



Local and State Partnerships with Taxicab Companies

DETAILS

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NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM

Responsible Senior Program Officer: Gwen Chisholm Smith

Research Results Digest 366

LOCAL AND STATE PARTNERSHIPS WITH TAXICAB COMPANIES

This digest presents the results of NCHRP Project 20-65, Task 30, “Local Practices in Developing Coordination Partnerships with Taxicab Companies.” The project was conducted by Nelson \Nygaard Consulting Associates of San Francisco, CA, with Total Contract Solutions, Little Elm, TX, under subcontract to ICF International, Sacramento, CA. David Koffman of Nelson \Nygaard Consulting Associates was the Principal Investigator. The other authors of this digest were Ellen Oettinger of Nelson \Nygaard Consulting Associates and Charles Johnson of Total Contract Solutions.

CHAPTER 1—INTRODUCTION AND SUMMARY

This research was undertaken to identify how states and local governments can best promote partnerships with taxicab companies for provision of public transportation. A “partnership” typically involves some form of contract for service, but also includes less formal arrangements as well as regulatory involvement intended to expand or create service for the public. An expansive understanding of “public transportation” has been applied including not just service provided by public transit agencies but service for all types of public agencies, including state and local governments, human service agencies, and school districts.

At the outset of the research, a list of known partnership types was created on the basis of a literature review, along with a list of factors that may hinder or help establish partnerships. A survey of state departments of transportation (DOTs) and taxicab regulators was then used to learn more about the prevalence of partnership types and factors that promote or hinder partnerships. Using the survey results, telephone follow-up, and further literature review, a series of case studies was selected to explore how part-

nerships work in practice, what barriers have had to be overcome, and steps taken to overcome these barriers.

Following this introduction and summary of lessons from the case studies, the balance of this digest consists of a presentation of the survey results, 23 case studies, and previous research.

Types of Partnerships and Case Studies

Eight kinds of partnerships between public agencies and taxicabs have been identified and studied in this research. The following partnership types, case studies, and other sources used are shown in Figure 1.

General public dial-a-ride. Contracting with taxi companies for general public dial-a-ride service seems to be uncommon, but case studies of the Ann Arbor Transit Authority (AATA), the Pomona Valley Transit Authority (PVRTA), and Wisconsin Shared Ride Taxi programs illustrate how this does prove effective in certain situations.

Demand responsive service for seniors or people with disabilities. Transit agencies provide demand responsive service for

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Partnership Type	Sources
General public dial-a-ride	<ul style="list-style-type: none"> • Ann Arbor Transit Authority (Night Ride) • Pomona Valley Transit Authority • Wisconsin Shared Ride Taxi programs
Demand responsive service for seniors or people with disabilities	<ul style="list-style-type: none"> • Pennsylvania Senior Shared Ride program (3 cases) • San Joaquin Regional Transit District • Orange County Transportation Authority
Subsidized taxi rides	<ul style="list-style-type: none"> • Maryland Transit Administration (Baltimore) • Los Angeles, California • West Hollywood, California • Olathe, Kansas
Wheelchair accessible taxicabs	<ul style="list-style-type: none"> • Chicago, Illinois • Seattle, Washington • Washington Metropolitan Council of Governments
Non-emergency medical transportation	<ul style="list-style-type: none"> • Kentucky • Massachusetts • National brokerage company
Guaranteed ride home	<ul style="list-style-type: none"> • Washington Metropolitan Council of Governments
Student transportation	<ul style="list-style-type: none"> • New Haven, Connecticut • St. Lucie County, Florida • Palatine, Illinois • Cleveland, Ohio • St. Louis, Missouri
911 transport	<ul style="list-style-type: none"> • Houston, Texas

Figure 1 Partnership types, case studies, and sources.

people with disabilities as required by the Americans with Disabilities Act (ADA), often using taxicabs for some portion of service as illustrated by case studies of the San Joaquin Regional Transit District and the Orange County Transportation Authority. In addition, states and localities provide other demand responsive services for seniors and people with disabilities, as illustrated by the State of Pennsylvania’s Shared Ride program and its implementation in three counties.

Subsidized taxi rides. Popularized in the 1970s as “user-side subsidies,” subsidized taxi rides enable individual riders to obtain taxi rides at a discount. Historically, they have used tickets, scrip, coupons, and vouchers and mechanisms, but recently there is a trend toward using smart cards. Case studies have been conducted of subsidized taxi rides in Baltimore, Maryland; Los Angeles, California; West Hollywood, California; and Olathe, Kansas. The targeted populations include seniors, people with disabilities, low-income people, and people with AIDS.

Wheelchair accessible taxicabs. Public agencies have provided subsidies to help taxi companies obtain and operate wheelchair accessible taxicabs. Three case studies illustrate some of the issues that have arisen in Washington, DC; Chicago, Illinois;

and Seattle, Washington. A report from the Taxicab, Limousine, & Paratransit Association (TLPA) provides some perspective and additional examples.

Non-emergency medical transportation (NEMT). States provide access to medical care for participants in the state-run Medicaid programs, often by means of taxicabs. Approaches and issues with using taxis for NEMT are illustrated by case studies of programs in Kentucky, Massachusetts, and Rhode Island. A national survey and interviews with two national NEMT brokerage providers give perspective.

Guaranteed ride home. Agencies in many metropolitan areas operate programs that encourage commuters to use transit and ridesharing. As part of these programs, they offer commuters a way to get home in case an emergency or long work hours require a trip home that is not feasible using their regular commuter mode. Commonly this involves paying for a taxi ride. A national review by the Federal Transit Administration (FTA) provides a good overview of guaranteed ride home programs and a case study of a large program in the Washington, DC, area illustrates a particular approach to overcoming challenges.

Student transportation. Many school districts provide transportation either because of a broad state

requirement or else for specific groups of students covered by certain state or federal laws or court orders. Most of this transportation is provided using school buses, but taxis also provide many trips that do not fit on bus routes. Various situations and methods are illustrated in five case studies: New Haven, Connecticut; Palatine, Illinois; Cleveland, Ohio; St. Louis, Missouri; and St. Lucie County, Florida. The case studies include transportation of special needs students, homeless students, students transferred out of a school that fails to meet standards, and transportation for school desegregation.

911 transport. One example was found of taxis being used to serve non-urgent needs of 911 callers. Despite the apparent rarity of this type of service, the case of Houston, Texas, is included because of the promise that it seems to hold for other areas.

Published Information

Five previously published reports are particularly relevant to this research.

TCRP Report 75. *TCRP Report 75: The Role of the Private-for-Hire Vehicle Industry in Public Transit*, published in 2002, looked at the role of not just taxicabs but also limousines, specialized vehicles used for non-emergency medical transport, and shuttles. Reliable information about the taxicab industry overall is very hard to find, so a summary from *TCRP Report 75*, although dated, is still useful. Conclusions from the report include the following:

- Estimates vary on the number of taxicabs in the United States, with the two most recent estimating 170,800 and 101,351 for 1986 and 1992, respectively.
- Studies are more conclusive with respect to the number of taxicab organizations, with the same studies estimating 6,349 and 5,701, respectively.
- A survey of 361 taxicab operators in 1998 found that more than 60% of taxicab companies operated fewer than 25 vehicles, more than 72% operated fewer than 50 vehicles, and more than 83% operated fewer than 100 vehicles (smaller companies are likely to be underrepresented).
- Taxicabs are a heavily regulated industry. The survey of taxicab operators found that state reg-

ulations under which they operate require driver background checks (78% of companies), control fares (76% of companies), and control entry into the market (64% of companies).

- Taxicabs are heavily involved with contracting with public entities. Of survey respondents, 54% contract with local government, 32% with transit, and 74% with social service agencies (which may include non-profit agencies in addition to public entities).

TCRP Report 121. *TCRP Report 121: Toolkit for Integrating Non-Dedicated Vehicles in Paratransit Service* and the associated Case Study Report provide a comprehensive examination of how taxicabs and other non-dedicated vehicles are used in public paratransit programs. The case studies of public paratransit in this digest were chosen to highlight developments since the research for *TCRP Report 121*.

Project ACTION taxi survey. *A Survey on the Use of Taxis in Paratransit Programs*, published by Easter Seals Project ACTION in 2008, includes five case studies focusing on the use of taxicabs in conjunction with ADA paratransit. It includes some information about wheelchair accessible taxicabs, which is incorporated in the discussion of that topic in this digest. The case studies herein were chosen to avoid duplicating the Project ACTION survey and to highlight issues not covered in that report.

FTA guaranteed ride home survey. “Guaranteed Ride Home Programs: A Study of Program Characteristics, Utilization, and Cost,” published in 2007, includes an overview of the use of taxicabs in these programs. The relevant information is summarized in Chapter 8.

TLPA accessible taxi report. “Assessing the Full Cost of Implementing an Accessible Taxicab Program,” published by the TLPA in 2010, is a valuable compendium of information about wheelchair accessible taxis. The relevant information is summarized in Chapter 6.

Lessons from the Case Studies

The 23 case studies, supplemented with information from published reports, illustrate the range of partnerships between public agencies and taxicab companies. The case studies also illustrate many of

the hindrances described by survey respondents and steps taken to overcome them. This section summarizes these lessons from the case studies.

In general, the case studies and the literature show that partnering with taxicabs can be cost effective and expand service to the public in the right circumstances with appropriate controls and incentives.

Taxicabs can be more economical and effective for certain trips than buses or other modes. Examples from ADA paratransit, school transportation, and general public dial-a-ride illustrate that taxicabs can be more cost effective than transportation with buses for long trips, trips to and from distant locations, and trips at night when demand is low. For example, the Orange County Transportation Authority is finding it effective to assign evening and Sunday trips to taxicabs. AATA uses a taxicab contractor for a nighttime general public service when buses do not operate. And many school districts use taxicabs when they need to transport students long distances. The example of Houston, Texas, shows that not only are taxicabs less expensive than ambulances (which is not surprising), they also serve the needs of many people who call a 911 emergency service. Taxicab partnerships have allowed shared ride programs in Pennsylvania to serve a wider area than would otherwise be possible, have let the AATA maintain around-the-clock service, and let Medicaid NEMT brokers ensure access to medical services where public transit is not an option.

Trips need to be economically attractive for independent contractor drivers. Almost all taxi drivers are independent contractor drivers. As a result taxi companies have less ability to require drivers to accept specific trips, take special training, or adhere to special rules than if the drivers were employees. Drivers' income normally consists of fares collected from passengers less fees paid to a taxi company. In a typical partnership arrangement, the passenger pays no fare to the driver, but the company passes on a payment in lieu of fare from the revenue received from the project sponsor. Lack of tips, extra paperwork, delay in payment, or percentage fees retained by taxi companies can make subsidized or contract trips unattractive to drivers and lead to poor service. For example, in Los Angeles, drivers often turned down trips for the City's coupon program for seniors and people with disabilities because of paperwork, low tips, delays due to passengers' assistance needs,

and a processing fee charged by companies. Replacing coupons with a debit card reduced drivers' paperwork, reduced the companies' processing cost, and allowed the City to forbid the companies from charging the drivers a processing fee. As a result, the trip refusal rate is reduced though not eliminated. In Baltimore, the Maryland Transit Administration, which also uses a debit card for its Taxi Access II program for ADA paratransit riders, has found it worthwhile to compensate drivers \$3 per trip for lack of tips. Seattle and Washington, DC, have both arranged for drivers of wheelchair accessible cabs to receive favorable license or lease terms to make operating these vehicles economically attractive.

Steady business is an incentive for some drivers. The case studies of student transportation illustrate how steady business from a taxicab partnership can be economically attractive for drivers. School trips typically provide steady income for a driver, since they tend to be long and repeat five days a week, and because school districts like the same driver to be assigned to a student every day. A taxicab operator in Cleveland noted how transporting a single student on a daily basis can provide a driver with \$300 weekly income. As a result, drivers are willing to go through special training and certification, accept occasional behavioral problems from some students, and even accept a rate of payment somewhat below meter rates in some cases.

Taxicab companies need to recover costs from driver fees. Taxicab companies make money from the fees that drivers pay for leasing a vehicle or for dispatch service. It follows that a taxicab company will only accept a substantial burden for requirements like paperwork, billing, payment delay, training, or higher-than-usual insurance for a sufficient volume of steady business that allows the company to increase or at least maintain the number of drivers that lease from it or pay dispatch fees. This is illustrated by the case of Night Ride in Ann Arbor and by several school transportation examples. In some cases, taxi companies may try to pass program costs on to drivers, but this runs the risk of making the program less attractive to drivers. Alternatively, the public agency can reduce the burden of the problem, as Los Angeles did by automating payment in its Cityride program.

Contracted rates may be better than meter rates. Case studies of partnerships for general public dial-a-

ride, ADA paratransit, school transportation, and Medicaid NEMT illustrate the use of contract rates, based on a bidding or request for proposals (RFP) process. The resulting rates reflect competitive market conditions and may be higher or lower than meter rates. A rate higher than the meter may be appropriate if it allows taxi companies to recoup the cost of training drivers, obtaining additional insurance, instituting a drug testing program, and advancing payment to drivers while waiting for payment from the public agency. The higher rate lets the company recoup these costs without reducing the amount it passes on to the drivers. However, under certain conditions, a rate less than the meter rate may work. For example, the PVTA has found in recent years that it can pay a rate which gives the drivers \$0.10 per mile less than the meter rate, since depressed economic conditions mean there is less other work for drivers and PVTA's dial-a-ride provides steady business. Contracted rates also allow the use of rate structures that are simpler than meter rates, easier to verify, and less subject to fraud, such as flat rates per trip paid by PVTA, the AATA, the Centre Area Transit Authority, and Olathe, Kansas, and Zip Code-based rates used by some school systems in St. Louis.

Partnership arrangements need to take into account the opportunities and limitations created by taxicab regulations. Where there are strict taxicab regulations, a public agency may be able to involve all the taxi companies in the area, like Los Angeles does for its Cityride program where participants arrange their own trips with any permitted taxi company. Neighboring West Hollywood, which also grants time-limited franchises to taxi companies, is able to require that companies provide a limited number of free rides to people with AIDS. In comparison, in Washington, DC, which has much looser controls on the number of taxi companies and their methods of operation, the Metropolitan Washington Council of Governments (COG) decided it needed to centrally authorize and dispatch trips to specific taxi companies for its Guaranteed Ride Home program.

Trip grouping reduces cost. When an individual passenger hires a taxi, regulations in most areas prevent the driver from serving other passengers en route. In comparison, most publicly sponsored programs encourage or require shared rides. In student transportation, trips are typically grouped in "routes." Medicaid NEMT brokers, ADA paratransit programs, and Shared Ride Program coordinators in Pennsylvania

commonly group trips together before assigning them to a taxicab. In Massachusetts, providers that carry Medicaid NEMT trips are required to offer at least a 50% discount for the second passenger and each subsequent passenger on a shared ride trip. The two transit agencies that contract with taxi companies for general public dial-a-ride (AATA and the PVTA) both encourage their taxi contractors to group rides together and make it worthwhile for them to do so by paying a flat rate per passenger or a set amount per vehicle hour.

Driver selection is important. Because taxi drivers are independent contractors, and taxi companies make money from driver leases and dispatch fees, taxi companies do not select drivers in the same way that most companies select employees. Therefore many private agencies add their own requirements for taxi drivers to participate in publicly sponsored service (e.g., special training, certification, or drug testing) and reserve the right to bar particular drivers from participating. This is illustrated by San Joaquin RTD's paratransit service, AATA Night Ride, PVTA dial-a-ride, and most of the student transportation examples. Taxicab operators interviewed for this study noted the importance of selecting particular drivers for regular work on these contracts. For example, the taxicab operator who performs student transportation for the Community Consolidated School District 15 (CCSD 15) in Palatine, Illinois, noted the importance of picking those drivers that like transporting students, since some drivers get along well with the children and some do not. The taxi operator for AATA noted that only certain drivers appreciate the steady nature of contract work, and more entrepreneurial drivers would rather do other work. One of the services offered by a transportation management company used as an intermediary in several case studies is screening and selection of drivers.

Active program oversight is necessary. Even more than in any contracting situation, active oversight of a taxi contractor is important. For example, the Centre Area Transit Authority in State College, Pennsylvania, requires drivers on its shared ride service to keep logs that the company uses for billing, and then places calls to randomly selected passengers to verify trips on a regular basis. Staff in Olathe, Kansas, and at CCSD 15 also described procedures for verifying the trips billed by taxi companies. Los Angeles formerly employed a multi-person staff to verify billings for the City's coupon program, before switching to debit cards. Routine quality

control surveys are another useful form of oversight, one that is used by the Metropolitan Washington COG for its Guaranteed Ride Home program, Kentucky's NEMT brokerages, and the Houston 911 diversion program.

Intermediaries can help with quality control and contract oversight. A number of the public agencies included in the case studies have found it advantageous to work with taxicab companies (and other vendors) through a contracted intermediary rather than directly. For example, Kentucky and Massachusetts both contract with regional brokers who make transportation arrangements, including pre-arranging each trip and monitoring compliance with requirements for drivers, vehicles, and insurance. Some NEMT brokers also provide training for taxi drivers. The Orange County Transportation Authority, the San Joaquin RTD, and the St. Lucie County school district all work with a national transportation management company that performs a similar function. The Maryland Transit Administration contracts with a private broker to administer its Taxi Card II trip subsidy program. The broker verifies that all trips take place only within the precise area and hours permitted by MTA. For its Guaranteed Ride Home program, the Metropolitan Washington COG uses a contractor to receive requests from commuters, arrange taxicab transportation, and provide follow-up for quality control.

Technology reduces costs and allows better control. The taxicab contractor for Houston's 911 alternative transportation pilot was chosen partly because of their ability to deliver a trip reservations web portal with custom fill-forms with drop-down menus that provide for rapid data entry. This portal also ensures trips are only dispatched to eligible locations. In Baltimore and Los Angeles, debit cards allow for much better control of a taxi trip subsidy program than is possible with coupons or scrip, and with less effort and expense. Even Olathe, Kansas, which is a much smaller program, has developed a customer database that allows it to connect each coupon to the person it was sold to, which helps determine if a person has sold or given away his or her coupons. The City is also working on computerization of payment, possibly using some kind of smart card. In Massachusetts, the Montachusett Regional Transit Authority (MART) operates a vendor portal for posting available NEMT trips and letting vendors bid on trips and indicate which they can operate.

Taxicab partnerships should avoid competition with regular taxicab service. Competition with regular, market-rate taxi service was an issue in at least two case studies. In Pennsylvania, taxi operators resisted the Shared Ride program when it was established in 1981, saying that the Shared Ride services would amount to unfair competition. However, the State was able to reason that a prior day reservation requirement that applies to the Shared Ride program eliminated the direct competition element. The State also encouraged the counties to use taxi operators where they could, and this helped win over the taxi operators. In Ann Arbor, the transit authority's Night Ride service, even though it does not require previous-day reservations, has response times that are deliberately made long enough that the service does not compete with regular taxi service. Also riders do not get an exclusive ride and cannot flag down a cab on the street or make a personal appointment with a driver.

Some form of public involvement appears to be necessary to establish wheelchair accessible taxi service. Wheelchair accessible taxis cost more to buy and operate than conventional taxicabs and trips by wheelchair users involve unpaid time for loading, securement, and unloading, but ADA prevents charging more than regular meter rates. This creates a challenge for all parties involved.

- Cities are using a combination of regulations, incentives, and direct involvement to establish wheelchair accessible taxi service. Examples include percentage requirements in taxi fleets (Chicago, Los Angeles, Portland, and under consideration in Seattle); issuing medallions or licenses restricted to wheelchair accessible taxis (Boston and Seattle); free or lower-priced wheelchair accessible taxi medallions (Seattle, New York, Miami); waiving annual fees (Seattle); and using public funds to help purchase wheelchair accessible taxis (San Francisco, Washington, Rhode Island Public Transit Authority).
- Steps taken to make wheelchair accessible taxi service work for independent contractor drivers include requiring or subsidizing discounted leases from taxi companies (San Antonio, Washington, DC), and letting wheelchair accessible taxi drivers go to the head of the line at airports (Chicago).

- Business from the ADA paratransit program helps make wheelchair accessible taxi service more sustainable (Houston, Seattle, San Francisco, Arlington, Chicago).
- Effective dispatching is needed to make wheelchair accessible taxi service available to wheelchair users and to bring business to wheelchair accessible taxi drivers. Chicago created a specialized central dispatching service for this purpose. Seattle required cabs in a wheelchair accessible taxi pilot program to join a single dispatch association to provide good response time, and Washington, DC, used just two companies with dispatching for its pilot.
- Local agencies have provided training (Seattle, Washington), included training on passenger assistance in training required of all drivers (Chicago), and facilitated very active coordination groups (Seattle, Washington).
- Experience with or knowledge of 16 types of partnership between taxicabs and state or local agencies
- Opinions about 14 issues that may have hindered partnerships
- Factors that have helped in creating partnerships between taxicabs and public agencies

State DOT Survey

Taxicab Regulation

Of the 26 respondents to the state DOT survey, no agency indicated it has principal responsibility for regulating taxicabs.

State DOT Partnerships with Taxicab Companies

Direct partnerships between state DOTs and taxicab companies are rare. Only two respondents described direct partnerships with taxicab companies for some type of service:

- Pennsylvania: In one county, the DOT contracts directly with taxicab companies to provide subsidized human service transportation for senior citizens. In every other county, the DOT contracts with a coordinator of services that in turn contracts with various providers, including taxicabs in some cases, for human service transportation.
- Maryland: In its capacity as the transit operator for the Baltimore metropolitan area, the DOT administers a taxi trip subsidy for ADA paratransit riders.

Four others described partnerships that work through local agencies or consist of funding:

- Arkansas: FTA Job Access/Reverse Commute and New Freedom programs were cited as a type of partnership.
- Oregon: DOT staff noted that the FTA Section 5310, 5311, 5315, and 5317 grants that it makes to public transit agencies and others are used for taxi ticket programs in some communities.
- Virginia: The DOT had no partnerships at the time of survey, but was considering funding arrangements with taxicab companies for 2012.
- Wisconsin: The DOT administers a statewide Shared Ride Taxi program that serves over 50 small communities. The DOT provides funding and oversight, but the municipalities contract with the providers.

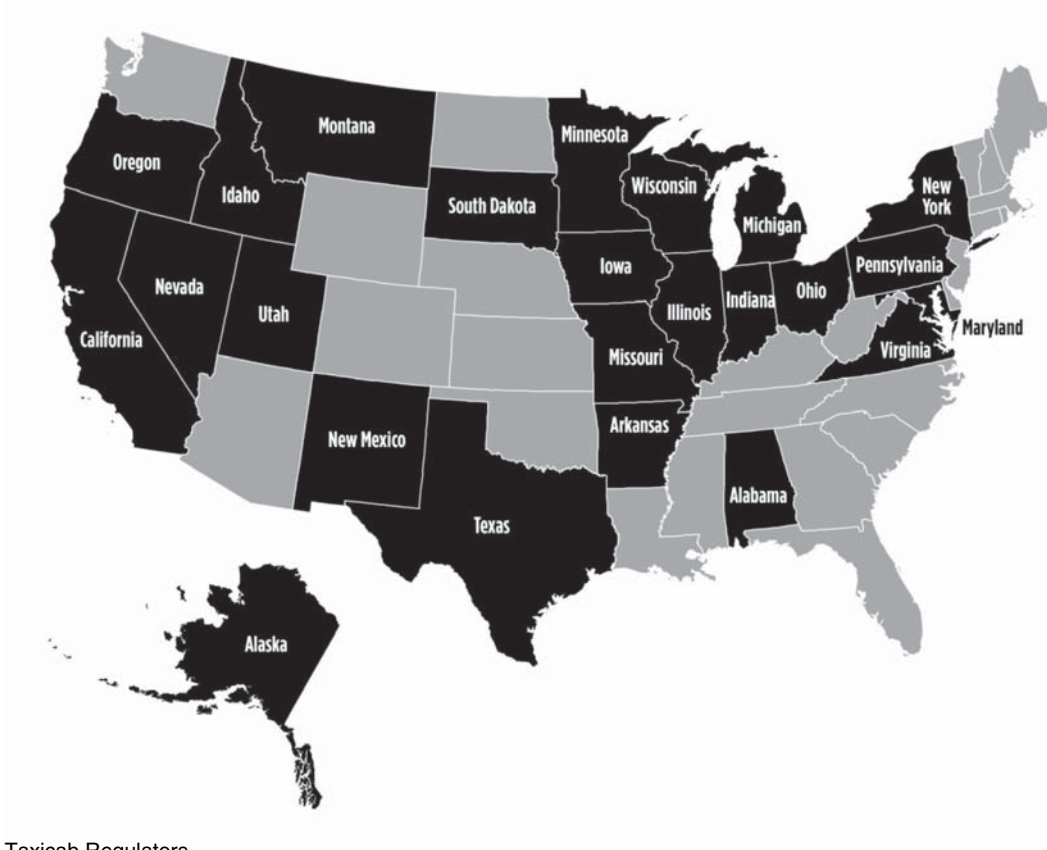
CHAPTER 2—SURVEY RESULTS

Three surveys were undertaken to explore the extent to which public agencies have implemented partnerships with taxicabs, as well as barriers and facilitating factors for partnerships.

- **State DOTs:** Email invitations were sent to 79 state DOT contacts including members of the Standing Committee on Public Transportation (SCOPT) of the American Association of State Highway and Transportation Officials (AASHTO) and state contacts for AASHTO's Multistate Technical Assistance Program (MTAP). Twenty-six usable responses were received. Their locations are shown in Figure 2.
- **Taxicab Regulators:** Email invitations were sent to U.S. members of the International Association of Taxicab Regulators (IATR). The invitations were sent directly by IATR to preserve confidentiality. Twenty-four usable responses were received. Their locations are shown in Figure 2.
- **Taxicab Operators:** The TLPA sent survey invitations to its taxi operator members. Eight usable responses were received.

All three surveys were conducted online. With some variation due to differing responsibilities among the respondents, the following topics were covered:

State DOT Survey



Taxicab Regulators



Figure 2 Locations of survey respondents.

The Pennsylvania, Maryland, and Wisconsin programs are described in case studies.

Other State Agency Partnerships

Nine respondents indicated that other state agencies partnered with taxicab companies in some way:

Type of Partnership	Responses
Medicaid non-emergency transportation	9
Other human service programs	4
Other services	3

The survey asked about partnerships for emergency response, but none of the respondents knew of such partnerships.

Most of the respondents who indicated “other human service program” or “other service” did not provide details, but two mentioned departments of Labor and Rehabilitation. Many of the partnerships that respondents had in mind actually work through contracted entities, such as statewide or regional brokers for Medicaid NEMT, for example:

- Oregon: The State Department of Human Services contracts with transit agencies for NEMT, part of which is provided by taxicabs.
- Missouri: In the Department of Social Services, Medicaid (called MoHealthNet) contracts with a statewide broker (M-T-M) that uses taxicabs for NEMT.

Funding for Taxicab Partnerships

Seventeen DOTs administer programs that provide funding for partnerships between local public agencies and taxicabs including these examples:

- FTA grant programs: 5310 (Elderly and Disabled), 5311 (Rural), 5316 (Job Access/Reverse Commute) and 5317 (New Freedom)
- Pennsylvania Shared Ride Program for senior citizens, persons with disabilities, and welfare-to-work transportation program. Not every locality uses taxicabs, but many do.
- Wisconsin provides funding to local governments for the Shared Ride Taxi program and provides funding to counties that may contract with taxi operators for specialized or human services transportation.
- Michigan provides operating assistance to local transit agencies and a few of those agencies contract with taxicab services for a portion of their service.

Knowledge of Other Local and State Taxicab Partnerships

User-side subsidies. Respondents were asked about their knowledge of partnerships between local or state public agencies and taxicab companies involving user-side subsidies, that is, voucher, scrip, or similar arrangements in which an agency subsidizes fares for riders. As shown in Figure 3, the most common cases are for seniors and/or people with disabilities, including some that are provided as a supplement to ADA paratransit service. Eleven respondents were also aware of user-side subsidies for job access program participants and as a part of guaranteed ride home programs to promote ridesharing and/or public transportation, but most of the respondents indicated that there were only a few such programs. Five respondents also claimed

Type of Program	Numerous (>3)	A few (1-3)	None	Don't Know
Seniors and/or persons with disabilities	5	10	3	6
Supplemental ADA service	4	7	4	10
Job access programs	3	8	3	10
Guaranteed ride home services	3	8	5	9
General public	3	2	7	12

Figure 3 DOT respondent knowledge of user-side subsidy programs.

Type of Program	Numerous (>3)	A few (1-3)	None	Don't Know
Seniors and/or persons with disabilities	4	4	7	9
Supplemental ADA service	5	5	7	8
Job access programs	3	6	7	8
Guaranteed ride home services	3	8	6	8
General public	5	4	7	8
Special education	1	1	5	18
Medicaid (NEMT)	5	5	5	9
Emergency 911 transports	2	0	6	17

Figure 4 DOT respondent knowledge of direct taxicab contracts.

to know of user-side subsidy programs for the general public.

Direct contracting. Asked about partnerships involving direct contracting with taxi companies or payment for rides, the applications that respondents believe are most numerous are again programs for seniors and/or people with disabilities, but an equal number knew of “numerous” cases of contracting with taxis for general public demand responsive transit service (see Figure 4). These cases include the Pennsylvania and Wisconsin programs (two respondents) already mentioned. The Pennsylvania Shared Ride program is principally targeted to seniors and people with disabilities but is also open to the general public at unsubsidized rates. Respondents from

Oregon and California also believe that there are a number of cases of taxicabs providing general public demand response service in their states. Contracting for Medicaid non-emergency trips is also widespread and two respondents indicated use of taxis for 911 transports but did not provide details.

Other. Asked about four other types of partnerships with taxicab companies, the type that respondents believed was most common was assistance with purchase of accessible taxicab vehicles (Figure 5). In addition, there were five respondents who know about partnerships for coordinated dispatching of accessible taxicab vehicles. Two respondents know of taxicabs being used for emergency response, including a respondent from Wisconsin

Type of Program	Numerous (>3)	A few (1-3)	None	Don't Know
Assistance with emergency response	0	2	2	20
Assistance to buy accessible taxicabs	2	7	6	10
Coordinated dispatching of accessible taxicabs	1	4	4	15
Regulatory requirements, incentives, or special permits for accessible taxicabs	0	1	3	21

Figure 5 DOT respondent knowledge of other taxicab partnerships.

who described taxicabs (and amphibious vehicles) being used to evacuate stranded residents from flooded properties.

Nine respondents provided examples of partnerships, most of which have been mentioned already. Follow-up on these is included in the case studies.

Hindrances to Partnerships

Respondents were asked to what extent 14 different issues hindered taxi partnerships. Among those who gave answers other than “don’t know,” most indicated that most of the factors (shown in

Figure 6) were at least a “minor issue” but there were only a few factors that many respondents considered a “major issue.” The factors most commonly cited as major issues were the following:

- Taxi companies cannot meet drug and alcohol testing requirements (6 respondents)
- Real or perceived concern with taxi service quality (5 respondents)
- Taxi companies cannot meet insurance requirements of public agencies (4 respondents)
- Under-capitalized taxi companies (4 respondents)

Factor	Major Issue	Minor Issue	Not an Issue	Don't Know
1. Taxi companies cannot meet insurance requirements.	4	4	5	12
2. Taxi companies cannot meet drug and alcohol testing requirements.	6	2	6	11
3. Taxi companies cannot meet driver training requirements.	3	4	6	12
4. Taxi companies cannot meet requirements for on-board equipment.	2	7	5	11
5. Taxi companies lack access to capital.	4	5	4	15
6. Inadequate supply of taxicabs in service area.	3	9	1	12
7. There are too few taxi companies to provide competition in service area.	2	10	2	11
8. Real or perceived concern with taxi quality.	5	10	1	9
9. Inadequate public regulations.	0	4	8	13
10. Restrictions on sites for picking up or dropping off passengers.	0	5	7	13
11. Lack of driver participation due to lack of tips, long trips, paperwork.	2	4	6	13
12. Taxi companies feel payment is too slow.	1	4	5	15
13. Taxi companies feel payment is inadequate.	3	3	6	13
14. Taxi companies feel payment requires excessive paperwork.	1	5	4	15

Figure 6 Hindrances to partnerships—opinion of state DOT staff.

Though most DOT respondents did not cite specific hindrances to partnerships, several had important insights:

- Many see program rules as inhibiting partnerships, namely ADA compliance and making taxicabs accessible for people who use wheelchairs. Some taxi companies are unable or unwilling to meet vehicle maintenance and safety requirements. In one state, even cab companies that are awarded publicly funded accessible taxicabs do not want to pay the local match share of the vehicle, at 20% of the cost.
- Beyond physical and financial requirements, the drug and alcohol testing and ongoing reporting requirements were cited as too onerous for some companies.
- One respondent stated that the taxi companies have not been aggressive about seeking out partnerships with public agencies. Another said that although companies had been invited to meetings to discuss potential partnerships, they have declined to attend.

Helping Factors

Respondents were asked about factors that have helped in creating partnerships between taxicabs and public agencies. This was an open-ended question. Responses were in four general areas.

Regulations and program design. For Wisconsin, which has a statewide “shared ride taxi” program, a consistent design of the shared ride programs throughout the state was seen as important for the success of partnerships.

Grant programs. Federal grant programs were mentioned frequently as foundational to partnerships with taxicab companies. The FTA Section 5316 (Job Access and Reverse Commute) and Section 5317 (New Freedom) programs were cited as direct helps to partnerships. These programs are being used to fund purchases of accessible taxis and to fund ride subsidy programs.

Joint committees and industry outreach. Several respondents identified good relationships with the taxi industry as critical to the success of any program. One specifically mentioned trust as an important factor. Another cited “able” taxi companies and owners that have worked as partners toward changes that were instituted and toward establishing new conditions in the industry and in state programs. This flexibility was cited by another respondent, as well,

who mentioned that several taxi companies recognized their separate roles as operators of a for-profit company and as an operator of a publicly funded taxi service. This differentiation was particularly helpful to the public agencies with which the company partnered. Wisconsin cited its statewide taxi owners association as essential to the success of its partnerships.

Coordination plans and studies. Four state DOT respondents cited the coordination plan process (for coordination between public transit and human service transportation) as instrumental in identifying taxi companies as important partners in their overall service delivery. Another respondent stated that the process made the human service agencies more aware of the opportunities to partner with taxicab companies. At least one coordinated plan identified expanding the existing taxi voucher programs as an important strategy for the state going forward.

Taxicab Regulator Survey

The 24 survey respondents work for taxi regulatory agencies that are located within the governments of four states, 18 cities, and two counties, including small cities (as small as 30,000), many large cities, and the largest cities (New York and Los Angeles), distributed throughout the United States. The responsibilities of the agencies vary with the regulatory system in place. Not all gave comprehensive descriptions of their regulatory systems, but the range of variation is clear:

- Some regulate only taxicabs while others regulate all types of vehicles for hire.
- Some grant franchises to a limited number of companies.
- Some issue medallions or licenses that are equivalent to medallions, some grant certificates upon a showing of public convenience and necessity, and some have open entry.
- Some have their own enforcement staff while others rely on police or sheriff’s departments for enforcement.

Direct Partnerships

Six of the regulators’ agencies directly partner with taxicab companies. These are typically programs run by other departments within the same government or agency (for some reason, all in California):

- The City of Los Angeles DOT regulates taxicabs and also provides a taxi subsidy program for seniors and people with disabilities.
- The Orange County Taxi Administration Program (OCTAP), which coordinates taxicab service permitting and other administrative functions for cities in the county, is part of the Orange County Transportation Authority (OCTA) that operates transit service, including ADA paratransit, which provides certain rides on taxicabs.
- The San Francisco Municipal Transportation Agency regulates taxicabs and also operates the City’s transit system, including ADA paratransit, which has a taxi subsidy component.
- The San Diego Metropolitan Transit Development Board regulates taxicabs in the county and also operates the regional transit system and the complementary ADA paratransit service, which uses taxis for some trips.
- The City of West Hollywood regulates taxicabs and has an unusual program that provides free taxi rides to medical appointments for people with AIDS, as well as a more conventional taxi coupon program.
- The Sunline Transit Agency (serving Palm Springs and nearby cities) regulates taxicabs in its jurisdiction and is planning a guaranteed ride home program.

Four of these agencies also provide grant funding to taxicab companies, for example, for alternative fuel and electric vehicles (San Francisco), and wheelchair accessible taxicabs (San Diego).

Knowledge of Partnerships by Other Agencies

Sixteen respondents know of other agencies that partner with taxicabs:

Partnership Type	Responses
Medicaid non-emergency transportation	9
Other human service programs	10
Emergency response or services	1
Other services	10

Aside from Medicaid, the specific examples mentioned included school transportation, ADA paratransit overflow, senior and disabled taxi coupon programs, and an unspecified program by the District of Columbia Department of Risk Management.

Respondents were asked to provide more details about partnerships between local public agencies and taxicab companies that exist in their areas in three general categories. The answers follow a similar pattern as those from state DOTs. Although the question asked about partnerships “in your area,” the responses appear to refer to partnerships more broadly, even nationally.

User-side subsidies. By far the most common uses of user-side subsidies noted were for seniors and/or people with disabilities and as a supplement to ADA paratransit service, followed by guaranteed ride home programs to promote ridesharing and/or public transportation. Three respondents indicated that there were a few examples of user-side subsidies for the general public, but none of them provided detail. Figure 7 provides details.

Direct contracting. Service for seniors and/or people with disabilities and by ADA or senior/disabled

Type of Program	Numerous (>3)	A few (1-3)	None	Don't Know
Seniors and/or persons with disabilities	5	8	6	3
Supplemental ADA service	3	9	7	4
Job access programs	0	0	8	13
Guaranteed ride home services	0	7	7	8
General public	0	3	12	7

Figure 7 Regulator knowledge of user-side subsidies.

Type of Program	Numerous (>3)	A few (1-3)	None	Don't Know
Seniors and/or persons with disabilities	3	10	5	4
Supplemental ADA service	3	10	5	6
Job access programs	0	0	8	13
Guaranteed ride home services	0	5	8	8
General public	1	2	11	9
Special education	3	4	5	11
Medicaid non-emergency medical transportation (NEMT)	3	7	5	8
Emergency 911 transports	0	1	10	11

Figure 8 Regulator knowledge of direct taxicab contracts.

paratransit programs for some portion of service were the most common types of partnerships noted, followed by Medicaid non-emergency trips and special education transport, guaranteed ride home programs, and general public demand responsive transit service. One respondent mentioned 911 transports, but when contacted was unable to provide further information. Figure 8 provides details.

Other. More respondents knew of at least one application of regulatory requirements, incentives, or special permits for accessible taxicab vehicles than appli-

cations of assistance with purchase of accessible taxicab vehicles. The next most common types of partnerships respondents knew were for coordinated dispatching of accessible taxicab vehicles and assistance in emergency response. Figure 9 provides details.

Hindrances to Partnerships

Respondents were asked to what extent 14 different issues hindered taxi partnerships. In general, as shown in Figure 10, the regulators saw fewer hindrances to partnerships than the state DOT

Type of Program	Numerous (>3)	A few (1-3)	None	Don't Know
Taxicab assistance with emergency response	0	1	11	9
Assistance with purchase of accessible taxicabs	0	7	11	5
Coordinated dispatching of accessible taxicabs	1	5	10	7
Regulatory requirements, incentives, or special permits for accessible taxicabs	2	8	10	4

Figure 9 Regulator knowledge of other taxicab partnerships.

Factor	Major Issue	Minor Issue	Not an Issue	Don't Know
1. Taxi companies cannot meet insurance requirements of public agencies.	• 1	• 2	● 13	7
2. Taxi companies cannot meet drug and alcohol testing requirements.	0	• 1	● 15	7
3. Taxi companies cannot meet driver training requirements of public agencies.	0	• 1	● 14	7
4. Taxi companies cannot meet requirements for on-board equipment (first aid, special signs, or indicators).	• 1	• 1	● 11	10
5. Taxi companies lack access to capital.	• 2	• 4	● 9	8
6. Inadequate supply of taxicabs in service area.	• 2	• 2	● 14	5
7. There are too few taxi companies to provide competition in service area.	0	• 2	● 17	4
8. Real or perceived concern with taxi quality.	• 2	● 8	● 7	6
9. Inadequate public regulations.	• 2	• 3	● 14	4
10. Restrictions on sites for picking up or dropping off passengers.	• 3	● 6	● 11	3
11. Lack of driver participation due to lack of tips, long-distance trips, or too much paperwork.	● 6	● 5	● 5	7
12. Taxi companies feel payment is too slow.	• 2	● 9	● 4	8
13. Taxi companies feel payment is inadequate.	• 1	● 8	● 5	9
14. Taxi companies feel payment requires excessive paperwork.	• 3	● 9	• 2	9

Figure 10 Hindrances to taxicab partnerships—regulator opinion.

respondents saw. There were only five factors that a majority of respondents considered either a major or minor issue. These were as follows:

- Lack of driver participation due to lack of tips, long-distance trips, too much paperwork
- Taxi companies feel payment requires excessive paperwork
- Taxi companies feel payment is too slow
- Taxi companies feel payment is inadequate
- Real or perceived concerns with taxi service quality

Asked for specifics, three agencies offered these comments:

- Los Angeles: In the past year, we changed from a paper scrip program for Cityride with excessive paperwork (due to past fraud), to a new debit card payment system using on-board vehicle GPS trip verification. This has eliminated all driver paperwork, improved fraud monitoring, provided quicker driver reimbursements, and reduced, if not eliminated, driver program charges from companies. Wheelchair service trips are still not accepted because of the ability of independent contractors to refuse. Many drivers will not take a wheelchair trip due to the added time to handle wheelchairs prior to turning on the meter, low tips, and so forth.
- Atlanta: Funding sources have always been an issue for creating these initiatives. (Redondo Beach also commented on funding as an issue.)
- Seattle: The taxicab industry is fragmented. Taxicab associations only dispatch and do not own taxicabs or employ drivers. The State Labor & Industries Department claims associations exercise control by dispatching thereby voiding the driver independent contractor status. Associations cannot guarantee pick up times because they cannot tell drivers when or where to work, for example, in which computer dispatch zone.

Los Angeles and Seattle are both included in the case studies.

Helping Factors

Respondents were asked about factors that have helped in creating partnerships between taxicabs and public agencies. This was an open-ended question with later telephone follow-up. Responses were in four general areas.

Regulations. Many respondents indicated that regulations were key to promoting partnerships between taxicab companies and public agencies. Many licensing commissions or public utility regulators use the permitting process to incentivize partnerships or participation in certain programs. Nashville allows taxicab companies up to five additional taxicab permits if the additional taxicabs are wheelchair accessible. The initiative has resulted in an increase of accessible taxicabs from 2 in 2006 to 27 in 2011. San Diego, which uses an RFP-based permitting system, awards extra points to companies that include wheelchair accessible taxicabs in their proposal.

Some cities simply mandate accessible service in some form. New York City requires that companies provide an accessible trip, even if that means using a different company that has accessible cabs. Companies are not allowed to deny an accessible trip. Other cities require fleets of a certain size to include a certain number of wheelchair accessible vehicles. Fleets must comply or they risk their authority for regular service.

Los Angeles includes a total company service requirement for wheelchair trips in its franchise agreements whereby internal incentives are provided to drivers (at overall company cost) to take these wheelchair trip requests. The City credits these regulations and companies' internal incentives for drivers to take wheelchair trips (such as \$15 added income per on-time trip) with overcoming the issues created by independent contractor drivers and avoiding a bigger wheelchair trip response issue.

Several respondents also noted that their regulating bodies have taken a leadership role in standardizing taxi rules and in raising the standards of drivers and their vehicles. OCTAP noted that central regulation of taxis serving a large number of jurisdictions within the metro area ensures that companies meet minimum requirements. According to OCTAP staff, this centralized process "takes the guess work away when a local agency decides on and approves partnerships with taxicab companies within the county."

Financial incentives. Some regulators have put together programs for payment incentives that aid in the formation of partnerships. San Francisco uses portions of advertising revenues and medallion transfer fees as a "Driver Fund" to provide additional driver benefits. The City of Seattle and King County issue taxicab licenses (similar to medallions in other

cities) for wheelchair accessible taxicabs at no cost and with no annual license renewal fee. The licenses are awarded by lottery to those best qualified or by RFP.

Joint committees and industry outreach. Several respondents cited meetings with industry representatives and/or joint committees as essential to promoting partnerships with public agencies. Seattle has coordinating groups with member representatives from government agencies, nonprofits, and the taxicab industry. These groups share information and look for solutions to common transportation problems by forming ad-hoc committees to address particular issues.

San Francisco uses town hall meetings with informal formats rather than traditional formal bodies to foster frank and productive discussion among all parties. The statewide regulatory agency in Delaware has just begun to reach out to the industry to discuss the State's needs as well as to hear the thoughts of the companies. The primary aim was to develop effective regulation and discuss potential legislative changes, but the agenda also included an education piece for the companies—the meetings discussed ways to promote cleaner, more reliable, and safer service.

Grant programs. Many regulators indicated involvement in grant administration or cooperation in applications with taxicab companies. A few are involved in pass-through grants for electric taxis, hybrids, or compressed natural gas vehicles. San Francisco is administering a grant for the acquisition of 50 electric taxis that will be supplied to the industry.

Primarily, though, most cities that cite grants as an aid to fostering partnerships with the taxicab industry use New Freedom funds or Job Access and Reverse Commute (JARC) funds to purchase wheelchair accessible taxis on behalf of taxi companies. Several respondents cited the New Freedom program as a critical piece of their coordination activities. Other types of grants include increased traffic safety training for drivers.

Other incentives. Other types of incentives are specific to each city's needs. San Francisco plans to improve taxi service to the public without cost to the industry through a web and smartphone application that locates cabs through GPS. Due to specific constraints of the regulations and the taxicab companies themselves in mandating driver behavior, this

private-sector solution is thought to close a gap in the city's taxi service delivery.

Los Angeles absorbed the technology upgrade costs when it switched from paper vouchers to a swipe card system for its user-side subsidy program and used its technology consultant contract to upgrade all of the cab software. The program used equipment that the cabs were required to have anyway, but the City's absorption of the cost eliminated major protest of the change and ensured that all systems had equal access to a uniform programming and consulting service. As described in more detail in a case study, the costs were offset by savings that would result from the upgrade.

Taxicab Operator Survey

There were eight responses to the survey invitation sent by the TLPA. The respondents indicated that their companies participate in the following types of partnerships:

Type of Partnership	Responses
Contracted ADA service	3
Trip subsidies for seniors and/or persons with disabilities	2
Contracted service for seniors and/or persons with disabilities	2
Trip subsidies for ADA paratransit riders	1
Guaranteed ride home	1
Contracted general public service	1
911 transports	1

The few operators that did respond made a number of observations about hindrances and incentives for partnerships. Hindrances included insufficient financial incentives, low demand for service, and lack of government interest or participation.

Insufficient financial incentives. The primary issue indicated in the open-ended answers was insufficient financial incentives for participating in programs. Two operators specifically cited private Medicaid brokers as not paying a high enough rate for them to participate in the program. They feel that the brokers take too large a percentage of the reimbursement from Medicaid, making it an unprofitable venture for taxicabs.

Another company indicated that other financial pressures have shrunk their operating margin, making partnerships yielding reduced profits not feasible. These pressures include guaranteed minimum wages, payroll taxes, and increasing overall costs.

One company stated that the purchase of accessible taxis with no subsidy is not possible because the rate of return is the same, but the vehicle is more expensive.

Low demand for service. Two companies indicated that there is not enough demand to warrant their participation in certain programs. One company is a provider of accessible taxi service, owning five wheelchair accessible vehicles. However, there are 14 other accessible cabs in the city, and there is not enough demand for them. Additionally, many organizations have their own vehicles to transport their participants and do not need the taxi service.

Without a guarantee of ridership from a public agency (in one case, the local transit authority), the taxicab company could not enter into an agreement or contract for service. The paperwork required for the company and drivers was too much of a risk to take on without this guarantee.

Lack of government interest or participation. A respondent described the willingness of the taxicab company to work with any public agency in the area; however, the agencies either do not need taxi service or are unaware of the potential benefits of a partnership.

One respondent sees it as a problem that there is no taxi representation on the board of the local planning district, or anyone from the private sector. In one area, the transit union reportedly prohibited partnerships with taxicab companies for any services.

Incentives for partnerships. Two companies described things that helped incentivize partnerships. One indicated that government regulation of market entry allows it to remain profitable and stabilizes its long-term financial decision-making. Another indicated that a new transit administrator recently took office and saw the benefit of partnering with taxicab companies. Until this happened, there was little interest on the part of the government to work with taxis.

CHAPTER 3—GENERAL PUBLIC DIAL-A-RIDE

The following case studies of the Ann Arbor Transit Authority, the Pomona Valley Transit Authority, and Wisconsin Shared Ride Taxi programs illustrate how taxis can be used effectively to provide demand responsive service for the general public in certain situations. All these programs have been operating for many years.

Ann Arbor Transit Authority

Overview and history. Night Ride is a shared ride taxi service that operates at times when AATA's fixed-route services do not. Night Ride enables AATA to provide at least some form of public transportation around the clock within the City of Ann Arbor. Other parts of AATA's service area, including the city of Ypsilanti, are not served by Night Ride. AATA initiated Night Ride in 1983 in response to the community's need for safe, low-cost transportation late at night. Trips are also available on major holidays when fixed-route service does not operate. Anyone may use Night Ride. The fare for a trip on Night Ride is \$5.00, or \$2.50 for individuals with an ADA or senior identification card, or \$3.00 for holders of the Go!Pass available to employees who work within the boundaries of the Ann Arbor Downtown Development Authority.

Night Ride changed substantially in 2002 when, in response to budget pressure, AATA considered terminating the program but instead increased the basic fare from \$1.50 to \$5.00. Many short trips and casual trips that were formerly made on Night Ride no longer occur. The primary use is by people who need it to get home from work when AATA bus service does not operate. Night Ride currently serves about 400 trips per week.

Service parameters. Night Ride operates from 11:00 PM to 6:00 AM Monday through Friday and 7:00 PM to 7:30 AM on Saturday and Sunday. No orders are taken after 5:15 AM weekdays and 6:45 AM weekends. All Night Ride trips must be scheduled by phone reservation. Customers call the Night Ride service phone number to request service. Drivers are not permitted to pick up passengers who attempt to flag down a vehicle. Similarly, trips arranged directly with a driver are not permitted under Night Ride. These restrictions are intended to limit possibilities for fraud involving trips that never really happened. They also help to distinguish Night Ride from the ordinary taxi service.

Night Ride cabs normally take 15 to 40 minutes to arrive to pick up passengers. The average wait is 20 minutes. It is a deliberate part of the service concept that response times should be long enough that the service does not compete with regular taxi service. Night Ride is a shared ride service, so the cab may pick up and/or drop off other passengers while serving any trip. AATA recommends that Night Ride customers allow at least an hour to complete a trip,

though the average trip takes about 45 minutes. Service for wheelchair users is provided with a lift-equipped van.

Taxicab contracting. AATA contracts with a single taxi company, Blue Cab Company, to operate Night Ride. This company won a competitive procurement conducted in 2002 and most recently in 2009. Under the Night Ride contract, the taxi company takes reservation calls (including by telecommunications device for the deaf—TDD), dispatches trips, collects fares, and provides extensive reporting. The contractor “is authorized and encouraged to consolidate unrelated passenger trips into one vehicle.”

Most trips are provided with vehicles that are dedicated to Night Ride service for a period of time. The contractor is required to have available at least one accessible vehicle for all hours the service is operated. The number of dedicated vehicles in each time period is established jointly with AATA based on demand patterns. For many years there were at least two dedicated vehicles and a third was often used from 11:00 PM to 1:00 AM or 2:00 AM depending on volume and from about 4:00 AM onward. A recent expansion of the boundaries of the program resulted in the use of three dedicated vehicles at all times and the addition of a fourth during periods of expected heavy volume.

Since these vehicles do not mix regular taxi business with Night Ride business during the hours they are dedicated to Night Ride, this part of the service is not, strictly speaking, taxi service. The drivers of the vehicles are paid by the hour as employees. However, the same vehicles operate as regular taxicabs at other times, with the same drivers acting as independent contractors and receiving compensation from fare revenue. Also, the contractor supplements dedicated vehicles with non-dedicated taxicabs whenever needed to accommodate demand. Drivers who carry Night Ride trips when operating in non-dedicated taxicab mode are compensated on the basis of meter rates, that is, the company pays the difference between the Night Ride fare, which is retained by the driver, and the meter fare.

AATA pays for service based on a rate per revenue vehicle hour. For 2011, the rate is \$28 per hour for non-accessible vehicles and \$40 per hour for accessible vehicles. For dedicated vehicle service, the payment is based on actual hours the vehicles are in operation. For non-dedicated service, the contractor receives payment for one revenue vehicle hour for each 3.5 trips provided, that is, \$8 per trip.

According to Blue Cab’s owner, the dedicated vehicle service is more profitable, since payment is fixed per vehicle hour. Trips on what he termed “cash cabs” can lose money since AATA’s payment is fixed at \$8 per trip, but the driver is paid for the meter. As a result, the company attempts to place as many trips as possible on dedicated vehicles, and only 5% to 10% of trips are carried on cash cabs.

Contract requirements. In the early days of Night Ride, AATA simply required that each driver be licensed as a taxi driver by the City. At that time, the City had a strong program of taxi regulation, with limits on numbers of taxi companies and vehicles and strong enforcement. Later, the City moved to an open entry system of regulation with much more limited enforcement. In this environment, AATA determined that it needed to enforce standards through the contracting process. The combination of AATA’s contracts for Night Ride and other services with contracts from local schools and for Medicaid non-emergency transportation provides a stable base of revenue that has enabled two of the many taxi companies in Ann Arbor to establish themselves as dominant players. (A larger taxi company has the contract for AATA’s para-transit services.) With the stable revenue from contracts, these companies are able to maintain 24-hour dispatch systems and comply with the requirements of contracting organizations.

The contract requires a regular program of pre-trip vehicle inspections and record keeping; exterior and interior vehicle cleaning to specified standards; eight hours of driver training on accessibility, customer service, and disability awareness; driver uniforms and name badges; FTA drug and alcohol testing; and \$1 million in general liability and automobile liability insurance. There are also standards for driver suitability that are similar to those in many taxicab codes pertaining to criminal convictions and driving record. An organized complaint investigation process is required, with reports to AATA. Detailed record keeping of trips and call taking activity is required, as well as completion of reports for the National Transit Database.

The requirement for \$1 million in general liability insurance exceeds the \$500,000 requirement of the City of Ann Arbor. The taxi company initially attempted to insure only those vehicles used in Night Ride for the higher amount, while leaving the rest of company’s 35 vehicles at the lower rate. However, this met with resistance from the insurance company.

Further, contracts with the public schools, which account for more service than Night Ride, also require \$1 million in insurance.

According to Blue Cab's owner, AATA's requirement for drug testing is unique among the organizations the company contracts with. He noted that drug testing has the potential for significantly limiting the available driver pool, since Michigan allows medical use of marijuana. However, the company has found that participation in drug testing has been a useful selling point in discussions with social service agencies interested in purchasing taxi service.

Driver issues. From the point of view of drivers, operating dedicated vehicle service represents steady income. This appeals to some drivers, but not to those who are most entrepreneurial. Also, since the dedicated vehicles only operate for limited hours, this work needs to be combined with some regular taxi work to make up a full shift and provide a reasonable income.

Pomona Valley Transit Authority

Overview. The Pomona Valley Transportation Authority (PVTA) provides local, door-to-door transportation services in four cities on the eastern edge of Los Angeles County. PVTA operates general public dial-a-ride in two of the cities, San Dimas and Claremont. PVTA also operates service for seniors and people with disabilities called Get About throughout its service area. San Dimas and Claremont have a population of about 35,000 each in 16 and 13 square miles, respectively.

All PVTA's local services supplement regional services, including Foothill Transit, which operates conventional fixed-route service, and Access Services Inc., which operates ADA paratransit throughout Los Angeles County. Get About began in 1975, while Claremont Dial-a-Ride began in 1985, and San Dimas Dial-a-Cab began in 1987, taking advantage of funds that became available from a transportation sales tax in Los Angeles County.

Get About uses a combination of dedicated vans and some taxicabs, but San Dimas Dial-a-Cab and Claremont Dial-a-Ride (except for a group trip component) are shared ride taxi services operated entirely by the local taxi provider.

Service description. Claremont Dial-a-Ride and San Dimas Dial-a-Cab are similar but distinct ser-

vices. Features of the two services are similar with some differences:

- Customers call one hour in advance for a pickup. Since rides are shared, customers are advised to allow 30 to 45 minutes of travel time after they are picked up.
- Service is available to the general public for any purpose.
- Service operates within the limits of each city, but with limited additional destinations available.
- Service operates 24 hours, except that on Claremont Dial-a-Ride only seniors, people with disabilities, and children under the age of 16 can ride outside core hours (6:00 AM to 7:00 PM, weekdays and 7:00 AM to 6:00 PM Saturday).
- Rides traveling together, with the same pickup and dropoff, can ride for one fare.
- Service is curb-to-curb, passengers must carry their own packages, and exact change is accepted (or pre-paid tickets in the case of Claremont).
- Fares are higher on the San Dimas service than on the Claremont service:

	Claremont	San Dimas
General public	\$1.25	\$3.00
Service beyond city limits or Claremont core hours	\$2.00	\$4.50
Senior/disabled (24 hours, all destinations)	\$0.75	\$1.50

The two services combined carried about 69,000 passengers in fiscal year 2010 at a cost of about \$760,000:

	Claremont	San Dimas
Passenger trips	47,915	21,206
Trips by wheelchair users	763	1123
Cost per passenger trip	\$10.02	\$13.22
Total cost	\$480,016	\$280,310
Fare revenue	\$46,046	\$21,785

The cost per trip (excluding PVTA administration) is similar to the cost of taxi trip subsidy programs.¹

Taxi contracting. All the dial-a-ride service is provided by taxicabs that can mix dial-a-ride work with

regular taxi business. The company, which provides taxi service in a much larger area, has about 80 cabs, but about four to five drivers tend to do most of the dial-a-ride work in San Dimas and Claremont. The services use regular taxicabs, five accessible vehicles leased to the company by PVTA, and some older accessible vehicles sold to the company after the end of their lease.

Customers call the taxi company directly to arrange rides, using a number that connects to the company's reservations center in Anaheim. The dispatchers relay groups of trips to the drivers that operate in this area and let the drivers determine the best sequence of pickups and dropoffs to serve the trips efficiently while meeting standards for on-time service.

PVTA pays a flat rate for dial-a-ride trips:

Claremont Dial-a-Ride:	\$9.05 per passenger trip
San Dimas Dial-a-Cab:	\$11.60 per passenger trip
Wheelchair or scooter fee:	\$3.00

These rates are based on many years of experience with trip patterns. The taxi contractor estimates the mileage and meter fare for each trip using a program called CabMaestro. This data is used as a basis for paying drivers and is provided to PVTA for use in negotiating future rate adjustments. In the past actual meter readings, as reported by drivers, were used for the same purpose, but the results from the software are considered more accurate and show shorter trips on average.

The contract requires FTA drug testing, reporting for the National Transit Database, automobile liability insurance with a combined single limit of at least \$1 million per occurrence, and "a formal training and retraining program which shall be subject to review and approval by PVTA." The contractor is required to keep records of preventive maintenance of vehicles. The contractor is required to pick up 90% of rides within 45 minutes of receiving a call, and is subject to a payment deduction of \$500 in any month the standard is not met. There is deduction of \$50 for a wait time of over 60 minutes and \$100 for improper securement of a wheelchair.

Drivers and vehicles. For drivers, dial-a-ride work provides a base of income at a time when business is very low. As is typical in taxi operations, the drivers are independent contractors who pay a lease fee, which is the company's revenue. The company pays the drivers for the dial-a-ride trips they carry

based on the meter rate, less \$0.10 per mile. Given the lack of other business, PVTA finds that drivers are willing to do dial-a-ride work at these rates, and that response times have actually improved—about 14 minutes compared with about 28 minutes in the past. Reported on-time performance (i.e., response within 45 minutes) in fiscal year 2010 was over 99%. PVTA's Administrator estimates that Dial-a-Cab accounts for 80% of all taxicab work in San Dimas.

Wisconsin Shared Ride Taxis

The State of Wisconsin provides assistance for approximately 50 shared ride taxi services across the state. Two are municipally operated, and the rest are contracted out to private operators. In almost all the participating communities, the shared ride taxi service is the only available form of public transportation. The program dates from the mid-1980s when private operators lobbied for state and federal assistance because they were having difficulty staying in business. The operators convinced many municipalities to start shared ride programs.

Most of the services are not taxi service in the usual sense, despite its name and the fact that many of the local services are called taxi service and use vehicles that look like taxicabs. The program is strictly a public transit program—there is no metered fare. Most communities are small—the largest has a population of about 18,000. Each town issues its own request for proposals for service, but the State approves them. The State is slowly converting all contracts to hourly rate contracts, but since most RFPs are issued for 5 years at a time, this is a slow process. Some municipalities have per-mile contracts at the moment.

The State uses FTA Section 5311 funding for rural transit to support the operations. Four systems are part of urban areas, so the State can use some 5307 funding for those systems. Generally, about 65% of each municipality's operating costs are provided by the State. Some municipalities do not contribute to the programs at all, and the State's 65% is the only subsidy. Some municipalities do subsidize in addition to the State's contribution.

The municipalities typically have three to seven companies bidding on their RFPs. This competition results in cost savings for the municipalities. Since the taxi operator is essentially guaranteed rides and payment, the contracts are highly sought-after. The operator network in the state is fairly sophisticated. It is doing the "missionary" work to promote the

programs in shared ride communities. There were three major players in the system—one was just purchased by another, so now there are two.

The State would like to bring 10 to 20 additional communities into the shared ride taxi network. It typically gets one to two additional communities each year. At the moment, there is not enough funding to include the additional 10 to 20 that it could possibly add.

Much of the success of the Wisconsin shared ride taxi system seems to derive from the active assistance that the state DOT provides to the municipalities. This has included education of local officials about federal funding and compliance issues and ongoing technical assistance. There is an active association of private operators, the Wisconsin Association of Taxicab Owners, which is allied with three other statewide organizations representing rural and paratransit operations, non-emergency medical transportation providers, and transit systems.

CHAPTER 4—CONTRACTING FOR SENIOR AND DISABLED DEMAND RESPONSIVE SERVICE

Many older people and people with disabilities have difficulty using conventional, fixed-route public transportation, and many transit agencies, cities, counties, and other organizations provide demand responsive services, often called dial-a-ride, to serve these needs. In the case of people with disabilities, the ADA requires that public transit operators receiving federal funding provide “complementary paratransit” for people with a disability that prevents use of fixed-route transit service.²

Research conducted for the TCRP in 2004 identified 31 public transportation operators that contract for non-dedicated vehicles, mostly taxicabs, for some portion of their paratransit programs, including ADA paratransit, non-ADA senior services, and some human service transportation.³ These 31 agencies are ones that responded to a survey, so it can be assumed that there are in fact many that use taxis for some portion of their demand responsive services for seniors or people with disabilities.

Pennsylvania Senior Shared Ride Program

Each of Pennsylvania’s 67 counties has a Shared Ride program for seniors supported by proceeds from the State Lottery. These services provide more

rides per capita for older people than any other program of its kind identified in a national study of senior transportation conducted for the American Public Transit Association in 2010.¹ These services are also open to the general public, but without the 85% subsidy available to seniors age 65 and older. Other agencies (such as the Department of Public Welfare for the Medical Assistance Transportation Program) also purchase service and pay for their clients.

A coordinator of Shared Ride services in each county decides how to deliver service. This coordinator is housed in different agencies in different counties. In some cases, the coordinator may be part of the county transportation department and in others, part of a transit authority. Some use no taxi operators whatsoever and some use taxi service exclusively and understand the benefits of these partnerships. One uses five taxi companies to cover the entire county. One two-county area is the only Shared Ride system with 24-hour, seven day per week service, because this is served by a taxi company with those hours.

Door-to-door service is available for medical trips for seniors and curbside service is available for the general public if they are willing to pay the unsubsidized fare. Fares in each county are different, and door-to-door trips average approximately \$15 to \$16 per trip, of which the State Lottery pays 85% for seniors. In many areas, the Association on Aging pays the remaining 15%, so seniors essentially ride for free. In 1997, the State made the same program available to persons with disabilities between the ages of 18 and 64 using other funding sources.

According to the Chief of Specialized Transportation at the Pennsylvania State DOT, taxi operators resisted the Shared Ride program when it was established in 1981, saying that the Shared Ride services would amount to unfair competition. However, the State was able to reason that a prior day reservation requirement that applies to the Shared Ride program eliminated the direct competition element. The State also encouraged the counties to use taxi operators where they could, and this helped win over the taxi operators.

Also, a taxi company that is a Shared Ride service operator can bypass some state service area regulations that otherwise apply to taxi operators. The State Public Utilities Commission oversees taxi licensing and operations, and companies are licensed based on specific service areas. Over 2,000 taxi companies have assigned areas throughout the state. For Shared Ride trips, participating taxi companies use the established Shared Ride fare and not the taxi fares set by the State.

Suburban Transit Network (Montgomery County)

Overview. The Suburban Transit Network (TransNet) is a nonprofit in Montgomery County, Pennsylvania, that began in 1980 as a pilot program and has developed into a regional transportation service with multiple public agency contracts. The first service was the Pennsylvania State Lottery's senior citizens' Shared Ride service; others include the Department of Public Welfare's non-emergency Medical Assistance Transportation Program, and the Office of Developmental Programs' service for adults with developmental disabilities. The latter two are funded by Medicaid. The State Lottery-funded Shared Ride service was the impetus for the organization, which began as a consortium of taxicab companies.

Initially, TransNet focused on meeting the needs of senior citizens and disabled persons, doing so exclusively through relationships with existing Montgomery County taxicab companies. While its core ridership continues to be groups such as seniors and disabled persons, TransNet also contracts with school districts, colleges, and private companies to offer specialized transit services and commuter shuttles. The State Lottery program still provides a significant portion of TransNet's revenue.

Taxicab company partnerships. TransNet began as a consortium of taxi companies and their continued membership in the organization depends on their adherence to policies and procedures. TransNet involves them in the development of new policies and procedures to facilitate buy in. For most of these companies, the contracts TransNet has with state agencies are a significant part, if not all, of their business; their regular dispatch businesses are very small in comparison. Because of this, they are highly motivated to keep their relationship with TransNet and comply with requirements.

Since the Pennsylvania Public Utilities Commission regulates taxi companies based on assigned service areas, there is some territorialism between the taxicab companies where service areas overlap. This has been an obstacle in some respects for TransNet, but for the most part the companies have been working together for many years and have learned to give and take.

Service quality issues. Some companies provide a higher quality of service than others, and it is still a struggle for TransNet to maintain equal compliance

with their service standards throughout the county. Still, it is much better than when TransNet first started.

A Risk Management Committee consists of three carrier members, one driver, one representative from a senior citizen agency, one representative from a provider of services to people with mental retardation, two representatives from TransNet's insurance carrier, and TransNet's Risk Manager and Risk Management Coordinator. The committee meets on a monthly basis. TransNet's Risk Manager and staff from an independent fleet service company randomly inspect vehicles at each carrier site to ensure compliance with these procedures.

Schuylkill Transportation System (STS) (Schuylkill County)

Overview of program. STS is the public transit operator in Schuylkill County in rural Northeastern Pennsylvania. STS operates fixed-route and paratransit services, including ADA paratransit, Medical Assistance (Medicaid), the Shared Ride program, the Persons with Disabilities Program, and employment transportation.

The Office of Senior Services is a major subsidizer of the Shared Ride program through the State Lottery, subsidizing approximately 79% of the total Shared Ride trips. State Lottery funds pay 85% of trip costs, and the remaining 15% is paid by the senior for non-medical trips. For medical trips, most seniors pay \$1.00 though this is waived for some low-income clients; the local Office for the Aging pays the remaining \$1.10 to round out the 15% match, for medical trips only. They will allow trips to the doctor, adult day care centers, grocery shopping, and County-operated senior centers.

General public participants account for 13% of ridership. These are trips that are related to recreation, trips to malls, group trips to various locations, and out of county shopping excursions. The other 8% of trips are provided for nursing and personal care facilities and medical facilities. In total, there are approximately 26 subsidizing entities.

Taxicab subcontracting. Approximately 45% of trips are performed by STS and about 55% are performed by taxi subcontractors. STS uses four taxi subcontractors whose performance, for the most part, agency staff consider very credible. STS has a formal contract with each provider and fares are

negotiated year to year. STS has a set trip rate from the State for the Shared Ride program—\$14 for trips under 10 miles, and \$15 for trips over 10 miles. STS negotiates per-trip costs with each cab company annually; these rates do not exceed what they receive from the State. The rates depend on the volume of trips that the companies typically transport; one company provides nearly 40% of the trips in the county, and they receive a lower reimbursement rate. Another provides trips in more rural parts of the county where fewer trips are taken and is therefore reimbursed at a higher rate. The STS call center distributes trips to taxicab companies in a balanced way to ensure that one company does not receive all the very long-distance trips that may cost more to provide than the flat trip reimbursement.

STS's contracts with taxi companies require insurance coverage of at least \$500,000, a requirement much more stringent than the State's \$35,000 requirement. One company has coverage for \$1 million.

The relationships are mutually beneficial. The taxi providers in this rural area benefit by getting more business and making contacts with individuals who may need their services beyond what STS can offer. STS benefits by being able to provide more service: taxi partnerships have allowed STS to expand service to some areas of the county and even across county lines in some cases.

Issues with taxicab company partnerships. STS's main concern about taxicab companies is service quality. STS staff believe that certain taxi subcontractors are more concerned with service quantity than quality. This can have an effect on service delivery and customer satisfaction. There are also concerns in regards to employees, dress codes, and the enforcement of certain policies and procedures set by STS. Also, certain providers sometimes show preference to trips scheduled through their taxi service, and this has caused some problems in on-time performance for their STS trips.

STS reports that the only area of concern on the side of the taxi companies is reimbursement levels. STS did lose a few potential contractors because of this.

Centre Area Transportation Authority (CATA), Centre County

Overview. CATA serves the Borough of State College, home of Pennsylvania State University, and the four surrounding townships. It operates a net-

work of fixed-route transit services called CATABUS, a ridesharing program, and a demand responsive service called CATARIDE. CATARIDE is open to anyone, as required by the State Shared Ride program, but those age 65 or over and those eligible for paratransit under the ADA may use CATARIDE at reduced fares.

As of August 2010, the following fares applied: general public—\$13.35, senior citizens—\$2.00, ADA eligible—\$3.00. In practice, CATA sets the senior fare and calculates the general public fare so that applying the 85% subsidy from the State Lottery yields that fare. The general public fare needs to be approved by the State and cannot be more than CATA's actual cost per trip. The service carries about 30,000 trips per year, primarily older adults subsidized with State Lottery funds, with the remaining small portion its ADA clients.

Taxi contracting. CATA contracts with a local taxi company to operate all its CATARIDE service. The taxi company operates three CATA vans and uses its own taxi vehicles as needed to meet demand. CATA maintains the vans it lends to the taxi operator, and the taxi operator maintains its own fleet. The contract requires that the operator maintain liability insurance of \$2 million per occurrence and also requires that the operator comply with FTA drug testing rules.

The same taxi company, one of the dominant companies in the area, has been the operator for this service for 25 years. This company advertises that all of its drivers are drug tested. At least for the paratransit contract, it participates in the same pool that CATA uses for its own drivers. CATA puts the contract out to bid every few years, typically with an option for the contract to extend up to 5 years. There has been competition from non-taxi companies in the past, but the last competing bid received was more expensive than the local taxi operator. The taxi company is also a Disadvantaged Business Enterprise (DBE), which helps CATA meet its goal for DBE participation.

CATA pays the company a per passenger rate (not mileage or hourly rate). There is a fixed rate for ambulatory trips and a fixed rate for non-ambulatory trips. The drivers keep logs of passenger trips and the company bills CATA based on these logs. CATA places calls to randomly selected passengers to verify trips on a regular basis, and it has never encountered a situation in which the passenger did not take the trip listed by the taxi company. In this respect, CATA feels confident that the company

keeps sound records. Note that the rate paid is not connected to the regular taxi meter rate, so the taxi company is able to build in its costs for insurance, FTA drug test, and record keeping.

Service quality. CATA receives very few complaints about missed trips or anything relating to the taxi operator or the paratransit program. CATA attributes this to the small size of the paratransit program. In the past, the company tended to provide many trips as direct rides, without ride sharing, which increased customer satisfaction. Recently, the company has focused more on arranging shared rides, which it is encouraged to do in its contract and which is in its interest given the flat per-passenger payment structure. This has created some dissatisfaction from customers but is in line with the intended nature of the program.

San Joaquin Regional Transit District (RTD)

Overview. San Joaquin RTD serves Stockton and vicinity, in San Joaquin County, California. Since 2009 the District has been contracting with a private mobility management company, American Logistics Company (ALC) to provide its ADA paratransit and other demand responsive services using non-dedicated vehicles, including taxicabs. RTD's experience illustrates how contracting through an intermediary appears to allow for contract provisions that might be difficult for many taxi companies to comply with.

Prior to 2009, this service was provided directly by the District. There was a transition period during which only a portion of the service was provided by ALC, but since September 2010 the contractor has been doing all of RTD's ADA paratransit in the Stockton Metro Area (SMA-ADA) and general public dial-a-ride (GP-DAR) in rural areas, including receiving reservations, scheduling trips, and providing service.

Contracting. The functions retained by RTD are ADA eligibility and administering a process to track passenger no-shows and apply suspensions for those with a pattern of frequent no-shows. The District also operates a program called One-Stop Shop, which is a full-service call center where customers can access transportation options throughout the county and surrounding areas, and provides travel training through a contract with a Sacramento-based non-profit.

Separately, RTD made an agreement with a local non-profit, United Cerebral Palsy (UCP), to transport its own clients using vehicles provided by the District.

Previously, trips by these passengers had accounted for a large portion of demand on the ADA service.

As of early 2011, the SMA-ADA and GP-DAR services carried about 90 trips per day, while UCP carried about 200 trips per day.

Operations. ALC manages the SMA-ADA and GP-DAR services from an operations center in Utah and contracts with vehicle operator subcontractors in the service area including taxi operators and others. The company declined to provide information about the number of vehicles operated or the number of companies that operate them, except to say that enough of the vehicles are wheelchair lift equipped to meet demand and none of the vehicles are dedicated exclusively to this contract. In the case of taxicabs, the vehicles have meters and take other trips when they are not needed for SMA-ADA or GP-DAR service. When any of the vehicles are providing RTD service they display an identifying placard. RTD inspects the vehicles to be sure they meet contract standards.

ALC provides the drivers with a GPS unit and specially programmed smart phone that is used for dispatching trips. Vehicle location and trip status information is also available to RTD via a web portal.

The company uses a variety of driver compensation methods that make the most sense for the driver and the contract. The method chosen depends on the number and frequency of trips available to be served as well as the number of trips the provider is interested in serving. Some drivers choose to serve only some trips while others choose to commit 100% of their service to this contract. Compensation can be per hour, per trip, per mile, per group, per individual (based on higher need customers), or any combination of these.

RTD's contract requires the contractor to train the drivers who are providing the service using a training program approved by RTD and covering ADA, disability sensitivity, knowledge of the service area, and so forth. ALC requires all its contracted providers to maintain workers' compensation as required by law. It is not clear if this includes coverage for independent contractor taxi drivers.

The rates paid by RTD are not connected to taxi meter rates. The agency pays the contractor a flat rate of \$2 per reservation, \$29.50 per SMA-ADA trip, and \$47.50 per GP-DAR trip. The same rate applies for a valid no-show, meaning that the vehicle was at the proper place at the scheduled time, but the passenger did not take the trip. The rate for GP-DAR is

similar to RTD's cost per trip when it provided that service directly, but the rate for SMA-ADA service is about 15% lower and includes vehicles.

The District estimates that it will save about \$7 million over 5 years by contracting for SMA-ADA and GP-DAR and by its arrangement with UCP. About 97% of pickups occur within the District's established on-time window of 20 minutes before or after the scheduled time.

Orange County Transportation Authority

Background. After some years of making very little use of taxicabs, the Orange County Transportation Authority has been experimenting with limited use of taxis and other non-dedicated vehicles in its ADA's paratransit service, known as ACCESS. As a major transit operator serving Orange County, California, OCTA provides 1.2 million ADA paratransit trips per year. Ridership has roughly doubled in the past 10 years, and cost per trip has increased by 68% in just 3 years. This makes it a high priority for OCTA to look for ways to contain costs.

Under terms of its current contract for paratransit service, since 2006, the turnkey service operator, Veolia Transportation, has diverted a number of ACCESS trips during AM and PM peak hours, overnight, and on weekends to taxicabs with the objective of reducing the number of revenue vehicle hours operated using the OCTA fleet. Trips were also sent to taxis for "service protection," that is, at times when demand is extremely high or in case of unforeseen circumstances such as breakdowns or a driver being severely behind schedule.

Under this arrangement, approximately 300 trips per day, out of 4,500 to 5,000, were diverted to taxis (supplemental service). OCTA pays Veolia per revenue vehicle for dedicated vehicle service and per trip for trips sent by Veolia to the supplemental service provider.

Pilot program. In 2010, in response to rising costs and budget pressure, OCTA began looking at increasing its use of supplemental service. In July 2010, OCTA and Veolia initiated a pilot program in which all Sunday ACCESS service, about 800 to 900 trips per day, would be performed by non-dedicated vehicles. For this purpose, Veolia began working with American Logistics Company (ALC), which manages taxis and other non-dedicated vehicles from a dispatch center in Utah.

Having all service on Sunday performed by non-dedicated vehicles meant that there would need to be provision for wheelchair accessible service. It also raised concerns about driver training and how passengers would identify the vehicles and drivers as being part of OCTA ACCESS. Veolia developed a training program that addressed topics such as empathy training and transporting persons using a mobility device. Veolia did not train all prospective non-dedicated service drivers directly, but conducted several train-the-trainer programs emphasizing the requirements of this service. An OCTA ACCESS placard was developed to be displayed in any vehicle performing ACCESS trips in this service. In addition, drivers were issued a photo ID which is identical to those worn by the Veolia ACCESS drivers. Veolia performs drug and alcohol testing for the supplemental service drivers.

In the pilot program, Veolia continued to take all reservations, but sent Sunday trips and trips between 10 PM and 6:30 AM to ALC, which subcontracted with a mix of taxi drivers and other operators to provide service. Calls from riders to check ride status during these times were forwarded to ALC's control center. Under this arrangement, the volume of supplemental service grew from 7,000 to 9,000 trips per month to about 14,000 trips per month, about 10% of them by riders using a mobility device.

Results of the pilot. For the most part, the results of the pilot were considered positive. On-time performance was 95% to 97% and complaint rates were low, below the contract standard of one complaint per 1,000 trips. There were no missed trips. Compared with more conventional methods of using taxis in paratransit, the arrangement seems to benefit from selecting specific drivers who want to provide paratransit. Also, there is flexibility to pay drivers an hourly rate in some cases. One concern involves the vehicles being used in the service. Veolia has observed some safety issues with the vehicles being used in supplemental service. The vehicles are owned by the drivers and not kept at a central location where they can be easily inspected.

OCTA continued with this arrangement after the pilot ended in September 2010. The agency is planning to expand its use of non-dedicated vehicles in May, by sending all trips after 6:00 PM Monday through Saturday to ALC. If results continue to be positive, OCTA is considering expanding the arrangement further to include all Saturday trips and more peak period trips.

As in the case of San Joaquin RTD, OCTA's experience seems to show potential benefits from contracting with taxicabs through an intermediary which can select and train drivers and deal with quality control issues.

CHAPTER 5—SUBSIDIZED TAXI RIDES

Subsidizing taxi rides is a convenient way for a public entity to provide mobility for users without needing to enter into formal contracts. Subsidized taxi rides, popularized as “user-side subsidies” in the 1970s, were conceived as a means for reducing the costs of existing transportation services for the elderly and people with disabilities by placing the subsidy funds directly in the hands of the users and encouraging them to select the providers of their choice.⁴ Although the user-side subsidy concept could apply to any type of transportation service, it has been most commonly implemented using taxicabs. In addition to theoretical advantages based on free-market economic theory advanced by early proponents, taxi subsidies are an attractive means of providing service for a number of practical reasons. They do not require starting up a new service. They can be tailored to the amount of budget available by adjusting the amount of subsidy offered per trip or setting a limit on the number of trips authorized per user. Also, unlike a direct contract for service, they do not trigger FTA drug testing requirements—drug and alcohol testing rules do not apply to taxicab drivers if patrons are allowed to choose the taxicab companies that will provide the services.⁵ Because riders are choosing among companies the transit agency's liability may also be reduced.

In addition to providing mobility for users, subsidized taxi rides may help transit operators reduce demand for ADA paratransit as described in a recent report from Easter Seals Project Action.⁶ That report gives examples of taxi subsidies that are administered using coupons, vouchers, scrip, and debit cards. The number of transit agencies and other public entities that subsidize taxi rides is not known, but it is probably in the hundreds. An Internet search using terms like “taxi coupon” or “taxi scrip” produces many pages of results for programs run by cities and transit operators all over the United States. One large taxi company in the Chicago area lists on its website over 30 municipal taxi subsidy programs for seniors in the Chicago area in which the company participates (http://www.americantaxi.com/senior_programs.asp, accessed April 26, 2011).

Maryland Transit Administration (Baltimore, Maryland)

Overview. MTA is the transit operator for metropolitan Baltimore, including ADA paratransit, called Mobility/Paratransit. As part of settling a lawsuit concerning Mobility in 2005, MTA agreed to establish a taxi subsidy program for ADA paratransit riders that would provide them with an alternative to Mobility. This program, now called Taxi Access II, provided 286,000 rides in 2010 at a cost to MTA of \$3.9 million excluding broker fees. Eight taxi companies and two sedan companies in Baltimore and nearby communities participate. Some notable features of this program include use of plastic smart cards to verify rider eligibility and track usage, incentive payments to drivers and taxi companies to encourage participation and good service, adherence to a strict service area, administration by a private broker, and effective monitoring to control fraud.

Program design. As initially established, customers could take up to four rides per day, and the program would pay a meter fare of up to \$50. Riders paid a \$3 fare in cash to the driver for each trip. MTA found that the program was very expensive: the agency paid \$8.4 million in fares for 382,000 trips in 2007, for an average fare of \$21.91. Aside from encouraging long trips, these rules also created opportunities for fraud, since it made it worthwhile for passengers to wittingly or unwittingly leave their card with a driver who could generate fraudulent trips.

As currently configured, riders can take up to two rides per day and the program will pay the meter fare up to \$20 per ride. The rider still pays \$3 per ride and is responsible for any meter fare over the \$20 limit. Some other features include the following:

- Each customer is issued a Taxi Access II card that includes a picture ID, a 16-digit card number, and electronically encoded eligibility information.
- All rides must be reserved through a taxi company dispatch office with full details of pickup and drop-off location, which cannot be changed after the vehicle has arrived. Riders must identify themselves to the taxi dispatcher as Taxi Access II riders and give their card number. Records of these reservations help establish the authenticity of each trip.
- At the beginning of the trip, the customer pays the \$3 fare and hands his or her taxi card to the

driver who uses it to electronically register the starting point of the trip, which is recorded via an on-board GPS unit and transmitted to the taxi office. At the end of the trip, the driver again uses the card to record the end point of the trip. This process creates a record of the exact start and end times and locations which can be used to audit fare payment requests submitted by the taxi companies.

- Drivers retain \$2 of the \$3 cash fare as a tip, and \$1 goes to the taxi company to compensate for the record keeping that is required.
- Weekly, the broker pays the taxi companies for the meter fares of the trips, up to the \$20 per trip limit. (The cash fare from the rider does not reduce the amount paid by MTA to the taxi company.) The taxi companies in turn pay the drivers. At the beginning of each contract period, MTA pays the broker a cash reserve which allows the broker to pay the taxi companies weekly although MTA only pays the broker monthly.
- Using the electronic trip records, the broker conducts audits to verify that the meter fares requested are reasonable in comparison with the pickup and drop-off locations and times of day and that all trips were entirely within the authorized service area. The authorized service is based on MTA's ADA paratransit mandate, which is the area three-quarters of a mile around all MTA transit routes. Taxi companies and drivers are not paid for any trips outside of the service area.
- The broker is compensated for the amounts that it pays to taxi companies plus a management fee, less any meter fares paid for any trips outside of the service area.

Note that the taxi card is used for tracking eligibility and usage, but not for payment. Unlike some other programs, riders do not purchase ride value in advance and no ride value is stored on the cards. This is possible because the rider pays a flat amount for each trip (plus the amount over the \$20 meter limit), not a percentage.

Discussion. Taxi Access II provides a convenient alternative to MTA's ADA paratransit service. MTA's management does not believe that the program significantly reduces demand for the ADA paratransit program, but it may provide a cost-effective way to grandfather certain trips that will become

ineligible for the ADA service if the ADA service area is reduced to correspond to transit service reductions since the time of the 2005 settlement agreement.

In a program that is distinct from Taxi Access II, but that works through the same broker, MTA is also using taxis as a way to serve dialysis trips by ADA paratransit riders. It is more cost effective to serve these trips with taxis than with shared ride, prescheduled, ADA paratransit. As an incentive for riders to participate, the fare is \$2.00 per trip, only a little more than for a Mobility trip (a fare of \$1.85) but with a direct, exclusive ride that can be ordered without advance reservation.

City of Los Angeles

The City of Los Angeles operates a transportation assistance program for individuals age 65 or older and qualified disabled persons. The program, called Cityride, offers participants reduced costs for the purchase of rides on City-permitted taxicabs or Cityride Dial-A-Ride services. The City's program illustrates another way of using smart cards and combining taxi subsidies with other services. It also illustrates the way Los Angeles regulates taxicabs by means of franchises, a method that is uncommon in the United States.

Los Angeles grants franchises to a limited number of taxi companies that are selected by a competitive process. Each franchise is a time limited grant of authority to operate taxicab service. Currently, eight companies have franchises. Among other things, the franchise ordinances require each taxi company to have a digital dispatch system with geographic positioning capability and to provide the City with detailed information from this system about usage and response times. Cabs have to be capable of accepting credit/debit card payment and relaying charge and authorization data through the digital communication system. The franchise ordinances also require the companies to participate in any transportation coupon or user-ride subsidy program sponsored by the City.

Prior paper coupon program. Cityride participants paid \$5 for a book of \$84 worth of coupons, each worth \$1.00. Participants could use their coupons on a variety of transportation options—buses, paratransit vehicles, or taxis. About 40% to 50% of the coupons were used in taxis. Each participant could use up to a maximum of \$12 worth of coupons for

each taxi trip; multiple participants riding together could pool their coupons for a longer trip.

There were various types of fraud involved with this paper system. For instance, some participants would sell these coupons to their friends, and sometimes passengers would complain that drivers had taken more than the appropriate number of coupons for a trip.

Much of the record keeping required by the City, other than for Cityride, could be completed using the computerized dispatch system. But there was extensive paperwork required of both drivers and companies for the Cityride coupon program. The City would pay for the value of value trips taken, but payment by the City could take months and companies would charge drivers 5% to 10% of the fare amount for billing, record keeping, and the cost of payment delay. Drivers did not like this system because of this extra fee as well as the lack of tips. Drivers often turned down trips for these reasons. Also, many Cityride clients were perceived to be more difficult than others, either behaviorally or physically (needing assistance).

Smart cards. In early 2010, the City replaced the coupon system with a smart card system. Now, Cityride participants may purchase up to \$42 of credit each quarter for \$21 (or \$9 for low-income participants) paid via check or money order. (An online payment feature is available but is not currently being used.) The amount that can be purchased was reduced for budgetary reasons unrelated to the change from coupons to cards. Participants can accumulate a credit of up to \$168. Cityride taxi ridership is running at about 10,000 trips per month.

With this system, a participant who wants to pay using the Cityride card must hand the card to the driver immediately upon boarding the cab along with a photo ID. The driver swipes the card through the meter to verify the Cityride account balance and enters the number of riders. At the end of the trip, the taxi driver swipes the card through the meter again to determine the total fare and gives the rider a receipt showing the fare, the amount paid from the rider's Cityride account, any other amounts paid, and the balance remaining in the Cityride account. For cases where the digital communications or GPS equipment does not work, a telephone hotline is available to authorize charges.

As in the coupon program, a maximum of \$12 per trip can be paid per participant using the card—enough for a ride of approximately 5 miles. Any fare

over \$12 must be paid in cash. However, as with the coupon program, multiple participants traveling together can each contribute up to \$12 to the cost of a ride.

Most of the preparation for Cityride cards was done in 2009, though the transition had been talked about for at least 5 years. The switch started in early 2010, and after September, coupons were no longer accepted. Since coupons were good for six months, the City had to phase in use of the cards.

Because of the requirements of the City's franchises, the capacity already existed for cabs to accept the new cards, although with some additional programming. The City paid for all of the programming that had to happen for units to accept Cityride cards. If the card reader in a cab needed to be updated, that was the responsibility of the owner. The City also installed card readers in dial-a-ride vehicles, so Cityride cards are accepted on them as well. MJM Innovations (which also provides cards and brokerage for Baltimore's taxi subsidy program) and MyTransitPlus were the contracted companies for providing the programming and technology.

Results. The City has disallowed the 5% to 10% charge that companies used to impose on drivers for processing coupons. The City picks up the tab for card transaction fees. These fees cost half of what it formerly cost the City to process paperwork and monitor usage under the old system, and it wants to incentivize the program. The savings more than make up for the cost of installing the new system.

The cards greatly reduce the potential for fraud and the paperwork that was required for coupons. Payment is made in a matter of weeks instead of months.

Trip refusals are down, though the City acknowledges that there are always going to be trip refusals. The issues of tips and passenger assistance needs remain, but drivers no longer lose the company processing fees and no longer have to handle coupons. It is no longer possible for a driver to take too few or too many coupons; if the driver swipes the card twice for the same trip, the mistake is detectable and can be fixed later electronically.

Future initiatives. Many companies are beginning to voluntarily install systems in the back of their taxicabs to facilitate credit card payment. Cityride clients will be able to swipe their Cityride cards themselves instead of relying on the driver.

West Hollywood, California

Overview. The City of West Hollywood, which borders Los Angeles to the north, has two taxi subsidy programs, one of which is very unusual. The City regulates taxis via a franchise system similar to that of Los Angeles. As a result of a franchise RFP process conducted in 2004, seven companies that also have franchises to operate in Los Angeles were awarded franchises to operate in West Hollywood. However, individual cabs must be “sealed” for operation in each city. The City’s taxi subsidy program illustrates the flexibility that exists with such programs to serve particular groups with a variety of program designs. The program also shows the potential for cooperation among cities through use of a third-party program administrator.

Medical rides for people living with AIDS. Taxi companies are required to participate in the program to transport residents living with AIDS. An employee of one of the taxicab companies serves as a central dispatch for the service. She takes all of the calls and distributes them on a rotating basis to the various companies. People living with AIDS are registered in the program through their case workers. The service is free and is only available for medical trips between 8:00 AM and 5:30 PM.

The program is tightly run, but the City may have to start monitoring more closely for fraud. A client recently booked a taxi trip to a Macy’s, claiming it was a trip to fulfill a prescription.

The taxi companies are not reimbursed for these trips but are required to fulfill them. Since a primary tenet of the foundation of West Hollywood was gay rights, the City Council is very sensitive to gay rights and prioritizes these issues. Thus, there is a high population of individuals living with AIDS in West Hollywood, and the City Council wants to extend support to them.

Seniors and residents with disabilities. Seniors and certain residents with disabilities are eligible for taxi coupon discount books. Specifically, the following individuals are eligible: residents who are 65 or older, blind, wheelchair bound, suffering from HIV, with Alzheimer’s disease, in chemotherapy/radiation treatment, or on kidney dialysis treatment. They can purchase a book with coupons worth \$28 in taxi trips for \$8. The coupons are good for any time of day and any trip type. As in Los Angeles, participants are allowed to use a maximum of \$12 per trip from the coupons; the rest must be paid by the rider.

Beverly Hills uses the same coupon program, and it has the same vendor. Los Angeles used the same vendor, until it switched to a smart card program. Drivers who must go between jurisdictions find it difficult to use both programs.

Olathe, Kansas

The City of Olathe, Kansas, located about 20 miles southwest of Kansas City, provides subsidized taxi coupons for low-income residents, as well as for seniors and people with disabilities. Olathe’s program is unusual for including low-income residents. It is also unusual for the generous amount of travel allowed for a flat-rate payment system. These features appear to depend on the small geographic area that is served. In addition, the program shows the effect of using federal funding.

Participants purchase coupons from the City that they can use to pay for rides with two participating taxi companies. There are four categories of coupons:

Coupon Type	Purpose	Coupon Limits	Cost per Coupon
Green—personal	Shopping or medical trips by elderly and disabled residents	20 coupons per month	\$3.00
Purple—work	Low-income residents for job preparation skills, work, and work related activities	50 coupons per month. Verification of employment, application, etc., is required	\$2.50
Blue—medical	Elderly and disabled residents needing affordable transportation to reach medical appointments	As needed for medical appointments with documentation from medical provider	\$2.50
Yellow—special	Five-minute stop at any location in the city	Unlimited	\$1.00

Each personal, work, or medical coupon is good for a one one-way taxi ride within the City limits only, and each special (yellow) coupon is good for a wait up to 5 minutes. The companies are required to provide service Monday through Saturday from 6:00 AM to 7:00 PM, and any longer hours that the company actually operates. As a result, service is actually available 24 hours every day. In addition to conventional taxis, both companies operate a lift-equipped minibus provided by the City. It carries two passengers in wheelchairs and eight seated passengers. The company can use the minibus in taxi service but needs to make it available at any time as needed for wheelchair accessible service or group trips arranged by the City. These group trips operate to major shopping destinations and cost one personal coupon for a round trip.

This program is the current version of one that began in 1977 allowing trips for any purpose for elderly and disabled residents. Recently, due to budget limitations, the City cut back on the number of personal trips allowed and raised the coupon price for these trips from \$2.50 to \$3.00, while leaving the work and medical components as they were. The program is funded by FTA New Freedom and Job Access/Reverse Commute grants matched by funds from the City's General Fund and a Community Development Block Grant. In 2010, the program provided about 50,000 trips, of which about 53% were work trips, at a cost of about \$600,000.

The two participating companies were selected using an RFP issued to comply with FTA requirements. One of the participating companies is a small local operation while the other serves the entire Kansas City metropolitan area of which Olathe is a part. This company is part of a company that operates limousine, paratransit, and shuttle services worldwide. It advertises a flat rate of \$10 for any trip up to 5 miles in length plus \$2 per mile after that. A trip from one corner of Olathe to the other is about 10 miles long, but many of the coupon trips are very short. This company operates a fleet of station wagons, plus some wheelchair accessible vehicles. The companies provide a dedicated reservations number for the Olathe taxi program.

The City has always paid the participating taxi companies a flat rate per trip. The current rate is \$12 per trip. The flat rate payment avoids issues that sometimes occur with taxi subsidy programs of overcharging for trips by inflating mileage. It also simplified program administration. Since the program is limited to the 62-square mile area of the City,

there is not the wide variation in trip lengths that could occur in a larger area.

A customer database allows them to connect each coupon to the person to whom it was sold to prevent misuse of coupons. This helps to determine if a person has sold or given away coupons. The City is also working on computerization of payment, possibly using some kind of smart card.

The flat payment rate could conceivably create issues with poor service for some trips, since the drivers of the larger company are independent contractors. However, the City has not heard complaints from drivers and some drivers like doing coupon trips. Given the rate structure of the larger company, it is possible that the City's payment actually exceeds the meter fare for most trips. There have been some complaints of long response times, even though one of the companies advertises a response time of 10 minutes. In general, the City considers the program extremely successful.

CHAPTER 6—WHEELCHAIR ACCESSIBLE TAXICABS

There is increasing interest in wheelchair accessible taxis, not just for use in ADA paratransit but so that any person who uses a wheelchair can take trips on conventional taxi service. No reliable national data has been found, but various sources suggest that an increasing portion of taxi fleets consists of wheelchair accessible vehicles. In a 2010 survey of taxi operators, 51 respondents reported that 4.2% of their fleets are made up of accessible vehicles, although this is predominantly fleets of greater than 100 vehicles.⁷

A 2008 survey conducted for Easter Seals Project Action⁶ gave examples of wheelchair accessible taxis being used in paratransit service in Arlington, Virginia; Houston, Texas; and San Francisco, California. The following was reported in the 2008 survey:

- In Arlington, Red Top Cab operates a portion of the ADA paratransit service for the Washington region and also of the separate paratransit service provided by Arlington County (directly across the Potomac River from Washington, DC). Red Top has 365 taxi cabs that can be used in ADA paratransit services, 40 of which are accessible taxis. Having accessible cabs enables Red Top to compete for this business.
- In San Francisco, there are more than 100 accessible cabs. The City's regulations prohibit

taxicab company drivers from refusing trip requests from disabled riders.

- In Houston, the Greater Houston Transportation Company (Yellow Cab) operates a large fleet of accessible cabs that are used in contracted ADA paratransit service and paid on an hourly basis.

A recent report for the TLPA⁸ provides more detail about Houston Yellow Cab. Yellow Cab's 2,245-cab fleet includes 200 wheelchair accessible cabs of which 150 are operated under contract with METRO, the transit agency, in ADA paratransit service. These vehicles are essentially dedicated to the ADA paratransit service. But the other 50 accessible cabs are integrated in Yellow Cab's taxi operations and are available to the general public at regular taxi rates. In this case, it appears that the stable base provided by the ADA paratransit contract helps Yellow Cab justify maintaining a fleet of accessible cabs. The following is an excerpt from the TLPA report:

“The experience of Houston Yellow Cab illustrates the fact that such a service is far more likely to be successful if the taxicab company is working as part of the publicly sponsored (subsidized) complementary ADA paratransit program rather than competing with it. With the contract that was awarded to Houston Yellow Cab, the company is enjoying market density since it is, in a practical sense, one of the few options available for on demand wheelchair users.”

The same report provides examples of regulatory measures to promote accessible taxis.

- Boston issues taxi medallions, including some that are limited to wheelchair accessible cabs. About 2.3% of cabs are wheelchair accessible vehicles, representing about 38 accessible taxicabs.
- Portland, Oregon, requires that each company's fleet contain at least 20% wheelchair accessible taxicabs, unless the company participates in an inter-company agreement called the Portland Accessible Cab Association, in which case the requirement is reduced to 10%. All the Portland taxi companies belong to this association. The provision allowing a reduced 10% requirement was added in about 2002 after experience showed that 20% accessible cabs was unnecessary and few cabs could meet demand if they were coordinated.⁹

- New York and Miami have made available medallions for accessible vehicles sold at a discounted price.

San Francisco has created a special category of taxi medallions for “ramp taxis” which must meet detailed requirements spelled out in the City's taxi regulations.¹⁰ The City has also assisted financially in the purchase of ramp taxis so that these vehicles would be available for participants in the City's taxi scrip program for ADA paratransit riders.¹¹ This illustrates the concept in the Houston case, that a public subsidy for use of taxicabs by paratransit riders helps make accessible taxis more economically viable. The Rhode Island Public Transit Authority (RIPTA) is buying ten accessible taxis, which will be operated by companies that will pay only the 20% match for the federal funding obtained by RIPTA.¹²

The examples of Chicago and Seattle also illustrate regulatory approaches to encouraging wheelchair accessible taxis, as described in the following case studies. A case study of Washington, DC, shows a different approach, where FTA New Freedom funds have been used to establish accessible taxi service. It is now also possible for taxi companies to obtain FTA New Freedom funds directly to purchase accessible taxicabs, as long as they operate some form of shared ride service, for example, by service under contract to a transit agency or human service agency.¹³

The ADA does not require that taxicab operators include accessible vehicles in their fleet, but does establish rules for such vehicles and their operation when companies choose to operate them.¹⁴ It is considered discrimination to

- Refuse to provide service to individuals with disabilities who can use taxi vehicles,
- Refuse to assist with the stowing of mobility devices, and
- Charge higher fares or fees for carrying individuals with disabilities and their equipment than are charged to other persons.

The TLPA report describes some of the issues that make operating accessible vehicles a challenge for taxi companies. The report asserts that

- A ramp equipped minivan with accessibility features is more expensive than sedans most commonly used in taxi service. Prices from \$27,000 to \$35,000 are quoted for used minivans with accessibility features, while a new vehicle with rear or side wheelchair entry

costs \$46,000 to \$49,000 compared with 5,000 for a used police vehicle bought at auction.

- Accessible vehicles are usually newer used sedans typically used as taxicabs.
- Because accessible vehicles are usually newer and more expensive than conventional taxicabs they have greater property damage exposure when involved in an accident. Insurance rates will reflect this.
- Rates may also reflect an expectation that passengers with disabilities will file more liability claims for higher dollar amounts.
- Accessible vehicles use more fuel than conventional taxicabs and may have a shorter useful life.
- Drivers require additional training to operate a wheelchair accessible vehicle, including operation of the accessible feature and providing assistance to passengers using wheelchairs.
- The additional time needed to serve wheelchair passengers makes providing trips to them less productive than serving other customers. Time is needed to deploy the ramp, secure the passenger and wheelchair, stow the ramp, and upon arriving at the destination, again deploy the ramp, release the securements, assist the passenger in disembarking, and stow the ramp again.
- Trips by wheelchair users may be shorter than the average taxi trip.

It should be noted that only anecdotal evidence is offered for the magnitude of most of these factors. Experience from Seattle shows at least one case where the last bullet point is not the case—wheelchair trips there are actually longer than others.

These factors affect not only taxi companies but also drivers and affect the willingness of drivers to accept trips by wheelchair users. As noted before, some cities have issued regulations requiring drivers to accept trips from people with disabilities. Taxi drivers are usually independent contractors, so it is difficult for taxi companies to require a driver to accept any particular trip. The TLPA report provides an interesting example of a taxi company in San Antonio that offers its drivers discounted leases for operating accessible vehicles and accepting a certain number of wheelchair trips. The Washington, DC, case study in this chapter also illustrates use of driver incentives.

The following case studies of accessible taxicabs in Chicago, Seattle, and Washington, DC, illustrate

different approaches involving various combinations of mandates and incentives, each tailored to local conditions.

Chicago, Illinois

Overview. The City of Chicago illustrates a regulatory approach to ensuring availability of accessible taxicab service, including numerical requirements and creation of a centralized dispatch system so that the public can easily find an accessible cab and so that operators of accessible cabs get business from wheelchair users.

A single toll-free number is available for the public to order an accessible cab, including cabs operated by multiple companies. The accessible cab dispatch system was started in the early 2000s. The mayor has made a push for Chicago to be an accessible city, so the department that regulates taxicabs had a mandate from him to further this goal. Disability advocates are also major partners in the project. Chicago had accessible cabs before 2000, but without any centralized dispatch for accessible cabs, a person would have to call multiple companies to find an accessible taxi.

Rules for wheelchair accessible vehicles. Chicago issues medallions that confer the right to operate a taxicab. Anyone owning between 15 and 49 medallions (adding portions of medallion ownership together) must have one wheelchair accessible vehicle (WAV), and anyone owning 50 to 74 medallions must have two. Above that, medallion owners are required to have one additional WAV per every 25 vehicles. The City has in the past assisted individual owner-operators in purchasing WAVs. The City has provided \$10,000 for the purchase of a ramped van, but has only distributed these grants to a small number of owners (fewer than 10). The funding used to sponsor this program has since been depleted. As of April 2011, there were 89 accessible cabs operating with 11 more expected by the end of the year. Since there are 6,800 medallions, the accessible cabs represent roughly 1.3% of the total fleet.

All accessible cabs must subscribe to the central accessible dispatch service. This is a special case of a rule that requires all cabs in Chicago to subscribe to a dispatch service, with the sole exception of about 300 cabs operated by owner/operators who have only one medallion. The accessible dispatch service is funded by fees of \$270 per month paid by subscribers.

All drivers of accessible vehicles must accept an average of at least four calls per day from the central accessible dispatch service over the course of a month. The City monitors this with data collected by the dispatch service. No fines are assessed for failing to meet the four calls per day requirement if the call center did not receive sufficient calls to distribute to all the drivers. The City does not limit the number of non-accessible trips an accessible vehicle takes; it only requires a minimum of accessible trips per day.

Accessible dispatch operations. The accessible dispatching service is provided by a dispatch company specific to accessible cabs. This company is a subsidiary of a larger dispatch company, and is a separate limited liability company (LLC). The accessible dispatch is separated financially and operationally from the larger company, but does use the call center technology that already existed at the larger dispatch center. Dispatchers for the accessible service are specifically trained for that type of dispatch.

All cabs in Chicago are required to have GPS and Mobile Data Terminals (MDTs). The dispatchers use this technology to assign calls. When a call comes in, they send the trip request to all cabs within a 5-mile radius of the pickup. A driver can accept the trip by pressing a button on the cab's MDT. If no driver accepts, the request radius is expanded to a larger zone, and so on until the trip is accepted.

Initially, the City received complaints about unfair trip assignment because of the accessible dispatch's affiliation with a larger dispatch company. However,

since the process is so computerized, the City believes it is very fair. This has been an education process for the drivers.

Use of wheelchair accessible taxicabs. During 2010, there were 36,517 trips dispatched by the central wheelchair accessible dispatch system. Usage had been climbing until 2006, when they peaked at over 38,000. In 2007 and 2008, usage fell after prices for the Taxi Access Program, a scrip program for ADA paratransit user, were increased. Since 2008, usage has been moving back up. These trends are shown in Figure 11. Note that these figures do not include any trips by wheelchair users that did not go through the central dispatch system, including trips hailed on the street. Some trips arranged directly between drivers and passengers may not be included either. The annual usage is equivalent to a little over 100 trips per day, which falls considerably below the target of four trips per accessible cab per day.

Partnership with paratransit. Accessible cabs service benefits from two programs for users of the ADA paratransit system in Chicago. One is the Taxi Access Program (TAP), which provides a discount to use taxicabs. Participants can take up to four taxi rides per day valued up to \$13.50 for the reduced price of \$5.00 each. The TAP information materials include the toll-free number of the accessible taxi dispatch. The second is Mobility Direct, a sister program to TAP, that places regular repeating trips by users of ADA paratransit system on taxicabs.

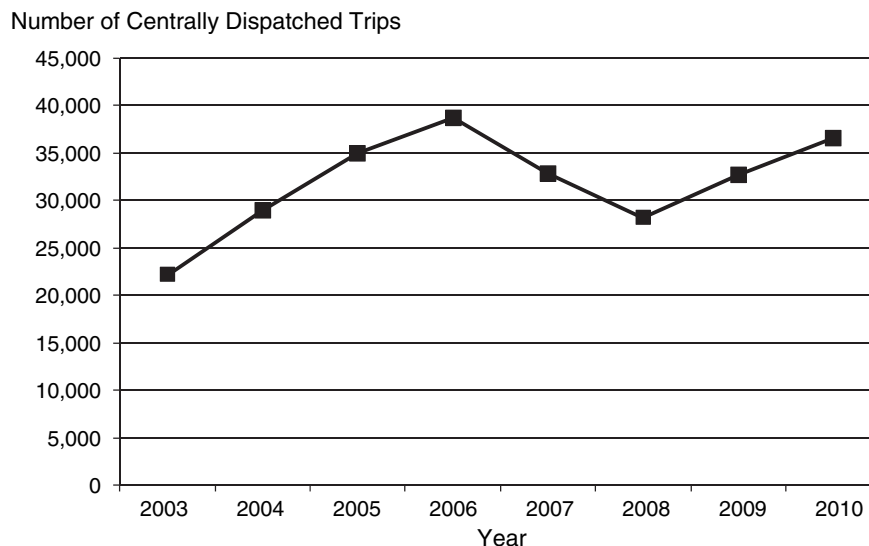


Figure 11 Chicago accessible taxi trips.

Facilitating factors. According to the Business Affairs and Licensing Director of the Chicago Department of Business Affairs and Consumer Protection, having buy-in from the cab industry is critical to making the program work. She notes three important parts of the program that make it work: incentive, enforcement, and communication:

- **Incentive:** Drivers who pick up accessible trips receive vouchers that allow them to skip to the front of the line at the airport.
- **Enforcement:** If drivers do not pick calls as they are required to, the driver and owner of the cab are notified and called in for a meeting.
- **Communication:** Accessibility issues comprise two days of the 10-day training that is required for all drivers. Local community colleges provide this training.

There are fewer turnovers of drivers of accessible cabs than regular cabs. Most accessible cab drivers have been affected by a person with a disability in some way (either through family or other community experience) and are dedicated to their role. Most accessible cabs are leased weekly instead of double-shifted like most cabs. Many are owner-operators.

Issues. Some drivers develop personal relationships with clients and are booked via driver cell phone. For a while, these clients would also call the dispatch line to log the trip. However, friends of drivers began calling to log a trip, claiming it had been scheduled via driver cell phone, and the City found that the meters were merely switched on and off. The City no longer allows clients to call in and “log” trips; they must use the dispatch service. Some companies were amassing vouchers and handing them out to drivers as an incentive to pick up outlying trips or trips that other drivers did not want to take.

Seattle, Washington

Seattle has implemented requirements for wheelchair accessible taxicabs following a 2-year demonstration program that tested the economic viability of accessible taxis and the number of accessible taxis needed to provide responsive service. The Seattle experience illustrates not only the value of a well-planned and analyzed experiment but also a cooperative process involving multiple jurisdictions, the transit operator, people with disabilities, and taxi industry representatives. The demonstration and the

analysis also show how a variety of indirect subsidies have made it economically viable to operate wheelchair accessible taxicabs.

Overview. The City of Seattle and King County jointly conducted a demonstration during 2007 and 2008 in which 16 wheelchair accessible taxicabs were operated with temporary licenses and extensive data was collected and analyzed. The data was documented and analyzed in a comprehensive report by City and County staff.⁹ Following the demonstration, permanent licenses were issued for 30 accessible taxis and then for 15 more.

As background, the City of Seattle and King County operate under a 1995 interlocal agreement to regulate taxi service in the region. The County licenses all drivers for the City and County, and the City licenses the vehicles for both jurisdictions. These City-issued licenses are similar to medallions in other cities; they confer a right to operate a taxicab and can be sold. The taxicab industry is considered fragmented, with hundreds of individual owners, though all of them are affiliated with just six dispatch associations.

Demonstration project. The Wheelchair Accessible Taxicab (WAT) demonstration project followed years of discussion and planning. In 1996, the Seattle City Council passed a resolution listing the need for wheelchair accessible taxicab service as a priority. In 1999, King County established a goal that 10% of county taxicabs be wheelchair accessible by 2001. Meetings among City and County staff and industry representatives identified a number of issues including the following:

- The demand for accessible taxi service and the appropriate number of accessible cabs were unknown.
- The fragmented nature of the taxicab industry made it a challenge to find a fair method for mandating accessible taxis. With 680 owners of 908 Seattle and King County taxicabs, which owners should be required to bear conversion costs of \$10,000?
- There would be the additional costs of purchasing and operating accessible taxis such as insurance and maintenance but accessible taxis could only charge the taximeter rate.
- Drivers would need special training which would be an extra cost in time and money.

- Driver incentives might be needed (e.g., reduced lease rates or waiving fees).

After studying the experience of other cities that had accessible taxis, most of which were subsidizing purchase of accessible vehicles or providing other incentives, it was determined that a demonstration project was needed because conditions in Seattle were different from other cities, and because none of the other cities had conducted an analysis of demand and economic impact.

In late 2006, an RFP was issued to select a group to operate WATs with eight temporary, non-transferable WAT licenses. The eight licenses were awarded to a group of taxi drivers who had organized as Washington Accessible Taxi. The drivers were required to affiliate with a single computer dispatch taxicab association because there were too few accessible taxicabs to have them split up and still be responsive to service requests. The drivers chose to affiliate with Yellow Cab. WAT operations began in October 2006. In June 2008, the number of WATs was increased to 16 at the request of Metro, the transit system, and to test how adding taxis would affect response time.

A Wheelchair Accessible Taxi Advisory Committee, composed of nine people with disabilities, was established to provide monitoring of, and feedback regarding, the operation and evaluation of the Wheelchair Accessible Taxicab Demonstration Project. The committee members met quarterly from January 2007 to March 2009. Committee members rode the accessible taxis, monitored project statistics, observed marketing methods, discussed the taxi service with peers, and held quarterly meetings to assess the project's progress.

King County Metro, the transit system, participated in several important ways.

- Staff of the Accessible Services department of King County Metro, which operates the ADA paratransit system, managed the demonstration project.
- Using grant funds from Washington State DOT, the transit system obtained eight side-entry wheelchair accessible minivans, loaned them for the demonstration, and provided major maintenance for these vehicles.
- The paratransit system provided a base of profitable business for the accessible taxis by sending "overflow" trips that could not be accommodated on the fleet of dedicated

minibuses that provide most of the ADA paratransit service. Normally these trips would have been sent to "cabulance" operators (private for-profit accessible van services that also carry trips for Medicaid and private individuals) or to other taxicab companies. For wheelchair trips, Metro paid the same rate that it would have paid for cabulance service, on average about 58% more than the taximeter rate. This was a no-cost subsidy from Metro's perspective, since the agency was paying no more than it would have using cabulances.

To dispatch the ADA paratransit trips received from Metro, Washington Accessible Taxi opened an office staffed by drivers and an office manager. The office manager, who was paid by Metro using grant funds, collected operating data, including data from trip sheets as well as revenue and cost data. Computer dispatch records and service response records were retrieved from the dispatch computer and submitted monthly by Yellow Cab, the dispatch organization with which the drivers had affiliated. Metro also provided training on assisting passengers with disabilities. This was the same training provided to drivers of Metro's paratransit vans and was provided by the agency's principal paratransit contract operator.

Two additional forms of assistance helped make wheelchair taxi operation more economically viable during the demonstration:

- Dual taxicab licenses (valid for operation in Seattle and in King County) were provided at no cost. Normally such a taxi license would cost over \$100,000 on the open market. Alternatively, a taxi operator without a license would pay a lease to a license owner of about \$420 per week. Unlike normal licenses, the ones awarded for the demonstration were valid only for the duration of the demonstration and were non-transferable. The WAT primary driver was able to drive one shift and lease out the other thereby earning profits like an owner but without an owner's cost of purchasing the WAT licenses.
- Annual taxicab license fees of \$1,050 to Seattle and King County were waived.

Results of the demonstration. The results of the demonstration were thoroughly documented and ana-

lyzed by City and County taxicab regulatory staff. Demand for WAT service quickly grew to an average of about 400 to 500 trips per month. When the number of accessible vehicles was increased from 8 to 16 in the middle of the second year, demand increased to around 800 trips per month. The average number of all wheelchair trips per WAT was approximately 1.6 per day, or 1.2 per shift (assuming 1.3 shifts per day). Wheelchair trips accounted for about 8% of all trips served by WAT vehicles.

About 48% of the demand for WAT service consisted of overflow trips from the ADA paratransit system, while 29% consisted of dispatched trips and 23% consisted of trips hailed on the street or arranged as personals between a driver and a passenger.

Drivers of accessible cabs carried somewhat fewer trips per shift than drivers of other cabs, but earned about the same revenue because the trips were longer on average and because of the higher rate paid by Metro for wheelchair trips. Figure 12 shows the figures.

The demonstration evaluation also examined the effect of operating expenses on driver income and determined that WAT operation would continue to be financially viable as long as permanent licenses were issued free of charge, license fees continued to be waived, and Metro continued providing a base of demand at favorable rates. Owners of the permanent WAT licenses would be able to sell them after 5 years. The current market value of dual licenses at Yellow Cab is reported to be more than \$250,000, but the value of a WAT license is unknown and would presumably depend on the revenue that a new owner could expect to earn.

Response times for dispatched trips served by the wheelchair taxis in Seattle averaged about 30 minutes when there were eight vehicles in service and fell to about 23 minutes when the number of wheelchair taxis increased to 16. These times exclude about 10 minutes required to lower the ramp, load the wheelchair passenger, and properly secure the passenger and wheelchair. These steps must be com-

pleted before the driver starts the taximeter. By comparison, the average response time for non-wheelchair cabs in Seattle was about 10 minutes. Projecting from the trends seen in the demonstration, it was estimated that 31 wheelchair taxis would be needed to bring response times down to the same level as for other taxis.

There were too few wheelchair taxi trips dispatched to county areas to determine an average response time for those trips. The average taxicab service response times for ambulatory passengers in King County was estimated to be approximately 16 minutes. Since the county area is very large, and many trips would have to be manually dispatched, the demonstration evaluation concluded that additional county-only wheelchair taxi licenses would be needed to ensure timely service for passengers using wheelchairs.

Outcomes following the demonstration. Instead of 30-plus WAT licenses for Seattle and 15 for the county, as had been recommended, there are now 45 dual licenses. The City issued 30 permanent, transferable WAT licenses distributed by two separate lotteries to eligible individuals in 2009 and 2010. Both lotteries attracted hundreds of applicants. Initially, these licenses were valid for operation in Seattle only. Later, King County passed an ordinance that allowed them to issue a county taxicab license to these 30 city-only WATs making them dual-licensed. License fees from the City and the County have continued to be waived.

In 2011, King County issued 15 dual WAT licenses (valid for city and county operation). The purpose of these additional licenses was to help serve King County, but it was considered unnecessary to restrict them to the county because both the City and County require that WAT drivers take a wheelchair trip before any other—no matter where the trip originates in the city-county area. There are now 45 dual-licensed WAT licenses authorized, all of which were expected to be on the road by May 2011.

	Wheelchair Accessible Taxis	Conventional Taxis
Revenue trips per shift	12.4	16.9
Average distance	6.0 miles	4.3 miles
Average time charge	4.0 minutes	3.0 minutes
Revenue per shift	\$203	\$215

Figure 12 Revenue of wheelchair and conventional taxis.

For the future, the evaluation report recommended that each dispatch association (what appears to the public as a taxicab company) should be required to have at least 3% of its affiliated cabs as dual-licensed WATs. Currently all the accessible cabs are affiliated with one association, an outgrowth of the demonstration requirement that was intended to ensure good response times. The recommendation was based on these considerations:

- Each taxicab association has a different operating area in the city and county so each should have WATs to provide equivalent service response times to individuals in wheelchairs.
- If each taxicab association has WATs, there will be competition and better service for individuals in wheelchairs.
- Persons in wheelchairs are entitled to a choice among taxicab associations just like able bodied persons.
- If there are no service alternatives, a person in a wheelchair may be intimidated from making a complaint to avoid being black-listed.
- All taxicab associations should be required to “give back” to the community in exchange for the privilege of operating in an industry with closed entry.

There has been a lot of consideration given to the economics of WAT operation in the future. Eventually, the current WAT licenses will be sold to a second generation of owners, and they will not be free to those purchasers. Whether the WAT licenses will command a lower market value than unrestricted licenses is unknown, as is how the price would reflect expectations of revenue earning ability. The following are related considerations:

1. To meet their 3% requirement, a taxicab association may have to offer incentives to WAT owners to affiliate with them, for example, reduced or waived service fees.
2. Accessible cabs are vans, which are desired when large parties travel together, for example, cruise ship passengers, large families, and so forth. They often get called to the head of the line to provide service to these groups. By comparison, most taxicabs in Seattle are getting smaller as Ford Crown Victoria sedans are replaced with more fuel-efficient Toyota Prius hybrids, so the larger accessible vehicles have some advantages.

The City of Seattle works closely with government agencies and non-profits that work with wheelchair users and promotes the use of WAT service. This promotional effort stresses the fact that WAT service is available 24 hours every day throughout the entire county, WAT service is offered at taximeter rates, and WAT drivers receive training in the special needs of persons in wheelchairs. The City’s regulatory staff participate in organizations like the King County Mobility Commission, the Livable Communities Committee, and the Eastside Easy Rider Collaborative.

Metro promotes the service on its website. Metro also offers a taxi scrip program under which low-income seniors and people with disabilities can ride taxis at half price. Participants can purchase up to \$60 worth of scrip each month for half the face value. This program has existed for many years but, in the past, individuals who need to ride in a wheelchair would not have been able to take advantage of it.

Washington, DC

The Metropolitan Washington Council of Governments (COG) is conducting a pilot test of wheelchair accessible taxi service in Washington, DC. While other cities have more accessible cabs or had them earlier, Washington’s experience illustrates a unique approach to addressing a particular set of challenges.

Overview. Washington has an open-entry system of taxi regulation leading to numerous very small companies and independent operators, many without centralized dispatching. Fares are low compared with many large cities:¹⁵ \$3.00 for the first one-sixth mile and \$0.25 for each additional one-sixth mile (\$1.50 per mile). (There are also a variety of usual extra charges, including \$2.00 phone requests and \$1.50 for each additional passenger except for children under the age of 6.) For various reasons, the ADA paratransit system operated by the Washington Metropolitan Area Transit Authority does not use taxicabs for any of its service in the city. In this environment, it would be economically difficult for taxi companies or drivers to justify the investment in accessible taxicabs without assistance and it would most likely not be feasible for the District of Columbia Taxicab Commission (DCTC) to require companies to operate some number or percentage of accessible taxicabs.

The COG is principally a planning and funding body, with limited implementation responsibilities. In this case, however, there was strong public support for a project and no other public body that was in a position to implement it. Initially, the possibility was considered of providing funding directly to the participating cab companies, but after discussions and review it became clear that there was a need for a coordination function.

Use of grant funds. Twenty Toyota Siennas with rear-door ramps were purchased using a 2008 FTA New Freedom grant and matching funding from DCTC. Two companies, Yellow Cab and Liberty/Royal Cab, operate 10 of these vehicles each. Originally, a third company was to participate, and there was to be centralized dispatch function for the accessible cabs. The third company had to drop out after it could not obtain permission to operate in the District of Columbia. With only two companies left, one of whom would have been the obvious choice to provide dispatching because of its more sophisticated capabilities, it was decided that each company should do its own dispatching to create competition and avoid any perception of favoritism in the dispatching function.

A total of \$1,050,000 in grant and matching funds went to purchase the vehicles and provide driver incentives. A portion of these funds also helps the taxi companies to maintain the vehicles. Another \$130,000 is being used by the COG for driver training and marketing including a customer satisfaction survey, and \$100,000 is being used by the COG for implementation, grant administration, and monitoring.

Using grant funds and the involvement of the COG resulted in some complications. Title to the vehicles is in the taxicab company's name, with the COG listed as a lien holder. The companies also sign a security agreement with COG for each vehicle. COG physically holds the titles. The lien goes away once the vehicles reach FTA's definition of "minimal useful life": 4 years or 100,000 miles. The COG required that the taxicab companies provide a \$1 million umbrella policy to supplement the \$20,000 in liability insurance required by the DCTC. (The COG has hoped to have the companies obtain a \$300,000 single limit policy, but the companies could not find an insurance company licensed in DC that would sell them a policy above the DC taxi requirement.) The COG's agreements with the companies also require them to provide regular detailed reports about usage of the grant-purchased vehicles by wheelchair users and

the general public, response times, trip times, and other matters. The most difficult issue to overcome was a Buy America provision that applied to the grant funds, for which the COG ultimately obtained a waiver.

Features and incentives. A key concept in the planning and implementation of the project is that it had to work for the companies, the drivers, and the users. Part of this was an extensive period of cooperative planning. An implementation group met for 1 year. Members included the taxicab companies, the DCTC, the DC Office of Disability Rights, and a DC Council staff member.

The companies benefit by receiving the vehicles paid for with public funds with an allowance for maintenance as well.

Each taxi company selected drivers who liked to do this type of work to operate the accessible vehicles. This, plus the newness of the vehicles, helped ensure willingness on the part of the drivers. To make it work economically for the drivers, a portion of the project funds is being used to provide drivers with discounts on the fees that they pay the taxi companies for dispatching, vehicle lease, and insurance. In addition, the drivers receive \$2.00 per trip to compensate for lack of tips from passengers. In exchange one of the companies requires the drivers to sign an agreement that wheelchair trips will get priority for service. This company provides its drivers a bigger discount than the other and is also getting more wheelchair trips. (It is also much bigger than the other company.) Each driver also received 6 hours of training from a trainer hired by the COG. About 25 drivers have been trained of whom three or four have dropped out. Typically, there is only one driver assigned to each vehicle.

For users, the original centralized dispatch concept would have made it easy to order a taxi. With only two taxi companies participating, it is still easy to order a taxi. Both of the companies have centralized dispatch services. According to customer information materials, if a company's wheelchair taxis are busy that company will transfer a trip request for accessible service to the other company. Provisions of the ADA require that the fare is the same as for a conventional taxi ride by a person not using a wheelchair. In addition, the COG has created a user's guide describing how the service works, including how to order a taxi, what information to provide the dispatcher, the need to come out to the curb, and the fact that oversized wheelchairs cannot be accommodated.

The guide encourages users to reserve their trips 1 to 2 hours in advance when possible. The guide also notes that drivers appreciate tips for good service. The program is being marketed under the name “Roll DC.”

The COG has a Taxi User’s Group that meets every other month to discuss the service with some of the drivers, the taxi company representatives, the DC Office of Civil Rights, and a few consumers of the service. This appears to have avoided complaints because users and providers are talking to each other.

Results. The COG staged an official dedication event for the project in May 2011. The period from January 2010 until then was considered a testing phase during which there was limited marketing. During the testing phase, it was intended that usage would grow very slowly while vehicles were being brought into service, drivers were being trained, and issues were being worked out. Service began in January 2010 with eight vehicles in service and just 23 wheelchair trips. By July, there were 19 vehicles in service and 200 wheelchair trips were provided. In December 2010, 287 wheelchair trips were provided. Once the project is officially launched in May, it is hoped that usage will increase.

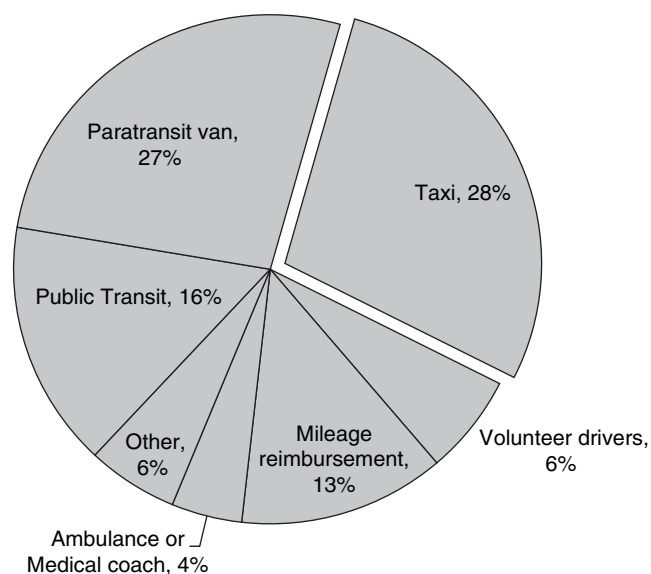
While the service appears to be working well, there is some concern about what will happen when the grant funding, which is used to provide incentives for the companies and drivers, ends in June 2012. The companies are seeking local sources of continuing funding.

CHAPTER 7—NON-EMERGENCY MEDICAL TRANSPORTATION

Medicaid is a jointly financed and administered federal/state partnership to provide health care coverage for low-income and disabled individuals. Each state runs its own Medicaid program differently, often under local names such as MassHealth in Massachusetts and Medi-Cal in California. While the states have considerable latitude in the design of their programs, they all operate within rules established by the federal government. In particular, federal Medicaid regulations require all states to “ensure necessary transportation for recipients to and from providers” and pay the cost of that transportation (42 CFR 431.53 and 42 CFR 440.170[a]).

Transportation provided to Medicaid recipients includes emergency transportation and non-emergency transportation, commonly known as non-emergency medical transportation or NEMT. In many cases, states provide NEMT by means of taxicabs. The federal government does not publish statistics about NEMT, but some data is available from a survey conducted by the National Consortium on the Coordination of Human Services Transportation in 2002 and 2003.¹⁶ Thirty-one states responded with NEMT data, reporting 39 million trips, 5.5 million of them by taxicab. The total reported cost for NEMT was \$1.1 billion. The proportion of NEMT trips provided using taxicabs varies greatly—14 of the 31 states that provided NEMT data did not report any trips by taxicab at all. Some states that make extensive use of taxicabs include Virginia (81% of NEMT trips), North Dakota (66%), Massachusetts (65%), and Colorado (51%). Figure 13 shows the overall average use of various modes.

Limited information from the perspective of taxicab operators comes from an annual survey conducted by the TLPA. The most recent survey obtained responses from 51 operators, who reported receiving an average of 9% of their revenue from Medicaid.⁶



Source: Steff, Gail, and Mark Newsom, Medicaid Non-emergency Transportation: National Survey 2002–2003, National Consortium on the Coordination of Human Services Transportation, December 2003.

Figure 13 Modes used for non-emergency medical transportation.

Kentucky

Overview. Kentucky formerly provided vouchers for some Medicaid recipients to take taxicabs, but switched to a system involving brokers who authorize trips. Kentucky's experience illustrates how an approach that was difficult to monitor has been replaced by one that seems to work much better. The new system also allows better use of other modes, including public transit, and coordination among human service programs.

Brokers. The State of Kentucky has established regional brokers with responsibility for arranging human service transportation including Medicaid NEMT. The Kentucky Transportation Cabinet, the state DOT, is responsible for overseeing the brokerages under agreements with several state departments including the State Department of Medicaid. There is a broker in each of 14 regions in the state. The Cabinet also is responsible for aspects of taxicab regulation in the state.

The brokers verify each recipient's eligibility, assess the recipient's need, and determine the appropriate mode of transportation, which can include: private auto or foster parent providers, regular taxi service, fixed route bus, and non-profit demand response bus service. In addition, there are two groups for whom special arrangements apply: those who are ambulatory but disoriented and those who are non-ambulatory and need physical assistance.

Arrangements for taxicabs. In fiscal year 2009–2010, 877,000 NEMT trips were provided using taxicabs, 29% of the total NEMT trips. The average taxi trip was 11 miles long and cost about \$15. The Transportation Cabinet sets rates that taxi companies are paid for NEMT based on six criteria which include geographic location and distance to facilities. In some cases, the rates are an amount per mile, while in others the rate is a flat rate per trip (usually in urban areas where short distance trips predominate). This is a change from an earlier system under which the regional brokers set the rates; the earlier system resulted in inequities.

The broker authorizes each trip and knows the mileage and authorized type of service for each one, which is used to verify billings. This replaces an earlier system in which patients were issued vouchers. Under the voucher system it was possible to be billed for inflated mileage and there was no way even to

confirm that a billing was for a trip that actually was provided. In one case, trips were inappropriately billed at the rate for disoriented passengers.¹⁷

While the earlier system created incentives for providers to bill as much as possible, the current system provides an incentive for brokers to authorize the least expensive transportation possible. This is so because the broker is paid a capitated rate per participant, and keeps the difference between those payments and the amounts paid to transportation providers. Therefore, it is necessary to monitor the program for customer satisfaction and inappropriate denials of service. The Transportation Cabinet maintains a statewide toll-free line for complaints and conducts monthly phone and rider surveys that show 96% and 100% customer satisfaction, respectively. In 2003, a legislative commission found 88% customer satisfaction.

To participate in the NEMT program, a taxi company must be licensed by the state or a local government. In addition, drivers must undergo drug and alcohol tests, pass a background check, and have required training. Vehicles are inspected annually by the brokers and the State verifies these inspections. There are no additional insurance requirements beyond those ordinarily required for taxicabs.

Cost savings. The State credits the current brokerage system with saving nearly \$100 million per year in NEMT costs as of 2010 compared with trends that were occurring before the system was changed between 1998 and 2004. Much of this change is most likely the result of having better controls in general rather than just avoiding fraud by taxicab companies.

Massachusetts

Overview. Massachusetts administers its Medicaid transportation program through a statewide coordinated body, the Human Service Transportation (HST) Office. The HST Office uses regional brokers to provide trips for a variety of human service transportation programs, including Medicaid, which is called Mass-Health in Massachusetts. These regional brokers then subcontract with a variety of transportation providers, or vendors, among which are taxicab companies and other companies whose fleets include taxicabs.

Brokers and vendors. Since the regions include large numbers of jurisdictions that may or may not

license taxicabs, the only absolute requirement for a taxicab to be a subcontracted provider, or “vendor,” is that the taxicab be registered with the Massachusetts Registry of Motor Vehicles and meet all safety and inspection requirements of the Registry. Taxicabs are required to be clean and sanitary, and drivers are required to possess a Massachusetts driver’s license. There are no requirements for special equipment or driver training from the state level of the HST Office. The regional brokers provide limited driver training for specific service requirements, but training is primarily the responsibility of the taxicab companies.

The State’s largest broker is the Montachusett Regional Transit Authority (MART). MART provides transit services in a region of north-central Massachusetts including the cities of Fitchburg and Leomister, and is the broker for four of the State’s nine HST brokerage regions, serving the Pioneer Valley, North Central, South Central, and Greater Boston regions. MART trips in fiscal year 2010 totaled approximately 3.9 million across its four regions, making up 70% of the State’s 5.4 million total trips. Of these, 1.5 million were MassHealth NEMT trips.

The brokers place trips on over 300 private vendors across the state. Vendors set their own rates, with allowance for no-shows and deadhead built in. Vendors can change their rates every month. A broker posts trips to the vendor that has the lowest fee for each trip. The vendor checks off which trips they can do; they may not get all those trips. Vendors can refuse trips. In regions where the Regional Transit

Authority (RTA) for that area is not also the HST broker, the RTA can be a vendor and bid on trips. This model is attractive to vendors and non-broker RTAs that are providing ADA service and may not always have capacity.

There are three types of rates that MART vendors use, shown in Figure 14. Taxi and dial-a-ride trips are typically both ambulatory service with different types of fares and trip assignment.

MassHealth NEMT. In fiscal year 2010, MART brokered 1.5 million NEMT trips across all of its four regions, costing \$17,523,472, at an average of \$11.57. Of this total, 1.4 million were ambulatory trips, most of which were provided by taxi or livery companies.

There are two possible conditions that would allow a door-to-door NEMT trip under MassHealth rules:

- No public or private transportation is available, OR
- An explanatory form (PT-1) filled out by a doctor describing the reasons a patient cannot use public transportation.

The central MassHealth office processes these forms, and the regional broker schedules the trips.

Vendors are paid based on the rates shown in Figure 14, which include mileage charges and can change monthly. However, the brokers are paid a contracted per-trip rate, not at the actual cost of the trips. MART requires that vendors give a minimum

Service type	Rate type and amount
Taxis	Sedans, low pick-up fee, generally no built-in mileage
Average pick-up rate	\$7.82 per one way trip
Average per-mile rate	\$1.47
Average mileage included in pick-up rate	2.1 miles
Average shared ride discount	60% of pick-up rate for each additional rider
Dial-a-Ride	Sedans, minimum \$10 pick-up fee, generally 5-10 built-in miles
Average pick-up rate	\$11.22 per one way trip
Average per-mile rate	\$1.19
Average mileage included in pick-up rate	7.1 miles
Average shared ride discount	58% of pick-up rate for each additional rider
Chair car	Wheelchair accessible vehicles, high pick-up fee and built-in miles
Average pick-up rate	\$23.58 per one way trip
Average per-mile rate	\$1.43
Average mileage included in pick-up rate	1.2 miles
Average shared ride discount	50% of pick-up rate for each additional rider

Figure 14 Massachusetts HST rates.

50% discount for the pick-up rate of a second rider and all subsequent riders. This system gives the brokers a strong incentive to control cost.

Issues. In general, there are very few issues that MART sees with taxi partnerships. The HST Office has streamlined the payment system well, and the paperwork is not overly burdensome. Monitoring systems and penalties such as warnings, fines, and suspensions work to maintain relatively uniform service quality, though this varies by company.

For-Profit Broker

A company that provides NEMT brokerage services throughout the United States was interviewed for its perspective about use of taxicabs. Ninety-five percent of this broker's business is Medicaid. It also does a lot of Medicare Advantage trips. (Medicare Advantage plans are offered by private companies and supplement basic Medicare coverage with additional coverage.)

Barriers. It creates a barrier to working with taxicabs if there are strict standards that companies do not normally have to meet such as background checks for drivers, drug testing, and high insurance barriers. In some cases, \$1 million in liability insurance is required, which is far more than typical local taxi regulations, some of which just require \$35,000. These are not necessarily federal requirements passed down through state level, but rather are a part of contracts with states looking for reputable companies.

In some cases, there are no available service providers that can meet state requirements in a given area, especially in rural places. Since the broker is contractually required to provide service in all areas for statewide contracts, it sometimes carries blanket insurance for companies that are the only possible provider in a given area. However, these cases are very rare; typically, the broker partners with local councils on aging or other non-profit groups in these areas.

Driver issues. Taxi companies typically have contractual relationships with drivers instead of an employer/employee relationship. This limits the control they can exert over drivers. There are two ways that the broker deals with the issue of driver control. One is that taxi companies include requirements as part of the driver contract. Many companies require

drivers to meet certain standards or participate in certain programs in order to be a driver. Second is that the broker sometimes provides driver training directly for drivers who will be operating under broker-sponsored programs.

Many drivers are reluctant to participate because Medicaid/Medicare clients are less likely to tip or tip as generously as some other types of customers. Sometimes, guaranteed trip volume is incentive enough to encourage driver participation in the program. In some cases, the broker adds a 10% tip to the trip costs for the drivers to ensure their participation.

In the end, taxi companies bear the onus of responsibility for complying with regulations set out by the state or municipal governments and for incentivizing program participation among its drivers. In Denver, for example, a cab company may receive an income of \$2 million to \$4 million per year by participating in the broker's program, so it is worth the owner's while to encourage driver participation. Note that, in most cases, a taxi company does not benefit directly from NEMT or other government subsidized trips, since taxi companies typically make their income from lease or dispatch fees paid by drivers. However, by making this additional business available to drivers, companies can increase the number of drivers from whom they receive lease or dispatch payments, maintain their existing pool of drivers in lean times, or justify higher fees.

Payment cycles and billing. Taxicab drivers and brokers work on a very different basis. Taxi drivers work on a basis of daily cash income. The broker operates on a bill and pay system, usually with a cycle of 2 weeks to 20 days. The taxi companies act as an intermediary. Owners of taxi companies reimburse drivers daily for brokered trips. To cover the cost of advancing payment to the drivers until payment from the broker is received, some companies negotiate a fee ahead of time with the broker. Other companies charge a small fee to the drivers. This is similar to the practice described in Los Angeles case study in which taxi companies charged drivers a percentage for trips on which riders paid with City coupons.

Paperwork requirements. Some areas require a handwritten trip ticket be completed, and others require a passenger signature to validate use of a voucher. If a company is already using vouchers for other programs, less training is needed to ensure proper use of vouchers for NEMT. Many places are

pushing for electronic verification instead of paper-based systems.

Quality of service. In the broker's view, the issue is not really one of quality of service, but of image. Many riders have prejudices against taxi companies, and these prejudices can be very strong in some areas. In some markets, the broker has worked closely with taxi companies to improve their images. For instance, in Denver, Colorado, where entry to the taxicab market is tightly regulated, the broker was having difficulty with one company, having received numerous complaints from sponsoring agencies and various facility managers. The broker began proceedings to allow more taxicab companies into the Denver market, spurring the cab company into cooperation to improve its image. The company began attending meetings, addressing complaints, and going to various agency facilities to help improve its image. A similar situation occurred in Connecticut many years ago, and cab companies now have a much improved image.

CHAPTER 8—GUARANTEED RIDE HOME

Guaranteed ride home (GRH) programs offer commuters who use alternative commute modes a timely and inexpensive way to get home in the event an emergency or unscheduled overtime makes it infeasible to use the regular commuter mode. These programs are offered as part of a comprehensive effort to encourage transit use, carpooling, vanpooling, walking, or bicycling to and from work. The intent of the GRH program is to remove one source of anxiety that deters some from using alternative commuter modes.

A recent review of GRH programs by the FTA¹⁸ provides an overview of how they work, including use of taxicabs for the ride home. A case study of a large program in the Washington, DC, area illustrates a particular approach to overcoming challenges posed by the nature of the taxi industry in that region.

FTA National Review of GRH Programs

FTA's review, published in 2007, covered GRH programs sponsored by transportation management associations, metropolitan planning organizations, municipal governments, and business associations. To be eligible for a ride home, a participant must use an alternative commuter mode some number of times per week and, in some cases, have used an alternative

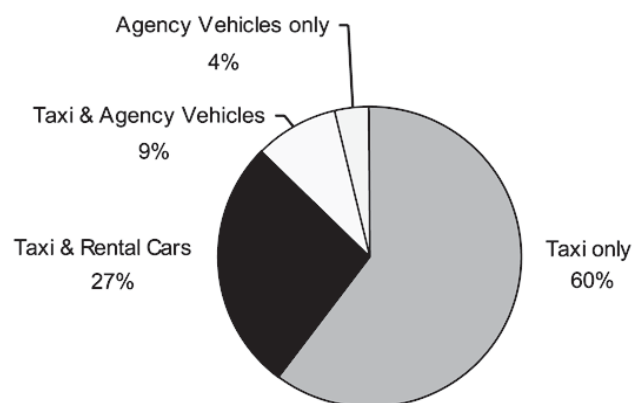
commute mode on the day that the GRH trip is requested. Depending on the particular program, rides home may be provided by taxi, rental car, employer vehicle, or co-workers. As shown in Figure 15, taken from the FTA review, 96% of programs offer trips by taxicab, including 60% that offer only taxi trips. In San Francisco, one program offers trips using a car-sharing company, which is another form of car rental.

Project sponsors pay for the rides home using vouchers (56%), direct payment to the provider (22%), or reimbursement to the traveler (22%). In programs that use vouchers, employees receive a supply of vouchers when they register for the program or obtain them from an on-site employee transportation coordinator on the day of need.

Usually a participant is allowed to ride home with one or more stops on the way at some other location such as an educational facility to pick up a dependant, a pharmacy to obtain a prescription, or a hospital to check on a family member. There is usually some limit on the length of the ride or boundaries within which rides must begin and end. Most programs will pay for four to six rides per year, but a few allow only two and six programs have no limits at all. Eight of the 55 programs reviewed require some co-payment by the employee.

The average trip home costs \$37, but GRH programs are still inexpensive to operate because most people who register for GRH programs never use them. FTA's data showed the average annual cost per registrant in 2005 was only \$1.69. These averages include the effect of a few programs with very expensive trips, including one with an average cost

(55 programs in 2005)



Source: William B. Menczer, "Guaranteed Ride Home Programs: A Study of Program Characteristics, Utilization, and Cost." *Journal of Public Transportation*, Vol. 10, No. 4, 2007.

Figure 15 GRH transportation modes.

of \$114 per claim. The median cost per claim was only \$30 and the median annual cost per registrant was only \$0.35. Usage rates are low even for programs that have high or no limits on the number of trips per year that are allowed.

Washington, DC

The Metropolitan Washington COG operates a program called Commuter Connections to promote commute alternatives in the Washington region. The program includes a GRH component that makes extensive use of taxicabs. The GRH program has been operating since 1997. Unlike many other GRH programs, Commuter Connection's program is centrally dispatched. It also serves a very large region, spanning the District of Columbia and large portions of Maryland and Virginia. The service was recently expanded to cover the Baltimore area as well.

The decision to centrally dispatch GRH trips was made to ensure that goals for a high quality of service could be maintained. Elements of this strategy include selecting specific taxi companies, establishing standards for service, and calling commuters who have used the service to learn about service issues. The COG's contract with the taxi companies specifies a response time of no more than 30 minutes.

At the time Commuter Connections' GRH program was developed, there was concern about quality control issues because of the numerous taxi companies operating in the very large region served by the program. In particular, the open-entry taxi system in Washington, DC, results in numerous very small companies of variable quality and dependability. If Commuter Connections were just to issue vouchers to participating commuters or employers, the total number of taxi companies in the entire region would make it very hard to verify proper use of these vouchers and troubleshoot quality issues.

Commuters must register with Commuter Connections before using the GRH service. To be eligible, the commuter must rideshare, use transit, bicycle, or walk to work at least twice a week and on the day a ride is requested. Registered commuters may use the GRH program up to four times annually in cases of unexpected personal or family emergency, unexpected illness, or unscheduled overtime. There is also a "one-time" exception use allowance for the program for non-registrants; however, registration is required for a commuter to use the remaining three trips. A participant who needs a ride home calls Com-

muter Connections and receives an authorization number. GRH service is available between 6:00 AM and 10:00 PM, Monday through Friday.

The GRH dispatcher decides what mode is appropriate for each trip. In most cases, the dispatcher orders a taxi. For some very long trips, usually over 40 miles, if there is a gap in taxi service coverage, or if the commuter's leaving time is uncertain, a rental car is arranged. In some cases, the commuter is instructed to take transit to a point where a taxi will pick them up. In this case, Commuter Connections mails a transit reimbursement voucher. If the dispatcher orders a taxi, Commuter Connections pays for all charges, excluding gratuity, to the destination. It is up to the commuter to tip the taxi driver if desired. The commuter has to give the trip authorization number and the registration ID number to the taxi driver as proof that the GRH trip has been approved. The driver fills out a form provided by the taxi company, including the authorization and registration numbers, which the taxi company turns in for payment.

Following each trip, Commuter Connections calls the commuter and a company representative to verify that the GRH trip actually occurred. These calls also determine customer satisfaction, which is between 93% and 97%.

In fiscal year 2010, Commuter Connections provided 3,164 free rides home, about 95% of them on taxicabs at an average cost per trip of \$68 on all modes. The dispatch service costs approximately an additional \$100,000. At the end of FY 2010, there were 11,701 participants registered for GRH.

The COG issued a Request for Qualifications (RFQ) to select qualified taxi companies for GRH service. After an initial process, a few companies have been added. There are a total of ten taxi companies being used in the Washington, DC, area. Another RFQ was issued in 2010 to select companies for service in the Baltimore area. Interested companies submit a "work plan" indicating how they will perform the service; a statement of professional credentials, expertise and key personnel; rates; references for similar work; and evidence of all insurance, licenses, and certificates required to operate as a taxicab.

For taxi drivers, GRH trips are relatively lucrative, since they tend to be long compared with a typical taxi ride (59% of participants work in Washington, DC, and 65% reside in Virginia). Since the participants are all employed and use the service infrequently, it is likely that they tip the drivers.

CHAPTER 9—STUDENT TRANSPORTATION

Many school districts arrange with taxicabs to provide transportation for some students to attend school. According to the TLPA’s member survey, work for school districts accounts for 3% of taxicab revenue at responding companies. Note that these arrangements do not involve public transportation agencies and do not use FTA funding, which cannot be used for school transportation.

Two situations that occur in many school districts derive from provisions of the Federal No Child Left Behind Act.

- The first situation involves schools that fail to meet the standard for “adequate year progress” that each state is required to establish. When a school fails to meet adequate yearly progress, the district is required to offer parents of children attending that school the option of enrolling their child in another school in the district and provide transportation to and from that school. In some cases, this results in children traveling some distance to attend school.
- The second situation involves children who are considered homeless under provisions of the McKinney-Vento Act (which is incorporated in No Child Left Behind). “Homeless” children can include “children and youths who are sharing the housing of other persons due to loss of housing, economic hardship.” When a child becomes homeless during the school year the district must permit the child to continue attending the same school and provide transportation to and from school. This may require providing trips between locations beyond the district boundaries if that is where the child is staying. This applies even if the child is living in another county.

Some districts also use taxicabs to transport certain special needs students, especially those whose behavioral problems prevent them from traveling with other students. Taxis are used for purposes of school desegregation.

Case studies of New Haven, Connecticut; St. Lucie County, Florida; and Palatine, Illinois illustrate use of taxicabs based on the requirements of No Child Left Behind. The New Haven case study and a case study of Cleveland, Ohio, give an example of taxicabs transporting special needs children, and a case study of St. Louis, Missouri, shows the use of taxis for school desegregation.

New Haven, Connecticut

Taxi company perspective. Student transportation is a significant part of the business of one large taxi company that serves New Haven and Bridgeport, Connecticut, and 14 other towns in the same area. Metro Taxi advertises that the company’s 161-cab fleet includes more than 40 vehicles registered as Student Transportation Vehicles (STVs). Metro Taxi drivers, with additional licensure, transport special education students to their schools and after-school programs. The company’s website mentions transporting blind and hearing impaired customers and customers with behavioral health needs.

According to Metro Taxi’s owner, the students transported include those who cannot ride with others on a school bus because of behavioral issues. Some of them just need to ride on their own while others may need a special harness. Some have severe physical disabilities. He estimated that the company provides about 45 to 50 round trips per day for school districts. Most of the trips go between towns. Metro Taxi keeps the same driver transporting each student every day, so parents and drivers can exchange telephone numbers. They have been providing this service for about 10 years.

For a vehicle to qualify as an STV, it needs to pass an inspection for this purpose. STVs need to carry a fire extinguisher and first aid kit and must have a sign with the words “carrying school children” in black lettering at least 3 inches high on a yellow background. This sign flips down when the vehicle is not being used for school transportation. The State requires daily pre-trip vehicle inspections and record keeping. The safety inspection is more detailed than for a taxicab and includes things such as measuring the thickness of brake pads.

All the drivers are independent contractors whose income depends on the amount of trips they are able to carry. Becoming certified as an STV driver is a way of increasing the business that is available for them. Once a driver obtains a regular taxi operator license, certification as an STV driver requires fingerprinting (a second time), a urine test for drugs, and 2 days of classroom training. Metro Taxi provides this training at its facility. The certification needs to be renewed annually and requires retesting for drugs and 1 day of classroom training. The training is offered to drivers to take on their own time.

STVs and their drivers also do regular taxi work. The rate for student transportation is commonly the same as the taximeter rate, but can be higher. In the

past, these rates were negotiated with school districts, but most districts now conduct an RFP that determines the rates. The lease rate paid by drivers is the same for a cab registered as an STV as for other vehicles. Drivers receive the payments from the school district for the students they carry each day, less some percentage for administration and to compensate for the time it takes the company to bill and receive payment, which is usually around 60 days.

The most significant difficulty of providing student transportation is the billing process. Record keeping is not much more than for other taxi business. Insurance requirements are typically more than required for normal taxi operation. The State of Connecticut requires only \$100,000 in vehicle liability insurance. Some school contracts just require the state minimum while others require more, up to as high as \$5 million, in which case Metro Taxi would carry the trip in a livery vehicle rather than a taxicab. In some cases, a Medicaid transportation broker, which carries its own insurance, provides school trips. (Medicaid brokers sometimes bid on school contracts.)

As background, note that taxicabs in Connecticut are regulated by the State. The State sets rates and establishes rules, but does not actively enforce standards. It is relatively easy for a new company to get started, and there are numerous small companies in operation in the New Haven-Bridgeport area, some without central offices or dispatch.

New Haven Public Schools. In the case of the New Haven Public Schools, taxis are not used for special education students but rather for students considered homeless under the federal McKinney-Vento Act. In some cases, this involves transporting a student from three or four towns away so the student can continue attending the same school in New Haven. Only students in the fifth grade or higher are placed on taxicabs, except in the case of younger students who can ride with an older sibling. Most of these trips are put out to bid. An exception is made in the case of students who are in the care of the State Department of Children's Services awaiting a placement in foster care. These trips change from week to week and are placed on taxis based on informal bids for each trip from vendors that already have proof of insurance on file with the school system. The New Haven schools have about eight round trips per day on taxicabs. It is not always necessary to use a taxicab for a student traveling from another town, since the school system has bus routes that bring students to

20 magnet schools in the district. The district's Coordinator of Transportation considers the taxi service it uses very reliable.

St. Lucie County, Florida

The St. Lucie County School District provides transportation to many of its students as required by provisions of Florida and federal law. Buses are used as much as possible, but taxis are used instead when it would be cost prohibitive to use a bus. The principal cases are students attending a school that is not near their home because of provisions of the federal No Child Left Behind Act of 2002. This includes students offered the opportunity to attend another school when their original school fails to meet "adequate yearly progress" and students considered homeless under the provisions of the McKinney-Vento Act. Beyond the provisions of No Child Left Behind, the State of Florida also grades schools and this too can result in children being offered another school and transportation. The obligation for a homeless student typically continues until the end of the school year but sometimes can continue beyond then. The longest trip the St. Lucie School District is currently providing is 40 miles long.

The fact that a child is attending a school beyond his or her immediate neighborhood does not necessarily mean that bus transportation is infeasible. Florida requires that school districts provide transportation for all students who live more than 2 miles from school. The District operates a zone-based school choice system such that many students attend school more than 2 miles from home. The County is divided in three zones, and parents can request any school within their zone, although they are not guaranteed their first choice. The District also runs bus routes to bring children to and from magnet schools that serve the entire county. At one time, these magnet schools were offered as an alternative for children whose school failed to make adequate yearly progress, since bus routes to these schools were already available. However, this practice led to complaints and was ended because the transferred students were jumping a waiting list for the magnet schools.

The District operates 320 bus routes bringing students to approximately 40 schools. By comparison, there are only a few taxis providing student transportation. As of April 2011, there was one taxi route, but there have been up to ten. Each taxi route may serve up to five or six students.

The District issues an RFP for taxi service. Regarding vehicles, it just specifies that vehicles must be approved as taxicabs. Drivers, however, need to meet the same requirements as school bus drivers including background reports, driving record, and drug testing. In the past, the District contracted directly with a local taxi company. However, for the past 2 years, the District has contracted with a national transportation management company (American Logistics Company) that works through taxi companies and screens and trains drivers, provides handheld communication and tracking devices, makes home visits, and introduces the driver to the parents or guardians. The management company assumes responsibility for meeting the District's standards. The District's Director of Transportation finds that this arrangement is very satisfactory and provides much more reliable service than directly contracting with a taxi company, with less work to supervise and troubleshoot problems, albeit at a somewhat higher price.

The rates paid for taxi transportation are established through the RFP process. The current rate is \$30 per route per day (morning or afternoon) plus \$1 per student plus \$2.50 per mile. These rates exceed prevailing meter rates. There is an added charge of \$25 for transporting a student in a wheelchair.

Palatine, Illinois

Community Consolidated School District 15 is the third largest elementary district in Illinois, serving a diverse population of all or part of seven suburban communities northwest of Chicago. The District operates 15 elementary schools, 4 junior high schools, and 1 preschool early childhood center and alternative public day school. The District serves about 13,500 students of whom about 10,600 receive transportation. State law requires free transportation for students who live at least 1.5 miles from school; parents can pay for transportation if they live closer than that.

The District provides most transportation using its fleet of 162 buses. However, for a small portion of students, it is more cost effective to use taxicabs. The most common use of taxicabs is for students considered homeless. These students began the school year living in the district attending a neighborhood school, but then had to move to a shelter or with relatives, sometimes in another school district. The federal McKinney-Vento Act and state law require the District to provide transportation so these students can continue attending the same school. If the student

lives in another district, the two districts share the cost of the transportation. Occasionally, this transportation is provided for a special education student, but generally this is not the case.

Rather than pay meter rates, the District pays a bid rate based on competitive procurement. The current rates were established as the result of a competitive procurement initiated in January 2011. The winning company bid \$8,220 per month to provide daily transportation to and from school for 14 students, or an average of \$14.68 per one-way trip. Since the trips may be grouped, these rates cannot be directly compared with taximeter rates.

The taxi company is required to maintain vehicle liability insurance with a combined single limit of \$5 million. This is much more than the \$250,000 in liability normally carried for taxicabs in this area, according to the taxicab company. Drivers and vehicles are required to comply with state rules for school bus drivers and vehicles. The vehicles must be inspected twice per year and drivers must be certified for school transportation. The drivers must take an 8-hour safety class and have 2 hours of refresher training each year. They also need to undergo a physical examination and a criminal background check. The taxi company designates specific drivers for this service. The District hopes to have the same driver transport a given student each day, although this cannot be guaranteed. The taxi company also designates specific vehicles that have been certified as meeting the contract requirements.

District 15's Director of Transportation, who has been in his position for about 1 year, indicated that there have been some startup issues, especially with timely pickups, but not many problems that could not be resolved quickly. Apparently, there were concerns in the past about trips being billed that never occurred. The current system provides better controls to ensure that the District only pays for taxi runs and trips that actually were provided.

The taxi company that provides transportation for District 15, American Taxi Dispatch, Inc., has been providing service for over 20 years for various school districts, according to the company's website. The company's website also lists over 30 municipal taxi subsidy programs for seniors in the Chicago area in which the company participates.

The company's school transportation manager indicated that about 150 drivers are currently school certified out of a total of about 900. The school trips take longer than other work. Some of the drivers

who do these runs also do regular taxi work, and some do not. Not all drivers like transporting students, so it is necessary to pick and choose who gets these assignments. Drivers pay a flat rate per week to the company (i.e., a lease or dispatch service fee), and receive all or part of the payment from the school district. He indicated a preference for charging somewhat above the regular meter rate for school service, but noted that that it is not always possible. In this case, the company's winning bid was 24% less than the next lowest bid.

Cleveland, Ohio

The Cleveland Metropolitan School District, known for most of its history as the Cleveland Municipal School District, has a more than 50-year history of providing transportation for its students with special needs. These students have been classified as having a disability, either physical or psychological in nature, that prevents them from being able to ride in a standard district school bus with the rest of the student population.

This program is totally outsourced to local transportation providers. Contracts are awarded to vendors in response to an RFP process, and each contract is awarded for 1 year with the possibility of 2 additional years added. Currently, the District contracts for this transportation with three local cab companies (Yellow Cab, Americab, and United Cab) and also a number of van services. Students who can be multi-loaded with other students due to address proximity are routed in vans. Students whose locations make multi-loading difficult are routed into cabs. None of the cabs are multi-loaded. Americab, with about 35 cabs assigned to this program, is the current largest taxicab vendor. A fourth taxicab company, Ace Taxi, was involved in the program for many years but no longer is involved. About 500 students per day are transported. Some students require wheelchair accessible transport.

Drivers are often faced with students manifesting their behavioral issues while riding to and from school. Due to these and other reasons, the vehicles require a higher insurance level than normal, and the drivers go through an advanced training program as well as having to pass a rigid certification process.

The taxicab companies and van services all maintain \$1 million of insurance coverage, which is higher than they are normally required to have. Some of the van services are such small operations that they can-

not get such an insurance policy on their own. These companies become sub-contractors to another van company and then purchase their insurance through that company.

All drivers undergo criminal background checks, a physical examination at a physician's office, a driving history records check, and drug testing. They also go through passenger assistance training and training specific to the needs of these children. The drivers must pass a certification requirement from three separate entities: the State of Ohio, the City of Cleveland, and the school District. In the past few years, video training has been added to the training curriculum.

The General Manager of one of the taxi companies provided a taxi company perspective. He joined the company 47 years ago as a driver who transported special needs school children. The company currently transports about 10 students round-trip per day although that number has been much higher in the past. The operational end runs relatively smoothly. There are, however, some occasional problems involving students with behavioral issues.

All drivers involved in this program are independent contractors who turn in charge voucher slips in order to be paid. Fares, which mostly range from \$25 to \$35 each way, are not charged by meter, but instead are charged as a flat rate based on an estimated figure that is slightly reduced from what the fare would normally be. Essentially, the fare is set at what it would be under the best of conditions, with no waiting time or route detours. For example, a metered fare that would normally run between \$31 and \$32 is set at \$30, a fare only achievable under the best of conditions. The drivers don't object to this system, since a \$30 trip will yield \$300 per week (two trips per day, five days per week) for 10 months per year. Each participating driver is assigned one round-trip per day consisting of one student each. Most drivers stay on this program year after year.

St. Louis, Missouri

*Taxicabs and school desegregation.*¹⁹ School partnerships with taxicab companies started in 1984 as part of court-ordered school desegregation in the St. Louis metropolitan area. Students were allowed to transfer between schools in St. Louis and the surrounding suburbs. Taxis were used from the beginning and were always used in conjunction with buses, which served the denser areas. About

6,100 city students are transferring to participating suburban school districts and about 170 county students are transferring to magnet schools in the city. (At the height of its enrollment, the program served about 14,600 transfer students.)

The desegregation program is managed by the non-profit Voluntary Interdistrict Choice Corporation (VICC) (formerly the Voluntary Interdistrict Coordinated Council). VICC provides transportation for participating students who meet certain eligibility criteria. At the start of the 2009–2010 school year, 305 bus routes and 93 cab routes were scheduled. About 4% percent of the students ride in cabs. Students are scheduled to ride cabs if there are fewer than eight children attending a school from a specific area as it is more cost effective to run up to two cabs rather than a single bus. This tends to be the case in less dense peripheral areas. Ride time guidelines also factor into the decision to schedule a child in a cab.

Although the priority is to transport students by bus, the number of cab routes has been increasing in recent years due to the combined effect of a growing homeless population, an increased number of relocated students who could not be placed at a school in the proper attendance area, and the impact of highway construction.

Taxi regulation. Taxis in the St. Louis area are regulated by the Metropolitan Taxicab Commission (MTC). The MTC was created in 2003 to marry existing City and County ordinances into one regional system, with uniform enforcement and improvement of the regulatory system overall. There are a total of nine licensed general “on-call” taxicab companies, not counting seven airport taxicab companies.

School contracts. The General Manager of St. Louis County Cab described his company’s contracts for school transportation. One is a contract with VICC. This office oversees eight school districts in the area. This contract is bid every 3 years through a competitive RFP process. This process greatly increases pressure to lower proposed rates. County Cab has lost this contract a few times over the years, but has always been asked to step in later in the contract to help out. VICC contracts out the transportation planning service to Transpar Group, a school transportation company, which makes the determinations about which trips to put on buses and which in taxis.

County Cab also contracts directly with three St. Louis area school districts. Much of this work is

for students traveling some distance to school because of No Child Left Behind rules. These are contracts that are renewed regularly, and rates are negotiated with the school district headquarters.

Vehicles and drivers. There are no special vehicles used by County Cab for school transportation. The company’s perception is that MTC standards for vehicles are high enough that the school districts accept the vehicles for school transports. Staff of MTC expressed some concern that there is room for more steps to ensure vehicle safety for school transports, and, despite the steps described below, to screen drivers.

Drivers must be designated as school transportation drivers. To acquire this credential, drivers must take a separate written test at a state DMV for student transportation, and a special designation is placed on their state-issued driver’s license. In addition, the school districts and VICC require that all drivers be fingerprinted and go through an FBI background check.

Drivers are independent contractors. About two-thirds of County Cab’s vehicles are company-owned, and the drivers lease from them. The other one-third are individually owned and operated. These independent drivers pay weekly dues to be affiliated with County Cab. Because the drivers are not employees, the company has limited ability to enforce requirements. However, the computer dispatch system sends trip requests for school transportation only to qualified drivers. Some drivers do not want to participate in the program because they want to keep their cabs clean and in good condition, and they see the students as a barrier to this. Presumably, some other drivers fail to meet the standards set by the districts or VICC.

Drivers receive training for student transportation through the cab company, in addition to what is covered in standard driver training for all cab drivers. There are state guidelines for student transportation operators that they must learn (issued through the State Department of Elementary and Secondary Education). The cab company holds a few special training sessions per year and publishes rule updates about various procedures. For instance, there is an incident report form that drivers must fill out if something happens during the trip.

Trips and trip types. County Cab serves several types of school trips. Some are along scheduled routes for students who are not placed on bus routes.

Some are same-day or urgent trips, such as for student illnesses or suspensions. Drivers can sign up for dedicated routes that they drive each day, as is convenient for their schedule. In these cases, the same driver picks up the same students every day, which is very beneficial for both the driver and the student, and there are fewer disciplinary incidents on these trips.

County Cab averages about 200 to 250 one-way trips per day. There are 65 scheduled round-trip routes every day, and the remainder are miscellaneous trips, including same-day or urgent trips.

Rates and billing. The MTC sets rate caps, but the rules allow that written contracts for service can have higher rates than the capped meter rates. Rates for school trips vary. Some school districts use flat Zip Code to Zip Code rates. In these cases, the rates could end up above or below the equivalent metered rates for the trip, depending on where in each Zip Code the trip begins and ends. Some districts base rates on mileage. This has gotten a lot easier since the Internet allows them to confirm mileage before a trip occurs. There is an instantaneous transaction with the school districts: when a district calls to request a trip, the cab company can determine the total fare immediately.

County Cab bills the school districts monthly, but drivers can get paid after every trip. Some drivers even come to the offices twice in 1 day to get payment. This creates an accounts receivable burden, but the company is large enough to accommodate this. Reportedly, some other companies that hold school district contracts do not pay drivers until they are paid by the school districts.

Barriers. There is a lot of paperwork for school transportation. The company takes on most of this administrative burden; for example, driver criminal records and extra motor vehicle checks all have to be done twice per year. The drivers must fill out a form for each trip, like any other voucher system, which is matched to a system code given to them by the computer for that trip.

The company considers the paperwork a major burden, but sees it as worthwhile to participate in the program and keep the company's drivers busy. Keeping the drivers busy is essential to maintaining a large group of drivers that will lease the company's vehicle fleet.

Aside from the paperwork and downward price pressure created by competitive bidding, the com-

pany does not have many issues with the structure of the school transportation contracts and system.

There are a few potential conflicts between school requirements and MTC requirements. For instance, the MTC requires that drivers undergo an annual physical, which must occur within 60 days of their annual license renewal. However, school districts require that drivers undergo a physical within 60 days of the start of the school year. The MTC has allowed drivers to hold off on license renewal to synchronize the two required physicals so drivers only have to get one physical per year.

There are no insurance or special equipment issues. The schools accept the state and MTC requirements for insurance, which is \$200,000 combined single limit.

Helpful factors. From County Cab's perspective, one key item that helps the school transportation program in particular and the taxi industry in general is that the MTC has taxi industry representatives on the commission. These industry representatives are commissioners, and this allows them input and power in the decision-making processes. Over time, trust has developed between the regulators and the industry representatives, and they have been able to work together on issues. There has been significant controversy and litigation between MTC and some drivers who object to the rules and enforcement; many drivers believe the regulations are a burden and question how the system helps them. County Cab's manager is one of the MTC commissioners and believes that sharing equal seats on the Commission has really helped with communication and trust from both sides.

CHAPTER 10—911 TRANSPORTS

One example was found of taxicabs being used to provide transportation for people who call the 911 emergency number.

Houston, Texas

The Harris County Healthcare Alliance operates the Tele-Health Nurse Triage (THN) program in conjunction with the Houston Fire Department's 911 system. It is designed to provide a solution to requests for non-emergency, but frequently urgent, medical needs coming into the 911 emergency lines.

Prior to the THN program, ambulances were frequently being sent in response to calls to 911 that did not require an ambulance. The taxicab transportation program is a recent add-on to the THN program. There are five categories of calls that are potential candidates for diversion to THN: abdominal pain, sick person, allergic reaction, headache, and pediatric. Diversion is always optional: if the person insists on an immediate ambulance, he or she gets one.

The initial program, which at that time did not include an alternative transportation program, began in June 2008. The goal is to provide telephone assistance to callers to resolve medical issues, including referring non-emergency calls to alternatives to ambulance and emergency room treatment, thus reducing costs. Non-emergency callers are identified by the 911 operator and transferred, with the caller's permission, to experienced nurses who then evaluate the caller's symptoms, using the McKesson call-center triage protocols. The nurses also have the ability to schedule appointments with the area's 13 Alliance-member community clinics. (These clinics are all Federally Qualified Health Centers, "FQHCs," which means that among other requirements, the clinics must use a sliding fee scale with discounts based on patient family size and income in accordance with federal poverty guidelines, and the clinic must be open to all, regardless of ability to pay.)

The initial program identified *access to transportation* as a major barrier to diverting significant numbers of callers to the alternative treatment modes. Of the 79% of calls transferred back to 911, 51% were transferred back due to lack of transportation or transportation-related issues. Thus, in November 2009, the "alternative transportation" pilot was introduced. Now nurses have access to scheduling a one-way taxicab ride, which is free to the patient, to one of the participating clinics, or to an area emergency room. Trip reservation information is immediately entered into a special web page designed by taxicab contractor, Greater Houston Transportation Company (doing business as Yellow Cab). On the web page, custom fill-forms with drop-down menus provide for rapid data entry for trips to potential hospital or clinic destinations.

With the introduction of the taxicab alternative, the number of diversions from ambulances immediately doubled, and remained at the higher levels through the next program expansion, as shown in Figure 16. In April 2010, the program was again expanded, to allow referrals from emergency medical personnel in the field. In the three months of experience with the field referral program, diversions from ambulance increased another 40%.

The alternative transportation program is considered very successful. The estimated total savings

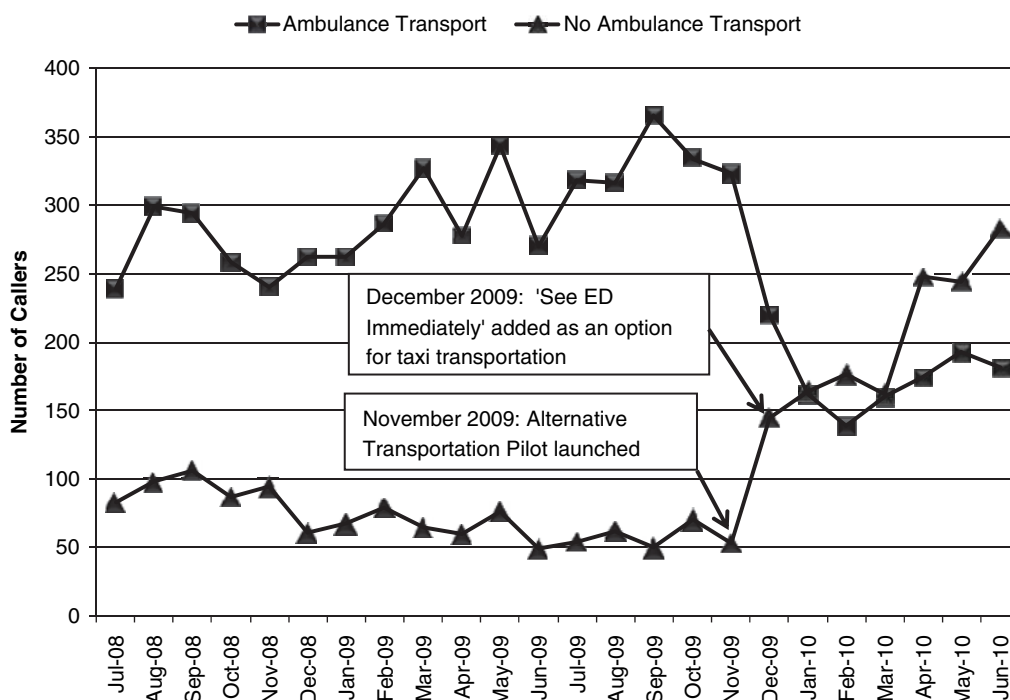


Figure 16 Transport outcomes of calls to tele-health nurse dispatch and field calls.

during the most recent year of the program was \$1.9 million net to the Houston Fire Department (\$3 million gross less program costs). These savings reflect the difference between the estimated average \$1,750 cost of an ambulance ride compared with \$28 for a taxicab. The savings increase to \$2,310 per call if the cost differential of emergency room treatment versus other treatment options is considered. As a result, there is an additional \$1 million in savings to the health system overall. Because the two most recent program enhancements were implemented during that year, future savings should be much higher. The program was briefly interrupted in the first part of 2011 over budget issues, but is now back in startup.

The transportation contract with Yellow Cab is administered by Harris County Rides, an agency that also manages other transportation contracts in the area, including a taxicab voucher program for people with disabilities, elderly riders, and low-income riders. That taxicab voucher program has eight participating cab companies in it. The 911 program was merely added onto the existing contract with Yellow Cab Company, simplifying administration. Yellow Cab was chosen partly because of its superior response time (it is the county's largest cab company), and also due to its ability to deliver the trip reservations web portal. That portal also ensures trips are only dispatched to eligible locations. The contract does not have any special requirements for insurance or training, because the current local taxi-

cab regulations are deemed suitable. Yellow Cab also offers wheelchair accessible taxicab service, but there have not been a significant number of requests for this service.

When reservations are entered by the 911 call center into the web portal, Harris County Rides receives an e-mail with the trip details, including a unique "event ID"; it uses this information to track client usage and to approve the invoices from the cab company. Rides also investigates any complaints, which are not common.

Historical trip volume is approximately 85 one-way trips per month, at an average cost of approximately \$28. The contract pays the meter charges for approved trips, with this amount going to the taxicab driver. It is important to note that payment for rides is one-way only, just as an ambulance would be. The client is then responsible for the return trip. When Rides performs customer telephone surveys, which it conducts on 100% of all trips, it also determines if clients are likely eligible for and interested in other transportation programs and, if so, it then forwards information on these programs. Repeat callers are also referred to caseworkers at the Healthcare Alliance for follow-up on health care management services.

The program surveys users for timely pickup, courtesy of driver, and overall customer and nurse satisfaction with all measures 85% or higher in the positive. Response time to immediate calls has been very fast, typically less than 10 minutes.

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Organization	Name	Title
American Logistics Company	David Braun	Vice President, Paratransit Services
American Taxi Dispatch, Inc.	Ihsan Qadir	Director of School Services
Blue Cab Company (Ann Arbor, MI)	John Etter	Owner
Centre Area Transit Authority (State College, PA)	Judi Minor	Director of Administration
Chicago Department of Business Affairs and Consumer Protection	Shellie Riedle	First Deputy
City of Los Angeles	Jeannine Brands	Transportation Engineering Associate
City of Olathe, KS	Carroll Ramseyer	Housing Office
City of Seattle	Craig Leisy	Manager, Consumer Affairs Unit
City of West Hollywood	Ron Winrader	Taxi Specialist
Cleveland Metropolitan School District	Fred Harper	Routing Specialist
Community Consolidated School District 15 (Palatine, IL)	Tom Bramley	Director of Transportation
Harris County Healthcare Alliance	Jennifer Tsuda	Health Policy Analyst

Interviews for the Case Studies (Continued)

Organization	Name	Title
Kentucky Transportation Cabinet, Office of Transportation Delivery	Jeremy Thompson	Branch Manager
LogistiCare Solutions, LLC	Kenneth Hoggard	Corporate Director, Provider Relations Group
Maryland Transit Administration	Lauren Skiver	Deputy Chief Operating Officer of Core Service
Metro Taxi (New Haven, CT)	Bill Scalzi	President
Metropolitan Washington Council of Governments	Wendy Klancher	Principal Transportation Planner
Metropolitan Washington Council of Governments	Nicholas W. Ramfos	Director, Alternative Commute Programs
Montachusett Regional Transit Authority	Bruno Fisher	Chief Operations Officer
New Haven Public Schools	Teddi Barra	Coordinator of Transportation
Orange County Transportation Authority	Curt Burlingame	Paratransit Manager
Pennsylvania DOT, Bureau of Public Transportation	Eileen Ogan	Chief of Specialized Transportation
Pomona Valley Transportation Authority	George L. Sparks	Administrator
Running, Inc. (Viroqua, WI)	Richard Running	
San Joaquin Regional Transit District	Julianne Flores	Transportation Superintendent
Schuylkill Transportation System (Schuylkill County, PA)	Mike Micko	Vice President for Public Transportation Services
St. Louis Metropolitan Taxi Commission	Douglas Scherer	Supervisory Enforcement Agent
St. Louis Yellow Cab and County Cab	Basil Rudawksy	General Manager
St. Lucie County School District	Don Carter	Director of Transportation
Suburban Transit Network, Inc. (TransNet, Montgomery County, PA)	Patricia Moir	Executive Director
Ann Arbor Transportation Authority	Chris White	Manager of Service Development
TMS Management Group, Inc.	Nick Cambas	Principal
Wisconsin DOT	David Lowe	Lead Worker—Program Finance and Operations
Wisconsin DOT, Bureau of Transit, Local Roads, Railroads & Harbors	Monique Currie	Program Manager
Yellow Cab Co. (Cleveland, Ohio)	Richard Headly	General Manager

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