standard of no more than 1.50 preventable accidents per 100,000 miles.	None	\$500 for every quarter in which this standard is not met.
<b>Excessive Ride Time:</b> Contractor shall accommodate 99% of trips within maximum ride time standards. Suggested ride time standards for the HCCTP are 60 minutes for trip lengths less than 8 (air) miles, 90 minutes for trip lengths of 8 to 15 (air) miles; 120 minutes for trip lengths of 15 to 30 (air) miles; and 150 minutes for trip lengths greater than 30 (air) miles.	Percentage of total HCCTP trips provided by contractor x \$200 per month for each month in which 100% of the trips are within the maximum ride time standard.	Percentage of total HCCTP trips provided by contractor x \$200 per month for each month in which the percentage of excessive-ride trips is less than 99%.
<b>Average Telephone Hold Time:</b> Contractor shall provide sufficient reservations staff and resources such that the average hold time for the reservations line is less than 5 minutes.	Percentage of total HCCTP trips provided by contractor x \$100 per month for each month in which the average hold time standard is met.	Percentage of total HCCTP trips provided by contractor x \$100 per month in which the average hold time standard is not met.
<b>Administrative</b>		
<b>Complaint Ratio:</b> The number of complaints involving each contract provider shall not exceed 2 complaints per every 1,000 trips provided.	\$250 for each 1,000 trips without any complaints.	\$250 per month for each complaint above 3 per 1,000 trips (e.g., 4 = \$250, 7 = \$1,000).
<b>Complaint Response:</b> Contractor will respond to each complaint as specified according to the contract (this should be established).	None	\$100 per incident in which the response time standard was not met.

<sup>1</sup>Suggested incentives and penalties are based on industry standards and should be refined based on HCCTP needs.

## Lessons Learned

HCCTP has developed a program that has attracted both general public entities (e.g., City of Pasadena) and health/human services providers (Area Agency on Aging). They have done so by leveraging existing service providers including the private-for-hire industry. Thus, HCCTP has avoided both capital investment and significant overhead development. These entities have full service scheduling, dispatching, and delivery systems; HCCTP needed only to build infrastructure for client certification and tracking of services provided/cost. This provides significant flexibility in modifying the level of service without paying a penalty.

Quality assurance/control measures are currently relatively lax. The contract with providers contains minimal financial disincentives for poor service delivery. However, HCCTP is not currently staffed to conduct regular field checking that would be required if additional rewards/penalties were tied to service quality indicators. The Nelson/Nygaard recommendation that additional standards be incorporated incrementally reflects the attendant need to invest in staff to monitor those standards (3).

The current system is a first step toward service coordination. Participants currently benefit from the pre-arranged availability of service at established fares and access to public subsidies to reduce the cost to the patron. However, each provider in this program operates independently, managing the clients who contact their organization.

This independence may result in an inefficient use of resources. For example, if two neighbors were clients and each contacted a different provider, then two separate vehicles would arrive and board one person each. A centralized reservation/trip scheduling system would permit optimizing pre-scheduled trips.

This independence may also leave the system vulnerable to fraud. While only eligible patrons can buy tickets and all trips must be scheduled in the name of the eligible patron, the ultimate enforcement of eligibility is the driver. Operating procedures require that the driver confirm the identity/eligibility of the patron by visually inspecting the patron's program identification card. However, there is a financial disincentive for a driver to deny service after having traveled to the patron's boarding location. In order to protect against fraud, administrative follow-up procedures similar to those used by METROLift are recommended.

### **PHV CASE STUDY 3: CONNECTING TO THE TRAIN IN FORT WORTH – A MISS AND A HIT**

The Trinity Railway Express is a commuter rail line connecting downtown Fort Worth, Dallas-Fort Worth Airport, and downtown Dallas. During weekday peak hours, service runs every 20 minutes; midday and evening service frequency spreads to as much as an hour. Service runs every 90 minutes on Saturdays, and no regular service is offered on Sundays.

The Fort Worth Transportation Authority (the T) has engaged private-for-hire vehicle operators in two separate experimental services designed to provide connections between a commuter rail station and nearby destinations. One service operated nearly one year and was terminated; the second service has expanded recently.

#### **Northeast Job Access Shuttle**

In August 2003, the City of North Richland Hills entered into an Interlocal Cooperative Agreement with the North Central Texas Council of Governments (NCTCOG) for joint funding of the Northeast Tarrant County Job Access Project. NCTCOG provided Job Access/Reverse Commute (JARC) funds and the City provided the 50 percent local match to fund the Northeast Job Access Shuttle. Neither entity operated transportation services; thus, the City engaged the T to run the service.

The Northeast Job Access Shuttle was designed to carry patrons between the Richland Hills commuter rail station and two major nearby destinations. The first was the northeast campus of the Tarrant County College, a junior college offering five campuses throughout the county. The second was UICI – The Insurance Center, a major area employer. The shuttle pulsed with three morning and three afternoon trips (weekdays) at the Richland Hills station and carried patrons to the College and then UICI.

Because the service was experimental, the T elected to contract the service. Initially it took cost quotations and issued a purchase order to Yellow Cab. Yellow Cab operated van-style taxicabs. The service was subsequently competitively bid, and Yellow Cab was the sole respondent. Yellow Cab charged \$45 per hour for 6.5 hours of services daily, for a cost of \$292.50 per day. The T did not charge any administrative cost. Because all passengers were transferring to/from the rail, there was no fare charged for the shuttle.

The T collected ridership numbers between December 2003 and August 2004. The average monthly boardings for that period were 67, with a low of 30 and a high of 131. Thus, the maximum average daily boardings were approximately six (6). In August 2004, the City notified NCTCOG that it was withdrawing financial support and the service was eliminated.

### **Lessons Learned**

Ultimately, the service simply failed to generate ridership. According to staff at the T, factors contributing to poor ridership included the following:

- The rail schedule is not designed to “pulse” at the Richland Hills station; that is, eastbound and westbound trains do not arrive at that station simultaneously. The shuttle was designed to leave after the train arrived in both directions, not in each direction. This schedule resulted in waits of up to 35 minutes for the transfer, a significant travel time penalty.
- The Tarrant County College campus has substantial nighttime enrollment. However, the shuttle operated only during the morning and evening rush periods, while students were likely to have schedules less typical of workers. Thus, the shuttle was not a practical alternative to most students.

The use of taxicabs was beneficial. Contracting with a taxicab provider who has vehicles and other necessary service infrastructure allowed the T and the region to move forward quickly and maintain flexibility.

### **Route 30 – CentrePort Circulator**

A second rail station-based shuttle was implemented at the CentrePort/DFW station. This shuttle was designed to serve CentrePort, a growing employment center located immediately north of the station. Current office locations served include the following:

- American Airlines Reservation Center,
- American Airlines Flight Academy,
- American Airlines Training Center,

- American Airlines Headquarters,
- EDS,
- Southwest Office Systems,
- Marriott Hotel,
- Bank One,
- SBC Southwestern Bell,
- Call Solutions, and
- Graybar.

CentrePort is divided by State Route 360, with the rail station located east of the highway.

Route 30 – CentrePort Circulator has gone through several service configurations since its beginning on April 15, 2001. The original service design used two vehicles operating two separate circulator loops. Similar in design to the Northeast Job Access Shuttle, the vans ran five morning and four afternoon trips. Again, the eastbound and westbound trains did not pulse at the CentrePort/DFW station, although the differences between arrival times were less than at the Richland Hills station.

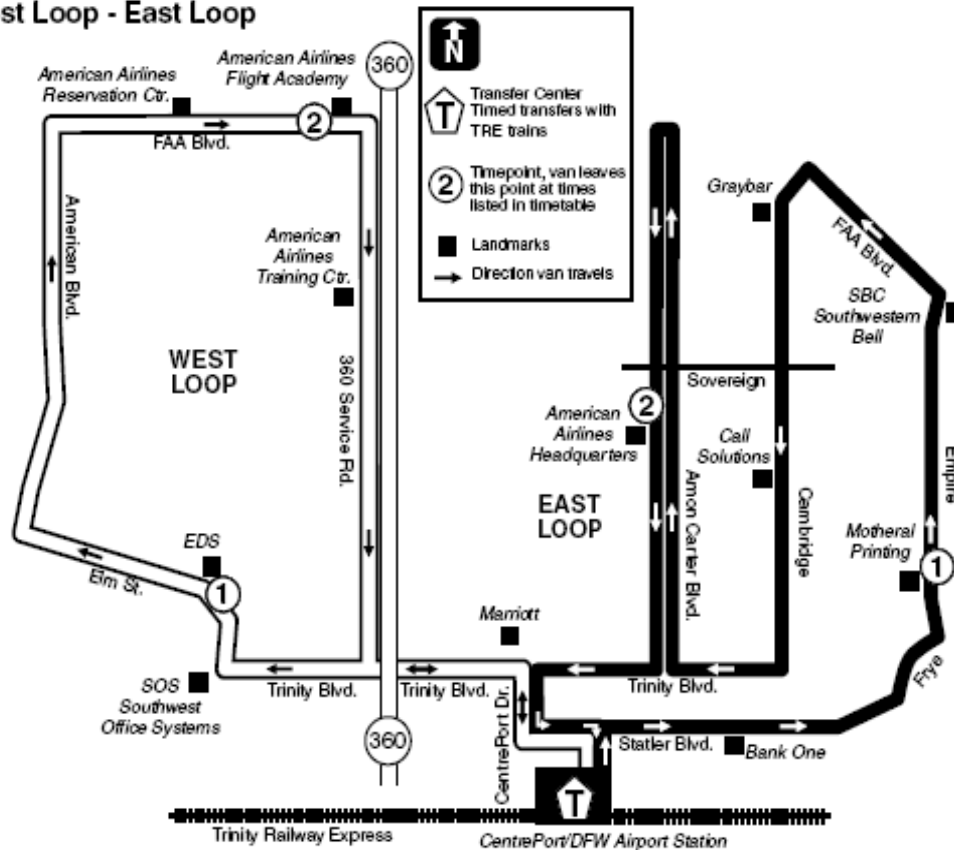
In January 2002, the service was greatly enriched, with vans meeting each train. Lack of ridership led to a restructuring of service into a single large loop operated with only one van. The number of morning trips decreased from 14 morning and 18 afternoon trips on each loop to four morning and three afternoon trips on the combined loop. In the morning, the van driver delivered passengers based upon their destination rather than running a fixed-route to reduce the impact of the combined routes.

While ridership floundered, it surpassed the levels of the Northeast Job Access Shuttle. However, the cost of the service was high, largely due to the long distance between the bus garage of the T and CentrePort. Since the service ran only during rush hours, the vehicle had to make that trip twice daily, resulting in a substantial percentage of unproductive (deadhead) miles. Staff believed that the service could only be a viable option if the route was separated again into two loops, but the cost of an additional vehicle with additional high deadhead miles made such a design impractical.

Staff at the T then explored additional options for operation and funding. With the elimination of the Northeast Job Access Shuttle, JARC funds became available and the shuttle qualified for such funding. In order to control costs, the T negotiated operation of the shuttle with SuperShuttle, a private-for-hire vehicle operator officed at nearby DFW Airport. SuperShuttle could avoid nearly all deadhead miles and operated at a lower cost per hour. Thus, contracting with SuperShuttle permitted the addition of one vehicle and two afternoon trips on a two-loop system at the same cost as the previous single-loop schedule which was effected September 2004. Further, JARC funds paid for 50 percent of the cost of running the second vehicle and 50 percent of the cost of running the two additional afternoon trips. The current service configuration for Route 30 is shown in [Figure 2-6](#).



**Route 30 -CentrePort Circulator  
West Loop - East Loop**



**Figure 2-6. Current Service Configuration.**

Ridership for the CentrePort Shuttle system during the current fiscal year at the T is shown in [Table 2-7](#).

**Table 2-7. Monthly Ridership - CentrePort Shuttle**

	<b>Morning</b>	<b>Evening</b>	<b>Total Monthly</b>
October 2005	3076	1989	5065
November 2005	2535	1686	4221
December 2005	2251	1477	3728
January 2006	2544	1738	4282
February 2006	2282	1550	3832
March 2006	2604	1575	4179

The current contract rate is \$34.50 or \$207 per day. As with the Northeast Job Access Shuttle, no fares are collected. For FY06, average daily boardings are 201. Thus, the cost per passenger is \$1.03 per boarding.

### *Contract Responsibilities*

The contractor is responsible for operation of the service. The original contract also assigned vehicle maintenance responsibility to SuperShuttle. However, the T maintenance staff was not comfortable with having agency-owned vehicles maintained by another organization. The T negotiated an alternative arrangement with SuperShuttle. The contractor is provided three vehicles, and the service requires the operation of two vehicles. SuperShuttle delivers vans to the T for maintenance. The contract rate was not modified – the cost of vehicle delivery was considered a trade-off for the cost of vehicle maintenance.

The contract with the T is most detailed in the section outlining driver qualifications and training. First, all contractor drivers are required to provide written permission for the T to conduct criminal background checks on them. Based upon the results of the background check, the T may restrict SuperShuttle from using an employee on the CentrePort Shuttle. The contract does not speak to the specific types of findings that would lead to removing a driver from shuttle service.

Minimum driver qualifications are as follows:

- 21 years of age or older;
- understand, speak, and read English;
- no more than one (1) moving violation in the last three (3) years;
- no Driving While Intoxicated (DWI) or Driving Under the Influence (DUI) convictions;
- have a valid Texas Drivers License; and
- be able to complete forms and reports legibly (e.g., accident reports).

Drivers must complete training in Defensive Driving and Passenger Assistance Techniques as well as customer relations. Employees of SuperShuttle are subject to DOT drug and alcohol testing requirements.

The contract does not contain performance standards, penalty clauses or incentive clauses. It does set insurance requirements, and a complaint procedure, and permits use of two-way mobile phones as an acceptable on-vehicle communications system.

### *Lessons Learned*

The use of SuperShuttle allowed for improving the service on the CentrePort shuttles while maintaining the cost. SuperShuttle offers a lower per-hour cost and reduced deadhead mileage, both of which contribute to overall cost control.

The vehicle maintenance arrangement demonstrates the great flexibility that agencies have in designing a contracted service structure that meets the needs of the agency. At the same time, the specification of minimum standards for drivers is an important safeguard for customers.

The T has been reluctant to permit the contractor to maintain the vehicles because they are owned by the T. While the contract pricing originally included maintenance, SuperShuttle now delivers the vans to the T for maintenance. Flexibility in operating strategy allowed the T to meet its transportation needs while also taking measures to ensure care of its fleet.

## **PHV CASE STUDY 4: VIA'S STARLIGHT SERVICE, SAN ANTONIO**

### **VIA Metropolitan Transit (VIA) History and Background**

In 1977, the voters of Bexar County approved by a 5-to-3 margin the creation and funding of VIA Metropolitan Transit through a one-half cent sales tax levied on San Antonio and seven other incorporated municipalities. In March 1978, VIA purchased system assets from the City of San Antonio and began operations. Since 1978, referenda have increased the area served to include 13 municipalities, portions of two additional municipalities inside Bexar County, and unincorporated Bexar County.

On November 2, 2004, voters in San Antonio approved the formation of the Advanced Transportation District (ATD). This district receives a quarter-cent sales tax to fund transportation improvement projects carried out by VIA, the City of San Antonio, and the Texas Department of Transportation. VIA receives half of the ATD revenues to enhance local public transportation services, and the other half is split between the City and TxDOT for improving streets, highways, and related transportation infrastructure.

Today, VIA serves a 1226 square mile service area, which covers 98 percent of Bexar County. VIA carried 39.1 million passengers across all services or 118,315 average weekday passengers during fiscal year 2004 – fiscal year 2005. VIA's fixed-route fleet consists of 450 buses, comprised of 54 General Motors RTS Models, 216 North American Bus Industries, 36 Champion Bus, 125 New Flyer, and 19 Optima streetcar buses. The paratransit (VIATrans) fleet consists of 105 propane-powered vehicles, all of which are equipped with wheelchair lifts. Each vehicle has the capacity to carry five ambulatory and two wheelchair patrons or four ambulatory and three wheelchair patrons.

VIA has been coping with budget constraints caused by sluggish tax revenues, higher benefits costs, and fuel price increases. The agency has cut costs and improved the efficiency of its operations where possible. VIA's 10-year plan is designed to meet the challenge of accommodating Bexar County's projected population, reaching 1.65 million from today's 1.5 million according to the Office of the State Demographer.

VIA's 10-year plan proposes long-range goals that would be accomplished by increasing service within the primary transit network, expanding service to new areas, building and developing new and improved passenger facilities, implementing new transit technology, and restoring the agency's financial health.

Through the ATD funding, VIA is working on transit improvements to help people commute to and from work or school. Such projects include the addition of express bus services along major commuter corridors and the addition of a new route connecting VIA's University Park and Ride,

both University of Texas (UT) campuses, and Valero Energy Corporation. Other future routes will serve new residential and commercial developments in rapidly growing areas. ATD improvements also include a pilot vanpool program to serve the outlying areas that are not suited for bus service; and, a new type of service called “Starlight” Service to riders between the hours of midnight and 5:00 a.m.

### **Starlight Service**

VIA buses currently provide fixed-route bus service from 5:00 a.m. to midnight, leaving the early morning hours without public transportation. This arrangement has not met the travel needs for the many people who work late shifts in the medical and hospitality industries in San Antonio but ridership estimates did not warrant the provision of bus service during these late-night hours. Options using VIA’s traditional services such as fixed-route or demand-responsive vans were studied to serve the requests from late shift, medical and hospitality workers but were not considered cost-effective.

Designed to meet these travel needs cost-effectively, the Starlight Service is a pilot program that began operation on April 17, 2006. VIA contracts with Yellow Checker Cab to provide on-demand service within Loop 410 and the South Texas Medical Center between midnight and 5:00 a.m., seven days a week, every day of the year. Reservations can be made beginning seven days in advance at any time on any day with a minimum two-hour notice. The service works as a shared ride service for VIA patrons only. Taxicab drivers cannot commingle Starlight patrons with other customers.

The fare for each Starlight Service trip is \$3.00 one-way. VIA tickets and passes are not valid for the service; however, Yellow Checker Cab accepts cash and credit cards. Half fares are available to students, disabled riders, Medicare recipients, people age 62 and older, and children ages 5 to 11. Personal care attendants and children under 4 years old ride free.

### **Procurement and Contract Provisions**

An Invitation for Bid was issued November 23, 2005, with bids being submitted on December 27, 2005. The resulting contract term is one year with the option to renew for two additional years. VIA may cancel the contract at any time with 30 days notice. This allows VIA staff the time to study usage patterns and demand to determine if the demand is significant enough to continue the service and if the market could better be served by a fixed/flex route.

Trips can begin and end at any address within Loop 410 as well as the medical center. The suburban cities and military installations within Loop 410 are excluded. The average trip length is currently 10.6 miles. Trips now exceed projections of 50 per night to approximately 120 to 160 trips per night in July 2006. [Figure 2-7](#) shows the area in which Starlight Service operates.

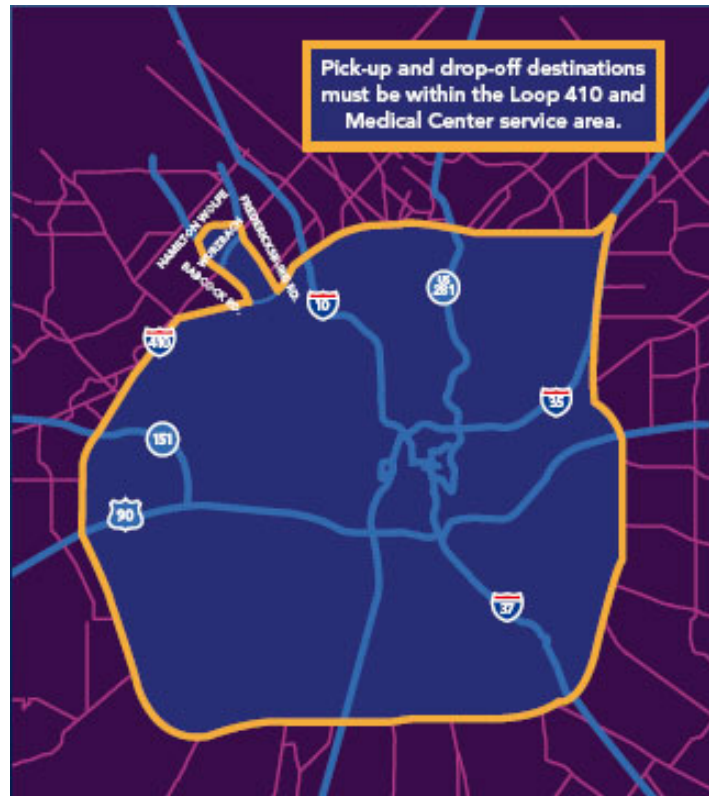
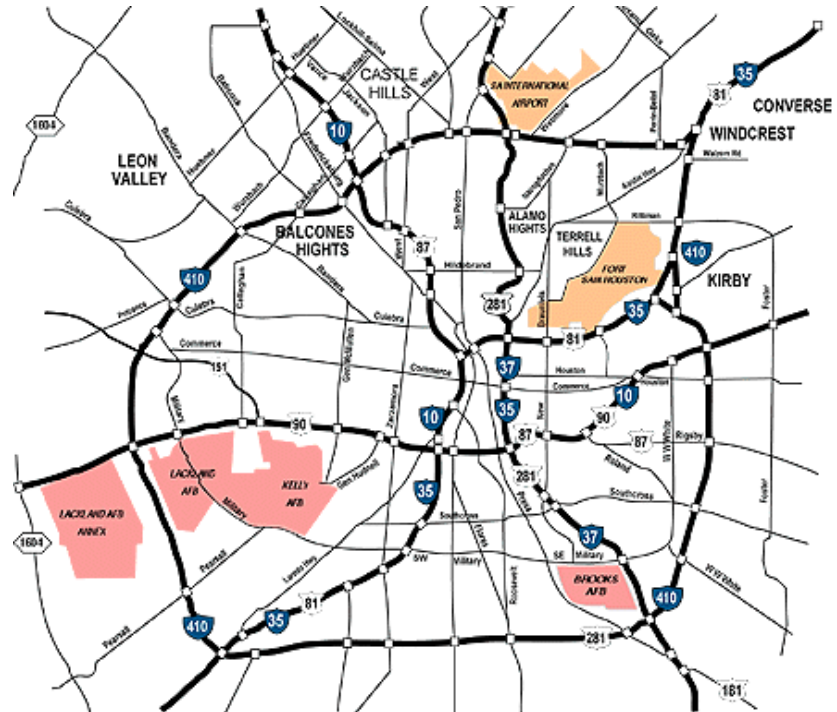


Figure 2-7. VIA Street Map and Starlight Service Area.

Key contract requirements include:

- Contract Supervisor must be available during all hours of operation and two management contacts with decision-making authority must be available in case of emergency.
- Contractor must meet or exceed the local taxicab industry standards, must be licensed by the City of San Antonio to provide taxicab service, and provide service within two weeks of receiving notice.
- The Contractor must provide a dedicated fax machine and computer with Internet access in order to receive daily schedules. The Contractor must install and maintain a separate telephone line for exclusive program use.
- Starlight Service customers cannot be commingled with other customers.
- The Contractor must provide responses to complaints received within five (5) calendar days.
- No-shows shall be reported on a daily basis.
- Operators must provide assistance to customers as necessary.
- The passenger trip manifest form must include: the name of each boarding passenger; the time and location of each pick-up and drop-off; the odometer reading at pick-up and drop-off; and total mileage.
- A minimum of five (5) vehicles and one (1) spare vehicle must be available during service hours. Two (2) of the vehicles must be accessible to persons in wheelchairs and three (3) remaining vehicles must have a capacity of four (4) seated persons not including the operator. Each vehicle must display a magnetic VIA sign.
- Trips will be considered on time if the vehicle arrives at the pick-up address within fifteen (15) minutes of the scheduled pick-up time.
- The Contractor must have a comprehensive anti-drug and alcohol misuse program in place that meets or exceed all federal requirements including pre-employment testing, reasonable suspicion testing, post accident testing, return to duty testing, random testing, and follow-up testing.
- VIA reimburses the Contractor on a flat rate, per one-way trip. The \$3.00 fares collected from Starlight Service customers are retained by the Contractor, and VIA treats this retained fare as an advance payment against reimbursement.
- Invoices with original passenger trip manifest forms should be submitted weekly.

Yellow Checker Cab Company was awarded the contract at \$10.60 per one-way trip. Because there is only one taxicab company in San Antonio that provides wheelchair accessible vehicles, this requirement led to only one bidder on this contract. Wheelchair trips have been provided on the Starlight Service in these first months of service. Other taxicab companies in San Antonio are in the process of obtaining wheelchair accessible vehicles. The cost per trip to VIA is effectively \$7.60 a trip (\$10.60 less \$3.00 fare paid by the patron). Initially because of the rapid growth, demand for Starlight trips was slightly greater than the supply of drivers. The drug testing requirements took time for the drivers to complete and delayed the number of drivers available for service.

Customers make reservations through VIA, and the trips are registered through VIA's Trapeze scheduling system with the passenger's name, pick-up time and address, and drop-off time and

address. The trip data are sent to the taxicab company which groups the trips. The driver records the passenger's name, pick-up time and address, and drop-off time and address on a voucher and the patron signs the voucher. The driver cashiers the voucher through Yellow Checker Cab which immediately pays the driver the \$7.60 per trip. Vouchers are sent to VIA; staff verifies the trips by matching the Trapeze registered trip against the voucher. There has been some difficulty in matching trips as drivers have written the incorrect date on the voucher and drivers sometimes hold on to the vouchers and cashier them at a later date. The VIA Starlight Service is in its infancy and is growing rapidly. Managing the growth will be essential to the success of this program.

### **Lessons Learned**

The Starlight Service illustrates some key benefits of the use of private-for-hire vehicles. VIA is able to experiment with a new form of service during hours where demand is present but limited. Existing vehicles and service infrastructure (e.g., Trapeze scheduling system) may be used, significantly controlling start-up costs. The cost structure guarantees a fixed subsidy per passenger trip, which can be easily compared to subsidy requirements of alternative service delivery structures. Total subsidy can also be controlled through limiting the number of trips to be provided.

## **PHV CASE STUDY 5: THE EVOLUTION OF MEDICAL TRANSPORTATION IN LUBBOCK**

### **Background**

Medicaid is an entitlement program for the provision of health care to eligible clients. The program is federally supported and administered by each state. States must comply with standards set by the federal government but can offer other services or exceed those standards at the state's discretion. The Medicaid program includes a transportation element, with reimbursement provided for medical and dental visits for which no other transportation is available. Transportation is particularly important in Medicaid because minor children are a prime client base.

Medicaid transportation in Texas is provided by the Medical Transportation Program (MTP). Historically, MTP was administered by the Department of Health and Human Services. In 1993, a class action suit was filed in Texas alleging that the transportation services provided did not meet federal standards. Texas entered into a consent decree in 1996; in 2000, a federal judge held that Texas had not complied with nine of the 148 remedial actions under the consent decree. One of the nine involved children's transportation and particularly outreach and staff awareness training. The legislature continued to work solutions and in 2004 shifted responsibility for MTP to the Department of Transportation.

This case study explores the evolution of MTP through 2005 and focuses on the Lubbock area. A PHV, Sexton Transportation, was the primary MTP service provider for the region from 2001 to 2006.

## **Evolution of MTP Services**

MTP services across Texas began as decentralized efforts within each of 10 regions. Lubbock was in a region comprised of 41 counties. Each region solicited and procured services individually. Original contracts for services were frequently negotiated with community action organizations in each region, and the agreements were typically fixed-cost “assurance contracts.” In an assurance contract, providers were paid a pre-determined amount monthly to provide services as required. This method reflected a lack of experience with MTP services, which did not permit a high level analysis into trip characteristics (quantity, trip length, time of day) necessary for more service-specific pricing. The community action organization was responsible for all aspects except certification of clients.

Over time, a trip history was created. The Lubbock region altered its approach to MTP services in two ways. First, the Lubbock region piloted a centralized process for authorizing trips. Providers only operated services at the request of the state. Second, the Lubbock region began developing trip-based pricing instead of the assurance contracts of the past. The earliest trip-based contracts paid a fixed amount per trip plus a premium on longer trips based upon mileage.

Prior to the initiation of statewide procurement of MTP services, regions exercised great flexibility and creativity in arranging for service. For example, the Lubbock region experimented with the use of taxicabs in the late 1970s, paying meter fare plus an administrative mark-up as a step toward trip-based pricing throughout the system. Statewide procurement resulted in the requirement for greater consistency and less flexibility to modify pricing if circumstances changed.

### **Request for MTP Proposals (2001)**

By 2001, MTP reached a maturity that permitted a sophisticated procurement process. The Texas Department of Health published a Request for Proposals in the spring of 2001 for the provision of non-emergency medical transportation to Medicaid and clients of programs serving children with special health care needs. The basic service requirements specified in the RFP were as follows:

- Services must be provided Monday through Saturday from 6:30 a.m. to 7:00 p.m.
- Services must be provided within the local and rural areas as well as to adjacent counties where health-related services are provided.
- Contractor must provide all routine service trips, delivered by the state to the contractor one day in advance of trip; and meet urgent same-day trip needs to the extent possible.
- Service must be timely, with client drop-off times no more than one hour in advance of medical appointments and client return times to the point of origin no later than one hour after scheduled return trip time.
- Contractor must contact client 24 hours in advance to confirm time of pick-up.
- Contractor must respond to complaints within five working days.



Contractors were responsible for driver training and monitoring. They also were required to have the hardware and software necessary for integration with state programs, including the state's billing system.

The RFP listed 10 MTP regions along with the counties in each region. Region 01—Lubbock was comprised of 41 counties, the largest number of counties of any region. Proposers were permitted to submit a Proposal Sheet with one-way trip pricing for any of the following:

- all regions,
- multiple regions,
- a single region,
- a single service area in a region, or
- multiple service areas in a region.

The RFP established two service standards. The first standard was tied to the contractor's performance of requested trips. The minimum standard was that 99 percent of trips be provided on the authorized date and time. The second standard required that the contractor respond to 98 percent of complaints within five working days. Because MTP contracts were for a one-year term with options for three additional one-year terms, the primary recourse for a contractor's failure to meet service standards was to not extend their contract.

Proposals were evaluated on a 105-point scale. Interestingly, 100 of the 105 points tied to pricing, and only 5 points tied to other factors. The proposal scoring system's point assignment method was as follows:

Cost of one-way trip during core (weekdays, 8 a.m. to 5 p.m.)	50
Cost of expanded hours (weekdays, 6:30 a.m. to 8 a.m. and 5 p.m. to 7 p.m.; Saturdays)	20
Cost of one-way trip for attendants	15
Cost of no-show	10
Cost of one-way trip for special needs client	5
Services/improvements beyond RFP	5

Improvements included communications, training, and quality control systems; years of experience; and having vehicles less than one year of age.

For each scoring category, the lowest priced proposal was awarded the maximum number of points. Other proposers were awarded points based upon the ratio of the lowest price to their price. For example, if Proposer A offered one-way trips for \$10 during core hours and Proposer B offered one-way trips at \$15 during core hours, Proposer A would be awarded 50 points. Proposer B would receive 33 points (10/15 times 50).

### **Sexton Enterprises/Yellow Cab**

Sexton Enterprises (dba Yellow Cab) emerged as the successful MTP provider for Lubbock and some surrounding areas. Sexton had a history of providing MTP services dating back to the region's first demonstration of taxicabs in MTP service in the mid-1970s. Sexton operates a fleet

of 24 non-accessible sedans. In order to meet the needs of patrons using wheelchairs or other mobility devices, Sexton subcontracted with Citibus, Lubbock's urban bus company. Citibus operates an ADA paratransit system and therefore has a fleet of accessible vehicles.

Under the terms of the 2001 procurement, Sexton Transportation elected to propose to serve only the area inside the City of Lubbock, a single service area within a single region. Their contract included two different unit trip prices, based upon origin/destination. Trips for which both origin and destination were inside Loop 289 cost \$13.31 in 2005. Trips extending into the area outside Loop 289 but within the city limits cost \$20.48 in 2005. If a client was not available for a scheduled trip ("no show"), Sexton was reimbursed one-half of the value of that trip.

Sexton was responsible for approximately 150 daily MTP trips in 2005. Of those trips, Citibus provided about 18 percent due to a need for accessible vehicles; the remaining 82 percent of trips were provided with non-accessible taxicabs.

### **Lessons Learned**

State staff associated with procurement and oversight of MTP trips expressed complete satisfaction with the services provided by Sexton Transportation. The nature of MTP service was well-suited to a taxicab operation, with a fleet already dispersed throughout the community. State staff felt that the availability of the fleet throughout all operating hours was a strong benefit to this partnership.

Staff conducted periodic surveys of clients and medical providers. They also felt that the complaint system was a barometer of customer satisfaction. Sexton Transportation received high marks consistently, reflecting their ability to provide quality customer service.

In 2006, TxDOT re-procured MTP services statewide. Sexton Transportation expressed concerns that the process made it difficult for PHV companies to compete. Specifically, they noted that insurance requirements reflected the kinds of coverage typically required of bus operations and not taxicab operations of their size. The insurance requirements included in the competitive MTP procurement process were based upon industry standards for commercial carriers, and PHV companies were selected as prime contractors and subcontractors as a result of this procurement. Sexton became a subcontractor to Citibus in the most recent MTP contract.

## **SECTION 3. GUIDELINES FOR USE OF PRIVATE-FOR-HIRE VEHICLES IN PUBLIC TRANSPORTATION**

### **INTRODUCTION**

According to Transportation Research Board Special Report 258: Contracting for Bus and Demand-Responsive Transit Services, nearly 80 percent of general managers that currently contract service say that they would do so again (2). The purpose of Section 3 is to provide guidance on successful incorporation of PHVs in provision of public transportation in Texas. Section 3 includes:

- information regarding best practices gleaned from prior national research, including Texas case study examples of application of best practices; and
- strategies to address areas of concern related to contracting for services discussed in [Section 1](#).

### **TYPES OF SERVICE**

Transit providers have traditionally incorporated PHVs in demand-responsive service modes. Because taxicab and limousine companies already possess the infrastructure for taking trip requests and dispatching vehicles for individual trips, the paratransit mode easily fits their business model.

Nationally, more than half of all demand-responsive services are contracted while only 6 to 7 percent of fixed-route services are contracted. Demand-responsive mode is particularly effective in meeting travel needs in low demand markets. Examples of the types of services that can be provided in demand-responsive mode include:

- ADA paratransit (METROLift, Houston),
- client-based transportation (Lubbock MTP service),
- special-market transportation (Harris County Coordinated Transportation Program),
- shuttles/connectors to mainline transit services,
- “replacement” service during times of low demand (VIA’s Starlight service),
- suburban circulation system,
- employment center circulation, and
- lunch shuttles.

In some cases, PHVs may also be used in fixed-route versions of shuttles or circulators. For example, the T’s CentrePort service is operated by a PHV contractor as a fixed-route. In this case, it is important to also note that the vehicles were provided by the T and are operated by the private firm to reduce cost.

PHVs are also well suited to providing backup services. These services include:

- handling peak overloads,
- covering service for disabled primary vehicles,
- providing “guaranteed rides home” for transit and rideshare participants, and
- assisting in emergency/unanticipated evacuations.

## **PROCURING PHV SERVICES**

### **Competitive Process**

Selecting the right provider when contracting for services is analogous to selecting the right employee for in-house services. The structuring of the procurement process is the first step. The most common form of procurement of contracted service utilizes a Request for Proposals. The RFP process is a competitive procurement methodology that provides for consideration of the qualities of a proposal’s management team, approach to service delivery, and past performance in addition to pricing. This process is consistent with the advice offered by contracting general managers to scrutinize potential contractors before contracting and to talk with other agencies. This review should include checking references for both the contractor and for the specific key staff that has been proposed. The intended outcome is the selection of a contractor who can be relied upon to provide quality service at a reasonable price.

The RFP method was used in most of the Texas case studies, including the Harris County Coordinated Transportation Program where multiple contractors were selected. In the two cases where services were procured for potentially short-term experimental services, a simple bid/price process was utilized. The limited duration of these experiments and their focus on using only existing service infrastructure made a bid process appropriate.

### **Contract Duration**

The contract period selected will potentially impact the level of competition and the quality of service. Short contract periods typically diminish interest by potential contractors due to the effort to develop a proposal and to start up a new service. Of course, the contracting agency also incurs effort and expense associated with the procurement process, making short terms unattractive to them as well. On the other hand, very long terms are feared to produce contractor complacency.

Another factor that could influence the duration of a contract would be the capital requirements placed upon the private company through the public agency. If a private company is required to make investments that must be recuperated over the period of the contract, pricing could be adversely affected in short duration contracts. One of the benefits of contracting with PHV companies is the ability to leverage existing resources (vehicles, scheduling and dispatching systems). Therefore, PHV contracts are unlikely to require major capital investment.

The typical contract duration for contracted service is three years. In order to minimize future procurement efforts and lessen exposure to service disruption related to changing contractors, contracts will often include option years, typically two one-year options. If the contracting agency is satisfied with contractor performance and pricing, the contract may extend for up to five years. The opportunity for a contract provider to receive a contract extension also serves as an incentive to provide quality service.

In the case of experimental services, three-year contract periods are likely inappropriate. PHV companies offer the opportunity to provide services with existing infrastructure for very limited time periods without incurring significant mobilization costs, making them ideal partners in experimental service contexts. This limited period use of PHV service has been evidenced in Texas with the original commuter rail shuttle service offered in Fort Worth that was eliminated quickly when funding was withdrawn. VIA in San Antonio is using taxicabs for late night substitute services on an experimental service today.

### **Capital Property**

When contracting for operation of services requiring buses, the transit industry has moved toward providing the vehicles and even the maintenance facility to a contractor. Primary benefits of this practice are:

- In the case of unsatisfactory performance by the contractor, the public agency still has access to the fleet, which they can operate themselves or re-contract for service.
- The economic life of buses (12 years) exceeds the period of time for which a service is contracted. The private company is then forced to both advance the rate of depreciation of the vehicles and include this higher cost in the contract rate, or to assume the risk that other uses of the fleet may be identified when needed. By providing the vehicle, the transit agency can establish contract durations and later even switch contractors while avoiding paying a built-in “penalty.”
- If a contractor must procure a fleet, the company must be in a financial position to incur significant debt. By providing the high capital cost elements of a service contract, the transit agency opens competition to a broader array of companies.
- The cost of public procurement of vehicles and other major capital elements may be supported by federal and/or state grants, while private procurement incurs the added cost of interest.

If a bus service is experimental or offered during very limited periods, PHV companies may be in a position to provide service using their existing fleet. For example, an experimental commuter service running only a few hours on weekdays may permit a company whose business is heavily weekend-oriented to provide vehicles with no additional capital investment.

Paratransit services are often provided by vans or sedans. The economic life of a paratransit van is typically four to five years, which is also the typical contract duration. The vans are also less costly than buses, so asking a private contractor to provide the vehicle is a stronger consideration for paratransit van services than for bus services. However, when the contractor provides the fleet, the public agency will be faced with a fleet issue if it chooses to terminate the agreement and operate the services itself. Houston’s METROLift program, for example, had a private

company withdraw from its contract with only a five-day notice. In this case, METROLift had provided the vehicles and was able to maintain service; if the contractor had owned the vehicles, service would have likely suffered.

In the case of sedan services, taxicab companies are often able to cross-utilize vehicles between their core business and a transit service. The combination of low initial capital cost for sedans and the sharing of that cost between two services can reduce the unit cost of sedan services compared to van services. Wheelchair accessible taxicabs are becoming increasingly available as well. ADA paratransit services can usually integrate the lower capacity sedan into their operation with no increase in total number of vehicles required. Examples of the integration of taxicabs into paratransit services include Houston METROLift, Harris County Coordinated Transportation Program, and Medical Transportation in Lubbock.

### **Contract Content**

The content of the contract is not only a hammer that is used to enforce contractor performance. It is also the spotlight that illuminates the transit agency's expectations clearly. It is a critical step in ensuring that the procurement process leads to the selection of a qualified, quality contractor. The content should include the following:

- There should be a clear delineation of responsibilities for both the contractor and the agency. This should include a thorough description of the services to be provided; the support that the agency will provide; the minimum qualifications and experience of the company and key staff; and minimum acceptable qualification for contractor employees (for example, drivers).
- Expected service quality performance measures should be established and well defined. The contractor needs to know the standards for on-time performance, safety performance, maintenance reliability, and customer satisfaction. The method and frequency of measurement should also be established.
- Including both incentive and disincentive clauses tied to performance will serve to emphasize those areas of performance and provide motivation for quality performance. Agencies typically tie these clauses to the performance measures; however, incentive/disincentive clauses can also be tied to other aspects of the contractor's performance (for example, reducing driver turnover).
- Change is inevitable over a contract period. Therefore, the contract needs to lay out the process for handling change. In order to achieve a favorable price for contracted services, it is useful to agree from the beginning of the contract how changes to the amount of service will modify contract pricing. Fuel charges to the agency are often subject to a rate adjustment tied to a fuel price index. On the other hand, changes to certain key contract staff may be discouraged and the agency would retain approval rights for replacements.

The case studies included examples of the development of service quality indicators and the tying of other indicators to economic incentive and disincentive provisions. The T in Fort Worth demonstrated great creativity in handling the change to its agreement with SuperShuttle, swapping out responsibility for vehicle maintenance with the contractor shuttling vehicles to the

T's maintenance facility. This kind of collaboration reflects the kind of partnership that can be developed when the contractor and the agency work together for the good of the customer.

## **MANAGING PHV SERVICES**

Selection of a quality contractor is an important step in contracting for service. A good procurement document establishes the quality standards for services that will be provided. Contracted services still require a level of oversight not unlike directly operated services.

The survey of general managers conducted as part of TRB Special Report 258 (2) indicated that agencies believe balancing collaboration and oversight is a hallmark of successful contracting. The contracting public agency needs to have realistic expectations and anticipate the need to dedicate some level of agency staff to managing the contract service. In addition to measuring performance and documenting service issues, the agency should also plan to monitor maintenance records, particularly if the contractor has received agency vehicles; monitor contractor's safety and training initiatives; periodically review accident records; and affirm that contractor employees meet contractual standards where applicable.

Voucher systems may require further diligent review. In the 1980s, a major Texas transit system identified significant fraud in a PHV-based voucher program involving transportation for seniors and persons who are disabled. The negative consequences of that experience have resulted in a generalized concern regarding any form of contracting with PHV companies. Houston METROLift has implemented a number of safeguards to protect against such fraud in its voucher programs, including randomly contacting users to verify that services were provided. Oversight of this program has permitted METROLift to offer this service and be confident that funds supporting its voucher program are appropriately spent.

## **OVERCOMING CONCERNS**

Section 1 included a listing of concerns related to contracting services as documented in TRB Special Report 258 (2); and concerns related to use of PHV providers as documented in the data collection effort associated with this research project. In this portion of Section 3, those concerns are listed along with strategies to address the concerns.

### **Loss of Control**

The number one concern related to contracting for services is the loss of direct control over provision of service. The issues of control and accountability were the highest ranked primary reasons not to contract for service among general managers in the national survey and among Texas transit providers in this research effort.

The first step to maintaining control is clearly specifying responsibility and service quality standards. Communicating quantifiable service standards is an effective method of establishing expectations.

The development of a collaborative environment while verifying performance permits the agency to stay close to the contractor. Rapid identification and resolution of any issues will help prevent significant deterioration of service quality.

The ability to preserve a service if a contractor fails to perform is a common method of managing the control risk factor. A number of strategies are exhibited among the Texas case studies that minimize risk to customers.

- METROLift and Harris County have service contracts with multiple taxicab companies. If one is unsatisfactory, service would still be available through the other companies.
- The T provides vehicles to the PHV provider and performs maintenance on those vehicles. It is able to ensure that the vehicles remain in sound operating condition and could assume the service if needed.
- Citibus in Lubbock is the primary medical transportation provider and can manage the level of service that is subcontracted to the local taxicab provider to assure that it can operate those services if necessary.

### **Client Concerns**

Health and human service agencies require assurances that their clients are transported safely. The primary mechanism to address this issue is in the specification of PHV contractor driver standards. These standards may include both driving record and criminal background standards. Additionally, drivers can be required to complete specific training. There are several existing off-the-shelf training courses related to passenger assistance; alternately, the agency itself could conduct training and certification. In Houston, not all drivers of taxicab companies contracted to METRO participate in the program; taxicab dispatchers have records of which drivers are qualified and limit assignment of METROLift trips to those drivers. At the same time, METROLift checks vouchers to assure that only drivers meeting its qualifications are transporting METROLift clients.

A second client concern may be related to client confidentiality. Client-based providers are often committed to protecting the identity of their clients, particularly those who suffer from medical conditions such as HIV/AIDS. Again, a specific driver training and certification could be required of all PHV drivers participating in such programs. PHV services may, in fact, be particularly well suited to these circumstances since they are generally personalized services.

### **PHV Industry Limitations**

Texas transit providers identified two key limitations to PHV companies participating in public transportation. The first is the lack of PHV providers within their region. The inventory of PHV companies indicated a concentration of PHV companies in the major urban areas, with nearly half of all companies located in the Houston and Dallas areas. However, there are also nearly 300 companies scattered outside of the nine concentrated urban areas (see [Table 1-1](#)).



Public agencies may view taxicab companies as the only source of PHV services. The T in Fort Worth creatively used an airport shuttle service to operate its airport-area shuttle connecting to the commuter rail line. Thus, options extend beyond the taxicab industry.

The second limitation identified by Texas transit providers was cost. Providers believe that use of PHVs will cost more than in-house operation.

The case studies include several examples where cost savings were enjoyed through contracting with PHV companies. Houston's METROLift program saved \$2.8 million in fiscal year 2005 by using contracted taxicabs to provide a portion of its ADA paratransit services. VIA is able to provide service during times of low demand by paying a per-trip cost rather than a continuous hourly cost to operate fixed-route services.

Clearly there is no universal response to the cost issue. The provider needs to make sure that all relevant costs are included when comparing its costs to the PHV operation, including depreciation of vehicles. Further, PHV operation may allow an agency to avoid significant up-front costs when introducing experimental services. After experience with the service, the agency can assess whether that investment is warranted for long-term operation.

## **PHV AND TRANSIT COORDINATION**

Under the correct circumstances, the use of PHVs in operating public transportation services can be economically or strategically advantageous. Twenty-four regions across Texas are currently drafting their first regional service plan to support greater collaboration and coordination among service providers.

These plans are not the end but rather the beginning of a process of improving the quality and quantity of transit in Texas. Regions will likely have identified specific coordination opportunities to pursue immediately, opportunities that require further study and consideration, and opportunities that will require statutory or policy changes in order to move forward.

As previously discussed, PHV companies may fill particular service niches within a coordinated transportation network. The regional service planning process includes identification of service gaps. Using PHV companies to address service gaps (such as the late night service being operated in San Antonio) may be a cost-effective way to introduce experimental services.

Regions have assembled working groups and advisory committees in developing the plans. These groups will likely continue to work to implement recommendations, refine concepts, and update plans. Including PHV representatives on these continuing coordination teams will provide an additional resource for ideas and for service delivery.



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