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Strategies for Overcoming Barriers to Paratransit Brokerage

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ABSTRACT

The benefits of interagency coordination of public and human service transportation have been recognized and promoted by federal, state and local governments. Potential coordination benefits can be realized by centralizing critical functions of transit operations. One of the ways this can be realized is by brokering paratransit services. This paper discusses barriers that agencies face when planning to implement paratransit brokerages. The barriers were developed from a synthesis of the literature and interviews with paratransit providers in Illinois. Strategies for implementing brokerages that attempt to overcome these barriers based on an analysis of paratransit operators in the state of Illinois are also presented. These strategies include establishing an advisory board, developing an agreement among participants, specification of the type of brokerage that will be implemented and technological changes.

Keywords: paratransit brokerage, coordination, barriers, implementation strategy, types of brokerages

INTRODUCTION

The benefits of interagency coordination of public and human service transportation have been recognized and promoted by federal, state and local governments. Potential coordination benefits can be realized by centralizing critical functions including planning, public information, call-intake, certification, eligibility records, reservations, trip allocation, scheduling, and transportation.

Brokerage is one form of coordination in which a centralized authority provides transit services either directly or indirectly, through one or more transit providers. Brokerage has the potential to reduce administrative costs, support the centralization of data sources and the integration of all community transportation services, reduce transportation costs and enhance client services.

Implementation of effective paratransit brokerages requires an in-depth understanding of potential barriers and development of a strategy to overcome these. This paper outlines research that has been carried on in Illinois to develop a strategy to implement successful brokerages across the state (1). We undertook a comprehensive review of the literature to understand the barriers to brokerage that have been reported. Then, all fifty states were contacted in order to determine the status of their brokerage or brokerages. Most states do not have a brokerage and are not in the process of implementing one. However, several states already have or will soon have at least one brokerage. These states' transportation departments have adopted various roles in their state's brokerage strategies, which range from adopting top-down approaches to acting as "bystanders" that typically facilitate legislation or collaboration.

We then did a combination of 26 case analyses of paratransit brokers and interviews with transportation service providers within Illinois. These analyses were based on structured interviews with one or more top executives in each agency, and are supplemented by archives, reports, brochures, and websites. During the interviews, the research team asked these executives about their current operations, experiences, or plans for paratransit coordination; their perceived success factors and barriers in the process; and their attitudes toward a statewide coordination system. These analyses were then used to develop a brokerage strategy for three areas in Illinois. Finally, technology requirements and technological readiness of paratransit operators were developed through on-site visits with 19 paratransit operators in Illinois. Detailed descriptions of the agencies contacted and results can be found in (1) and (2).

BARRIERS TO PRATRANSIT BROKERAGE

A variety of barriers, including misconceptions and misinterpretations, can hinder implementation of paratransit brokerages. While some of these barriers exist on local levels, others exist on state or national levels. Although some of these barriers may be easily overcome, others are challenging to eliminate. An in-depth understanding and analysis of common barriers will help transit agencies overcome some of their problems when they begin to look at implementing paratransit brokerages. Barriers were

developed though a synthesis of the literature, our discussions with the states planning or implementing brokerages, and additional barriers uncovered from our discussions with paratransit providers in Illinois. Potential barriers are shown in Table 1.

Table 1. Potential Barriers to Paratransit Brokerage

FUNDING AGENCY REQUIREMENTS	AGENCY PERCEPTIONS: PREFERENTIAL TREATMENT
Maintaining Needed Level of Agency Coordination	Turf Protection
Number of Partnering Agencies	System Operations
Unfamiliarity with Partnering Agencies	Conflicting Schedule and Route Requirements
Terminology Differences	Conflicting Vehicle and Equipment Requirements
Training	Insurance Coverage
Lack of Brokerage Mandates	Lack of Technology and Guidance
Labor Issues	Eligibility Requirements
Service Contracts	Varying Client Needs
Confusion Surrounding Funding	Subsidized and Unsubsidized Riders
Accountability	Crossing District Boundaries
Record Keeping Variances	Vehicle Use Restrictions
Lack of Sufficient Information	Other Governmental Restrictions
Client Perceptions: Loss of Personalization and Preferential Treatment	

Funding Agency Requirements

Regulatory guidelines or restrictions on such subjects as ridership eligibility, funding, record keeping, and monitoring can vary from one type of funding agency or paratransit provider to another. The U. S. Department of Transportation's (USDOT) regulations, for example, ensure that transportation is provided to all members of the general public, while federal Health and Human Services (HHS) programs are more stringent and offer services only to groups of riders whose eligibility is predetermined. Thus, barriers occur

when an entity looks to merge these and other requirements for agencies that want to work together under a brokerage.

Maintaining Needed Level of Agency Coordination

Maintaining identified levels of coordination may become strained over time since coordinating agencies, organizations, or companies often do not realize all of the benefits that they receive from coordinating their efforts. The expense of forming a brokerage may take longer to recover than initially anticipated. Many agencies will expect reimbursement for their investments, when in reality; most cost savings are re-circulated to unmet travel needs and further transit improvements, such as improved technology or vehicle fleet improvements. Constant and consistent work is therefore required to maintain the necessary level of coordination since formalized agreements may deteriorate, which can force the agencies to re-evaluate the benefits of participating in a brokerage (3).

Number of Partnering Agencies

Increased complexity, opportunities for confusion and misunderstanding, and a higher level of coordination and effort result from having more programs and agencies involved within a brokerage (3). Therefore, limiting the size of a brokerage and carefully choosing agencies and providers that will form a brokerage is necessary. The right size for each brokerage will vary from region to region. If too many agencies are involved in the brokerage, they may feel alienated or become neglected because they have overloaded the broker. This situation may cause conflict between the agencies and broker and lead to the brokerage's failure. On the other hand, if too few agencies and providers join a brokerage, the brokerage will be inefficient and fail to prosper.

Unfamiliarity with Partnering Agencies

Similarly, people who are involved with an agency that offers or regulates paratransit are often unaware or unfamiliar with their partnering agencies' missions, objectives, rules and regulations (3). This creates a challenge to paratransit brokerage that must be overcome. Coordination efforts require a new method of doing business. Workers from each agency must strive to understand the goals and regulations of partnering agencies. As stated elsewhere, "Accepting and helping other agencies to meet their trip needs must be seen as of equal importance to meeting one's own agency needs" (4).

Terminology Differences

Statutes and agencies often define the same words in different ways. For example, statutes widely vary on their definitions of persons with disabilities, and agencies greatly vary on their definitions of a client. Human service agencies often use the term "client" to refer to what transportation agencies consider "riders" or "consumers" (3). These slight differences in definition and usage may cause misunderstandings and thus create barriers for paratransit brokerages (5).

Training

Training requirements can widely vary depending upon the nature of the agencies and their clientele. These requirements include the type and duration of training and trainee re-certification. Training expectations, therefore, need to be assessed early on in the brokerage development phase to avoid confusion, frustration, and incorrect expectations.

Partnering agencies may have varying requirements regarding employee training needed to serve their riders. Riders with disabilities, for example, have very different needs than those riders who can no longer drive. The training necessary to provide service to riders with disabilities is more involved and difficult than that of providing service to those without disabilities. For example, drivers must learn how to properly tie-down wheelchairs without inappropriately touching those who are using them. If the brokerage decides that drivers will incorporate new rider types into their routes, it will need to impose new training requirements on its partnering agencies that will comply with existing statutes and regulations and that are amenable to all of its partnering agencies.

Lack of Brokerage Mandates

Very few states have mandated paratransit agency coordination. Given this lack of precedence, many paratransit operators, human service providers, and transit agencies are reluctant to participate in a brokerage, although many of them know that coordinated transportation systems usually improve efficiency, and overall service. Further educating these existing providers and agencies about the benefits of participating in a brokerage system may be too difficult to overcome since it requires substantial time and funding.

Labor Issues

Requirements that specifically pertain to unionized employees can significantly complicate the brokerage development process. Existing agreements may require that some agencies only hire unionized employees, for example, while other agencies may not be obligated to hire any. A brokerage's potential partnering agencies will therefore have to determine whether union and non-union agencies can work together and whether this difference can adversely impact any of the partnering agencies.

Negotiating labor agreements with current and new paratransit providers can jeopardize attempts to create a brokerage. Labor problems can result from issues surrounding the nature of the agreements themselves or from determinations about the brokerages' optimal size. The brokerage's optimal size will dictate how many agencies are sought to create the desired efficiencies. The more agencies, which become involved in the brokerage attempt, the more difficult it will likely be to reach a compromise. Some agencies may have to layoff or retrain workers once the brokerage is implemented. Unions may be fearful that non-union labor will replace union jobs. Hence, paratransit

workers and providers need to be assured that the brokerage contracts will have provisions for resolving labor disputes and fostering cooperative activity.

Service Contracts

Existing service contracts may have specifications or requirements that differ from those required for the brokerage. While some contracts may expire within a reasonable time and thus may be re-negotiated, others will expire well after the brokerage is implemented. Negotiating a new contract's terms or terminating an existing contract will require a concerted effort from all interested parties.

Confusion Surrounding Funding

Federal, state, and local agencies have more than 100 separate programs, which fund transportation services and promote system coordination. Each of these programs has different funding requirements, restrictions, and funding levels. The amount of funding spent or currently available for all of these programs, however, has not been clearly identified (6). This funding situation is so complex that the Federal Coordinating Council of Access and Mobility (CCAM) was created to bring together requirements and policies of the U.S. Department of Transportation (DOT) and the U.S. Department of Health and Human Services (DHHS) (7). Similarly, states are also examining this issue. For example, Illinois has established a legislative coordination body to deal with conflicting requirements.

Accountability

Each agency's managers need to fully understand their new role in the brokerage. If their roles are undefined or unclear, they will have misunderstandings, which could lead to ineffective management, confusion, and poor transit service. Management accountability is one of the first barriers that may be difficult to resolve as transit providers attempt to blend service areas and responsibilities. Staff accountability and responsibility may ensue after management accountability has been structured (8).

Record Keeping Variances

Conflicting, complicated, or duplicated record keeping policies and requirements may hinder a brokerage's effectiveness. Record keeping policies and requirements need to be clearly outlined and streamlined as much as possible so that the broker will not have to spend an inordinately long time trying to meet all of its service agencies' reporting requirements or try to determine which reports it should file.

Lack of Sufficient Information

Insufficient information about current trends, transportation costs, and efforts needed to successfully implement a brokerage can hinder paratransit brokerage formation (5).

Initial costs and efforts required to establish a brokerage are often higher and more elaborate than anticipated (9). More effort is required than typically expected, when arranging and coordinating existing and new contracts that engage participating agencies and organizations. Constant and consistent work is necessary for parties to cooperate with one another.

Perceptual Constraints

All parties involved in a brokerage, including the service providers and their riders must be open-minded and willing to cooperate with each other in order to achieve a more efficient and effective transit service. These parties must be willing to overcome any long-standing negative perceptions, which could hinder the brokerage's operations. This type of barrier may thus be the easiest or hardest to overcome, depending on the willingness of the participants to deal with it.

Client Perceptions: Loss of Personalization and Preferential Treatment

Clients often fear the loss of personalized services when their provider joins a brokerage, including the possibility of others getting priority over them. As the providers adjust their operations to better serve the brokerage, existing riders will likely be forced to share their trips with riders from other agencies and make stops before their destination that they did not previously make.

To allay these fears, the broker and its service providers will need to market the brokerage's benefits and ask for their riders' patience as schedule and service adjustments are made. The brokerage should be seen as a way of increasing the number of rides and improving service quality in the near future.

Agency Perceptions: Preferential Treatment

Just as clients fear a decline in service quality because of another's preferential treatment, paratransit providers may worry that the broker will favor one provider over another when dispatching trips. In reality, riders who are involved with some programs may have particular circumstances that require detailed or specialized care and service. Medicaid riders, for example, may require the shortest ride possible to their destination for medical or psychological reasons that may, in turn, inconvenience other riders. Hence, service providers that offer partnering services which are less restrictive may view this type of service as preferential. These fears and perceptions need to be addressed adequately.

Turf Protection

Turf protection can also complicate the formation of paratransit brokerages. Perceived threats to turf largely result from incomplete information gathering and a lack of communication. Agencies are often reluctant to relinquish control of their turf and require assurances of cooperation, coordination, equality, and collaboration. Transit service providers fear that participating in a brokerage will diminish their turf and

possibly profit, where in reality, the opposite is typically true. Turf protection can lead to disagreement among participating agencies on a method of coordination. The lack of a mechanism or incentive for building an alliance among paratransit providers will create a barrier that hinders paratransit brokerage (4).

System Operations

Conflicting operating practices may complicate the formation of paratransit brokerages. These conflicts are highlighted when different types of transit services attempt to merge. For example, school bus operators prohibit standees and require passengers to pass in front of their buses, while mass transit systems encourage standees and ask their passengers to cross behind their buses. Resolving some of these conflicts will require detailed agreements that can become very complicated (9).

Conflicting Schedule and Route Requirements

Often times, a rider's need for paratransit services may directly conflict with the needs of riders from other paratransit services. Public housing residents, for example, generally live far from adequate job opportunities or medical services. To get to these places, they will usually need to take long rides that leave them dissatisfied with their paratransit service providers. This situation has become more common as more and more clinics and facilities seek to re-locate to outlying areas. To minimize this problem, the brokerage will need to more efficiently schedule rides and better design paratransit routes. This solution will take time to evolve, however, and riders may become dissatisfied in the interim.

Discrepancies in route designations or services may also hinder a brokerage's formation. Private, nonprofit transit operators typically limit their services to one vehicle type on a single route. Also, small Section 5311 operators (with up to three vehicles) do not typically provide fixed-route services. On the other hand, fixed-route operators often serve a single city, instead of providing intercity or rural transit services. These operators may find it difficult to expand to other types of services that a brokerage might need.

Conflicting Vehicle and Equipment Requirements

Transit agencies have vehicles that are sized and configured differently to meet their particular needs. When a brokerage increases its pool of potential riders, the transit agencies may find that their vehicles no longer serve all of their riders' needs. Some of the new riders may have disabilities that require wheelchair lifts or that require adequate room for medical devices such as passengers' oxygen tanks. To accommodate these riders, the brokerage may have to pay for modifications to existing vehicles or buy new ones. Existing federal vehicle purchasing procedures will constrain those brokerages that want to replace their vehicles.

Insurance Coverage

The brokerage will need to uniformly insure each of its service providers against liability when it provides transit services for the brokerage. The brokerage must provide insurance that is comparable or better than that of its service providers and should not carry any additional hardships on them.

Lack of Technology and Guidance

Many paratransit operators may have much lower levels of up-to-date technology, infrastructure, or technical assistance than is needed to participate in a brokerage. A successful brokerage requires that all participants are technologically literate.

Eligibility Requirements

The brokerage will need to find a common set of eligibility requirements that the participating agencies will accept. This process should be grounded in a complete understanding of participating agencies' eligibility requirements and the ramifications of accepting or denying particular classes of people from eligibility. Otherwise, the broker will have confusing and conflicting eligibility requirements that will result in frustration and inefficiency.

Varying Client Needs

A paratransit brokerage's diverse ridership may have some riders feeling uncomfortable with their fellow travelers because of age differences or differences in their physical or mental condition. Other riders may not be physically or mentally able to travel longer distances than they currently do. The broker and its service providers, therefore, need to accommodate those riders who have special, intractable needs, and help others feel more comfortable with these service changes, whenever they can.

Subsidized and Unsubsidized Riders

The broker will need to work with human service agencies to establish a fare payment procedure that will have all of its riders using the same type of fare medium, such as tickets or vouchers. Agencies who subsidize their clients could pay the brokerage, which would send their tickets or vouchers directly to the riders. Unsubsidized riders could pay the brokerage in advance and receive their tickets or vouchers through the mail. These fare payment procedures would blur the differences between subsidized and unsubsidized riders and minimize any conflicts between these two groups. It would also help the brokerage simplify its record keeping.

Crossing District Boundaries

Mass transit districts and taxi companies can only provide incidental trips outside of their service areas. Given these boundaries, the brokerage will have to determine how to allocate its costs when its service providers make incidental trips, which are outside of the normal service area.

Vehicle Use Restrictions

Brokerages face a myriad of restrictions that are tied to governmental funding programs. Federal and state funding programs prohibit vehicle leasing, even though brokerages may save money by leasing their vehicles. The Federal Section 5311 funding program prohibits brokerages and other agencies from mixing Section 5311 funds with other funds to purchase vehicles. It also prohibits brokerages and other agencies from using urban vehicles to pick up passengers in rural areas. The Federal Head Start Program, on the other hand, requires agencies to use white school buses to pick up their program's participants.

Other Governmental Restrictions

These can also add to the cost and complexity of creating and operating brokerages. For example, Illinois law prohibits agencies from entering into intergovernmental agreements to create brokerages. Instead, these agencies have to issue a Request for Proposals to find a suitable broker.

BROKERAGE STRATEGY DEVELOPMENT

A comprehensive approach to paratransit brokerages should be developed which takes into account all of the partnering agencies and their needs and interests. This approach should give all of the agencies a sense of ownership in the brokerage and provide a sense of transparency. To achieve this, and help overcome the barriers to brokerage implementation, a number of inter-related tasks need to be accomplished.

Decide on the Type of Brokerage

We have developed five possible brokerage types, which are the following: *Consolidated Brokerage*, *Full Brokerage*, *Administrative Brokerage*, *Call-Center Brokerage*, and *Partial Brokerage*. Each of these brokerage types highlights different functions that previously belonged to individual transit operators or social service agencies. These functions are listed in Table 2.

The first brokerage type that is listed in Table 2 is the *Consolidated Brokerage*. In this type of brokerage, the broker takes on all the functions. Social service agencies and providers play no role in the brokerage, other than possible sponsorship. The brokerage takes full responsibility and authority for everything, including the provision of transportation, dispatching, billing, and financial reporting.

The second type, *Full Brokerage*, leaves most or all of the transportation function to professional transportation providers or social service agencies. The broker handles all of the administrative functions and may provide some of its transportation as well. The brokerage that is being formed in DuPage County, IL (1) is a good example of this type of brokerage.

Table 2. Brokerage Types and Their Functions

Types	Functions	<u>Other Agency Functions</u>
1. Consolidated Brokerage	1-9	
2. Full Brokerage	1-7, 9, (8)	(8)
3. Administrative Brokerage	1, 3-7	2, 8, 9
4. Call-Center Brokerage	1-3, 7	4-6, 8, 9
5. Partial Brokerage	1, 2, 8	1, 3-7, 9

1 = Receiving Calls
2 = Scheduling & Dispatching
3 = Determining Eligibility
4 = Providing Management & Training
5 = Reporting Data
6 = Maintaining a Ridership Database
7 = Approving and Verifying Trips
8 = Providing Transportation
9 = Billing

In an *Administrative Brokerage*, the brokerage does not handle scheduling/dispatching, actual transportation, or billing. It only performs administrative tasks, such as management and training, checks on ridership eligibility, and database maintenance. First Transit operates this type of brokerage in many areas of Illinois (1). Without the scheduling and dispatching function, this type of brokerage may not appear as a “brokerage” in the strict sense.

In the fourth type, *Call-Center Brokerage*, the brokerage acts as a call-center by taking clients’ calls, checking clients’ eligibility, approving trips, conducting trip verification, and scheduling/dispatching trips. This brokerage type requires that the brokerage’s staff is well trained in computer-assisted scheduling and dispatching technology and procedures. The system in Fairfax, Virginia is an example of this brokerage type (1).

In the last type, the *Partial Brokerage*, the sponsoring agencies retain many of their own functions. They take calls from their clients, check their eligibility, approve trips, forward their clients’ requests to the brokerage for service, verify trip completion, and pay the brokerage accordingly. The brokerage does the scheduling and dispatching and provides transportation. Sponsoring agencies maintain their own database and train their staffs according to their own unique needs. Since the brokerage schedules and dispatches trips, the sponsoring agencies do not need to buy computer-assisted scheduling and dispatching equipment or provide training on this equipment. The Chicago Transit Authority (CTA) exemplifies this type of brokerage (1).

There are many variants to these five basic brokerage types. The participating operators and other agencies will select a brokerage type when they determine which functions they want to retain or give away. The selection of brokerage type is an important mechanism for reducing many of the barriers associated with the brokerage. A brokerage may start out as a call center, or administrative brokerage and later move to a more robust brokerage type as the participants become more comfortable in the brokerage arrangement. The broker can have different relationships with different agencies, depending on the expertise and comfort level that the participant has with the brokerage. Thus, it is possible to mix and match these brokerage types, to customize the brokerage to the unique aspects of each participating agency.

Decide on Who Should Operate the Brokerage

Based on our discussions with paratransit operators in Illinois, a successful brokerage will require many different qualities. To be considered as a broker, a qualified operator will need to meet the following minimum, key requirements:

- 1) Daily involvement with transportation and experience with agency coordination,
- 2) Knowledge of computer-assisted scheduling and dispatching technology and use of that system in its daily operations,
- 3) Experience with planning, organizing, dispatching, and transporting of large volumes of passengers, relative to other organizations in the area,
- 4) Sufficient size so that it can demonstrate large-scale economies (medium-sized, 11-30 vehicles, or large-sized, 31-58 vehicles), and
- 5) Good rapport with the area's social service agencies and transportation providers, since the qualified operator will have to enter into agreements with organizations that want to participate in the brokerage.

Incorporate Participating Organizations into the Brokerage

The brokerage should include a variety of organizations, such as human service agencies, mass transit districts, cab companies, and other private transportation providers. This variety will allow the brokerage to have enough flexibility to handle many different situations.

The brokerage should also establish minimum hardware and software requirements for each of its sponsoring agencies and train their managers and staff so that they are comfortable with the computer-assisted scheduling and dispatching system.

Implement the Appropriate Technology

Successful brokerages must utilize the latest Computer Assisted Scheduling and Dispatching (CASD) technology in order to communicate effectively among all the participants. It is important to understand the technological capabilities of each of the agencies involved in the brokerage. We undertook an extensive study of paratransit

operator technology capabilities in Illinois (2). We studied 19 paratransit operators in areas outside of the Chicago metropolitan area.

We computed a technological readiness score, which determines whether an agency's hardware must be upgraded if a computer-assisted scheduling and dispatching system is installed. The scores were based on an interval scale of poor, fair, and good, and were determined using a combination of factors related to the respondent's technological capabilities.

These factors are the following:

- Number of computers used in the agency
- Computer configuration (RAM, HDD, drives, monitor, etc.)
- Operating system
- Networking capabilities (existing network)
- Internet capabilities (modem, high speed)
- Available peripherals (printers, scanners, etc.) and
- Overall technological preparedness

The results are shown in Figure 1. The first category, poor, contains agencies that need major hardware upgrades. This means that they need new computers because their existing ones are either outdated or needed for other purposes. The second category, fair, comprises agencies that need upgrades, but not major ones. Here, components such as: operating systems, network cards, and new monitors would be needed. The third category, good, includes agencies that are technologically up-to-date. In these agencies, only minor changes (e.g. properly configuring networks and setting up servers) would have to be made prior to deploying computer-assisted scheduling and dispatching software. As can be seen in the figure, most agencies would require some technological upgrading and training to make a brokerage system operational.

The technology requirements for a successful brokerage begin with implementation of high-level technology components as shown in Fig. 2. The following discussion will clarify the role of each of these components.

Participant PCs: Participant PCs are personal computers for each of the agencies participating in the brokerage. For larger paratransit agencies with multiple dispatchers, these computers can be tied together with a computer-assisted scheduling and dispatching software server. These computers need adequate connection capability with their software server, especially if they are situated in another location.

Computer-Assisted Scheduling and Dispatching Software Server: The server would usually be located at the broker's location. However, the use of a third party server is also a possibility. The computer-assisted scheduling and dispatching software server has two basic components installed: (a) the computer-assisted scheduling and dispatching software and communication capabilities with participant agency PCs; and (b) software and communication capabilities to connect to the Internet. Larger operators, especially those that have experience with computer-assisted scheduling and dispatching

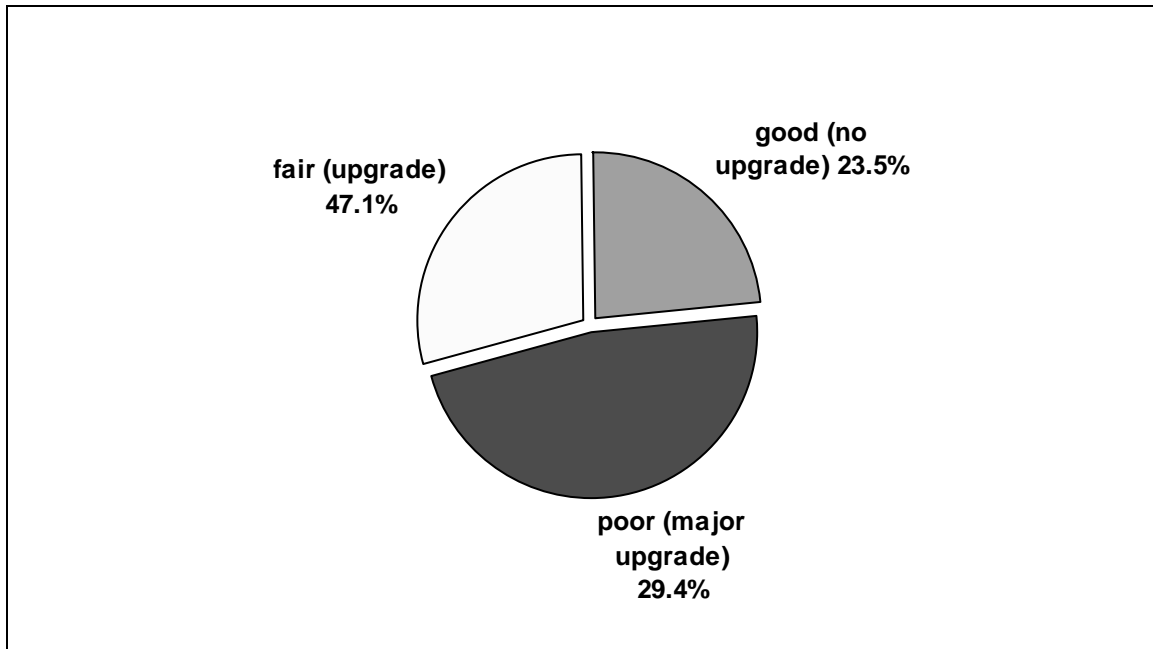


Figure 1. Paratransit Operators' Technological Readiness

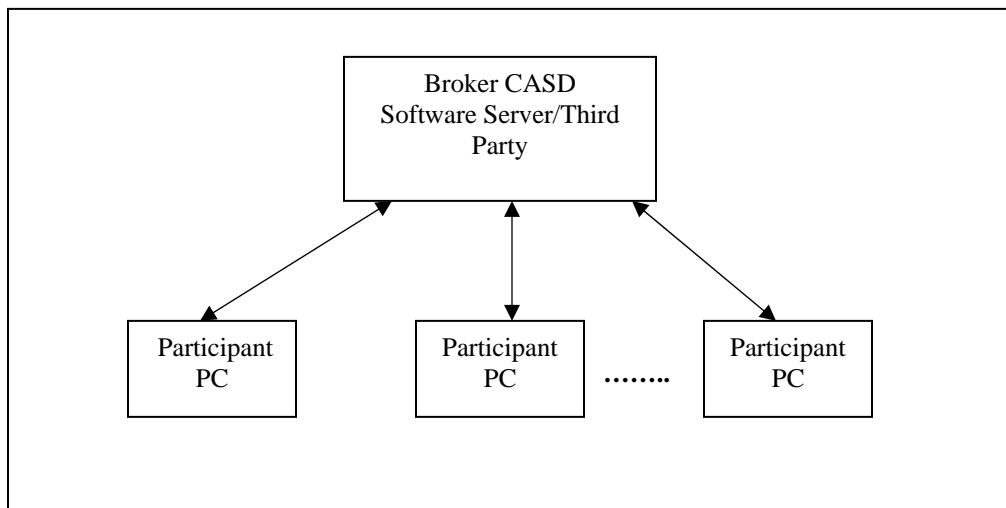


Figure 2. Brokerage Technology Arrangement

implementation, could have a computer-assisted scheduling and dispatching software server on their premises. Smaller operators could have adequate connections for accessing computer-assisted scheduling and dispatching software servers located at larger operators in their region.

Identify a Strong Local Leader

Possibly, the most difficult barrier to overcome is coordination itself. Many transit providers and public agencies have little experience with paratransit coordination. Consequently, fears, misperceptions, and lack of experience may hinder brokerage attempts.

The state DOT should take the lead to identify a strong local leader to lead the brokerage attempt, create an advisory board and assume other responsibilities in the preliminary stages of the brokerage creation. This leader should also work with the state DOT to assure the needs and concerns of transit providers are being met. The local leader should also help identify governmental and organization barriers to brokerage success. In cases which a local activist is difficult to identify, the state DOT should take the lead on choosing a local leader and working with that leader in establishing a brokerage.

Create an Advisory Board

State DOT's should designate an advisory board that will include representatives from various public agencies and transportation providers. The advisory board should include all paratransit agencies that may participate in a brokerage, the Metropolitan Planning Organization or the Regional Planning Commission, county government, sponsoring agencies, and representatives of paratransit customers. It should guide the brokerage's implementation through its initial stages and help these agencies and providers with their problems and concerns.

The advisory board should guide all participants through the brokerage implementation process, determine the needs of participating agencies and their riders, and assess the brokerage's progress. Another key responsibility of the advisory board is to break down fears and perceptions and educate agencies and transportation providers about the benefits and responsibilities of participating in a brokerage.

Create a Written Agreement

The advisory board should address various agency concerns in a written agreement that includes the following items:

- 1) **Clearly Defined Terminology.** Clearly defined terminology refers to clauses that identify and define basic concepts and standards. It is important that all parties involved use the same terminology in order to have a clear and accurate understanding of what is happening with the brokerage.
- 2) **Goals.** The brokerage's goals should be specifically outlined, defined, and communicated through a top-down approach so that all parties involved are working to achieve the same results.
- 3) **Responsibilities.** The Advisory Board should address each agency's responsibilities so that everyone is aware of what it needs to do and what other

agencies are expected to do. Clearly defining these responsibilities will help eliminate role ambiguity and conflict.

- 4) **Liabilities.** Cab companies that would like to be involved in a brokered system, but do not have enough resources to deal with a brokerage's labor issues and insurance would like to have these issues addressed. The brokerage or state DOT should bear responsibility for the cab companies' liability concerns.
- 5) **Expectations.** Expectations and perceptions are two concerns that add to the stress of implementing a brokerage. The Advisory Board will need to address these concerns in order to acquire support from participating agencies.

A model agreement can be found in (1).

Reduce Fears

The state DOT should assure transit providers that participation in a brokerage would not jeopardize opportunities for receiving new vehicles. Although a brokerage system promotes vehicle efficiency, transit providers should be assured that they will continue to receive the same amount of vehicles. The DOT should assure the brokerage's participating agencies that the brokerage's funding is secure. The advisory board should draft an agreement between the state DOT and the brokerage.

Establish Consistent Requirements

The advisory board and the state DOT will need to establish a set of requirements and standards for participating in the brokerage and providing service. Transit providers and other participating agencies will need to provide their input to this set of standards and requirements. These standards and requirements should address such issues as the duplication of services, underused resources, and service gaps.

Establish Vehicle Responsibility

All transit providers that are participating in the brokerage should be involved in negotiating vehicle maintenance and responsibility. Maintenance and other responsibilities associated with transit vehicles must be negotiated in each region in order to create an unambiguous agreement, which outlines each agency's responsibilities.

CONCLUSIONS

This paper discussed at some length a variety of barriers that can harm the creation of paratransit brokerages including conflicting or unnecessary demands on partnering agencies, misconceptions and fears related to competition for funding, confused roles or responsibilities, and a lack of effort. While some barriers exist on the local level, others result from state or national policy. While some barriers may be easily overcome, others are challenging to eliminate. An in-depth understanding and analysis of common barriers will help existing agencies and operators implement an efficacious rural paratransit brokerage.

A comprehensive approach to paratransit brokerages should therefore be developed, which would take into account all of the partnering agencies and their needs and interests. This approach would give all of the partnering agencies a sense of ownership in the brokerage and provide a sense of transparency. This paper has contributed toward this goal by focusing on the issues a successful implementation strategy would need to address.

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