Past Accomplishments and Future Directions of Paratransit: A Discussion

The Sixth International Conference on Demand-Responsive Transportation Systems and Other Paratransit Services concluded with a panel discussion. This is an edited transcript of that discussion. The moderator and panel members were as follows:

Moderator

Daniel Roos, Massachusetts Institute of Technology Members

Robert Aex, Rochester-Genessee Regional Transportation Authority

Douglas Birnie, Urban Mass Transportation Administration

Richard V. Gallagher, International Taxicab Association

Robert F. Hemphill, Federal Energy Administration John R. Jamieson, Twin Cities Metro Transit Commission, representing the American Public Transit Association

ROOS: The first question the panelists will address is: What are the three most significant accomplishments to date regarding paratransit?

JAMIESON: In the past decade we've seen quite a transition in the transit industry. It has been difficult to serve the diverse needs for mobility in this country, especially as land development has moved outward from our central cities. It has become costly for the transit industry to try to perform the many needed services, particularly in low-density areas. I think the primary accomplishment of paratransit is that it has identified to the public the wide range of available services that fall between the driver in his private automobile and buses filled with transit patrons. A second major accomplishment is the ability to demonstrate effective paratransit services not only in this country but also in Canada, where they moved early in such fields as dial-a-ride programs. This country took hold of the issue of gasoline shortage and mounted major programs such as car pooling in a way that cut short the standard lengthy process of planning. A third point is that paratransit has appeared just when the federal government has been concerned about the scarcity

of capital for the development of major facilities. Various people in the paratransit field have been able to step in and offer their services to fill a gap at a time when a new product was needed.

GALLAGHER: One basic area that I think has been greatly overlooked is that paratransit has been in existence for 50 to 60 years, but we simply didn't have a name for it. I would like to make an observation concerning some happenings that I believe made us more aware of paratransit operations. In 1969 the Massachusetts Institue of Technology (MIT) did a study on computerized dispatching. For the first time the industry became aware of the government's, academics', and consultants' interest in taxicabs. From then on the International Taxicab Association (ITA) became more active in determining its role as far as the government was concerned. Many people forget that the taxicab industry was essentially local until 1966. The services rendered were local in nature and were controlled by local ordinances. Gradually, the state organizations and public utilities commissions are assuming some of the power of regulation. The industry has probably been overregulated and overcontrolled on cost and other items.

The second happening that made a very significant impact nationwide was the energy crisis, which began about 6 months before the embargo, when we saw the changes in gasoline price and method of distribution occurring. But this created federal agencies that became involved in developing concepts that would improve transportation and would conserve fuel. This is still a very vital area to us and we are deeply concerned with improving our productivity and our cost-effectiveness, but I think it has changed all the economics of operations in paratransit modes.

Then there was the establishment of the name ''paratransit'' with the publication of Paratransit: Neglected Options for Urban Mobility (1) in June 1974. This brought into focus exactly what we were talking about in the area of paratransit. This was followed by the TRB Conference on Paratransit in November 1975, which I think established paratransit as an integral part of urban passenger transportation. I think from this point on we are involved in the roles the various sectors are going to play—the roles of taxis, transit, and government.

BIRNIE: Certainly awareness of paratransit services is now widespread and there is a great deal of support for these kinds of services. One can point to the successful demand-responsive systems in Ann Arbor and the activities in California as well as support on the federal level for car pooling and van pooling. In addition, of course, the federal government, through the Urban Mass Transportation Administration (UMTA), has made both capital and operating assistance available and the various systems are well known now. Kirby has said that in every small town he has gone to he has been able to find a copy of the paratransit book (1). Communities are aware of and receptive to paratransit services and they are now beginning to be implemented. That tells us one thing—that we know there is a market for these kinds of services.

With the growing support for paratransit, we no longer have to write off many parts of the urban area that we previously felt we could not serve—low-density areas, periods of low demand, and late evening hours and weekends. There is now an opportunity to improve the quality of transportation service and having that opportunity in itself is an accomplishment.

I think the most important accomplishment to date is something Roos (2) touched on at the Williamsburg conference—that paratransit is causing us to rethink our transportation systems. I think in the past we thought of transportation in basically two dimensions: the line-haul fixed-route system and taxi operators. But now we are beginning to think of our transportation services in terms of a multidimensional system in which services are going to be better tailored to the needs of the individual traveler. The systems will now become a mix of modes, not only in terms of new services but also in terms of the ways we look at these services. We are in a dynamic period right now, and paratransit has helped to foster this dynamism.

AEX: I will try to touch on a point or two that haven't been brought up by others on the panel. It may not seem an important accomplishment, but it is very significant that a considerable number of private manufacturers are demonstrating the research and development that have been going on in the private sector, not only with regard to vehicles but also in other areas, principally communications. This seems a little trite perhaps, but I think it is an accomplishment that at last the transit industry recognizes that paratransit exists, even though some paratransit operations have been going on for many years, 50 years or more. I think another accomplishment is the evolution of paratransit from a somewhat independent mode to that of an element in a comprehensive transportation plan. As has been pointed out, one of the most visible accomplishments is the extent to which paratransit has enabled the transit industry to step in quite vigorously and provide service for the elderly and handicapped in a way it could not do if paratransit weren't available.

HEMPHILL: I would like to reinforce Birnie's point that a market now exists for paratransit. The idea that Americans are wedded to their automobiles and always drive them individually everywhere is being increasingly disproved. You only have to look at the success of the Reston (Virginia) Commuter Bus, the 3M van-pooling program, or the Knoxville efforts for proof of that statement. The second interesting accomplishment is that people other than transit operators are proving that they can run successful ride-sharing paratransit programs. Programs run by Hallmark Cards in Kansas City, the Aerospace Corporation in Los Angeles, and Government Employees Insurance Company in Chevy Chase, Maryland, have proved to be fairly successful once they got over the

corporate stumbling block of getting involved in such operations. Finally, perhaps one of the most heartening things, from the viewpoint of public officials who have to deal with the whole task of getting public resources committed to these programs, is that at least commuter paratransit services are proving to be self-sufficient and in need of virtually no subsidy in terms of either capital or operating expenses.

ROOS: We now go into the second area with a number of brief reports. The first is by John Jamieson on the American Public Transit Association (APTA) view of paratransit and the potential for public and private cooperation

JAMIESON: You may recall Stokes' speech (3) at the Williamsburg conference, in which he stated forcefully that he was going to stir the transit industry up and get it quite active in the field of paratransit. He immediately followed that up with the establishment of a task force on paratransit that was asked by APTA's board to prepare a report. This report was recently circulated both within APTA and to Roos's committee, as well as to others who have shown interest in reviewing it. Our board has recently taken favorable action on this report. Although the position taken in this report is not a definitive one, at least it gives us a starting point, both within the transit industry and in working with the many other facets of paratransit.

Our basic feeling is that there isn't any single solution; we need rail transit in certain areas, bus transportation in others, and certainly paratransit in many areas. This should not turn into a competition, but into a family of services that includes the many forms of paratransit. Why do we need this combination? We need it because we are faced with increasing concerns over urban sprawl. You cannot chase urban sprawl with a bus or rail system as it moves outward. It is too costly. Additional services are needed, the services that can be provided by paratransit. An interesting long-range concern we have is the matter of petroleum consumption. Given the urban form we have today, a household in the center of a city consumes one-half to one-third as much petroleum as a household in the outlying suburbs. A significant amount of mobility hinges on the consumption of petroleum in the outlying areas. Our objective is to be supportive of the public's needs for improved transportation by sharing the concern that more people use each vehicle.

We believe paratransit can be incorporated into a family of transit services in a way that will encourage cluster development in outlying areas. Paratransit services designed to focus on major centers of activity will cover many nonwork trips as well as promote further clustering of development by providing a variety of services. Paratransit can fulfill transportation needs that larger vehicles normally cannot handle efficiently in lowdensity areas. Such a system would also extend the reach of line-haul services (either bus or rail) in a cost-effective way. The effectiveness of the total transportation system may be increased by integrating various paratransit service concepts both within paratransit and with conventional transit. Paratransit services such as dial-a-ride or subscription bus service can support conventional transit by feeding line-haul operations. Different forms of paratransit can also be coordinated by using the same fleet to provide various services to meet changing travel demands throughout the day. This coordination will provide a broader range of transit and paratransit service and offers a more attractive alternative to automobile use. For example, if paratransit can serve part of the traveler's needs, that person may use transit rather than his car for the balance of those needs; patronage of

transit and paratransit can therefore be mutually reinforcing. This capability for providing flexible service that enhances the existing transportation system is an appropriate component of an area's transportation systems management plan. This is something you'll hear more about in the next few months.

However, the responsibilities for coordination of transit and paratransit must be carefully defined to ensure equitable treatment for all organizations with an interest in the provision of transportation services. The basic purpose must always be to ensure that appropriate services are designed and implemented to meet demand, that those services are operated by the service provider who can do so in the most effective and efficient manner, and that direct conflicts among service types be minimized. We think the transit agency can be of considerable assistance in a number of fields-planning, the coordination of services, and assisting in securing finances, particularly in dealing with the federal government. The operation of paratransit services should be shared among the appropriate providers of transportation services. Paratransit includes many different types of services, each of which has its own characteristics that, along with local conditions, must dictate who will have the operating responsibility for each service to be provided. The diversity of operating agencies that can exist highlights the need for a single agency to act as coordinator. We believe the transit agency should be assigned this role. The coordinating agency must impartially determine who should have operating responsibility, using the strengths of each potential service provider to its best advantage. If some other agency is to provide service, it may be engaged to do so on a contract basis. In other cases, service might best be provided by the local taxicab company. Definite benefits may be realized by using the inherent advantage of taxis in certain service aspects, e.g., dispatching capability and type of equipment.

There are six points that sum up APTA's position at this time.

1. Paratransit is an important part of the family of transportation services; its various forms, if properly designed and implemented, can assist in meeting our total mobility needs. Paratransit services must be planned in the context of the total transportation system, not be mistakenly identified as substitutes for other established and developing transit modes but rather considered as complementary and supplementary services.

2. Planning for paratransit, like all transportation planning, must conscientiously strive for efficiency and effectiveness and make the implementation of paratransit services an appropriate response to special mobility

requirements caused by urban sprawl.

3. Paratransit must also help to promote efficient land use, clustering of activities, and reduced dependence on the automobile. Various forms of paratransit appear appropriate for group transportation in contiguous portions of urbanized areas and free-standing communities at the urban fringe and in certain rural areas.

4. In more densely populated areas, paratransit should be implemented only in ways that would complement the existing transportation system, such as feeders to line-haul corridors, specialized services for the hand-

icapped, and line-haul supplements.

5. Since the integration of all transit services is absolutely essential, a single agency should be responsible for planning, coordinating, and establishing market strategy. In urban areas the logical choice is the transit agency. Depending on local conditions and the type of paratransit being implemented, the operation of the service may be performed by either the transit agency or other providers in a contractual or franchise relation-

ship with the agency.

6. Paratransit performance to date provides no clear picture of the extent to which these concepts will serve various mobility needs or of their impact on urban development. Additional research and further demonstrations are needed to provide more sophisticated data bases, marketing strategies must be developed, and the relaxation of regulatory constraints must be carefully considered. UMTA, together with APTA and its operator members, should share in a definitive program of such activities.

ROOS: Richard Gallagher will speak on the role of the ITA in paratransit.

GALLAGHER: ITA has established a firm position on paratransit, which we stated at the Williamsburg TRB conference (4). I attended a conference sponsored by Northwestern University on planning for 2000 for the Chicago area. I found the academics were quite conservative in their approach to the question of nationalization of transportation services; they decided the railroads were going to be nationalized by 2000. If I were to follow the kind of thinking advocated by some of the speakers here, I would assume the taxicabs are going to be nationalized by 1977. This disturbs us. We have remained in the private sector many years; the association and its parent organization have been around for 56 years. We have publications in our office that show we had shared riding in 1922. We have an ongoing system that generates 3.4 billion passengers a year and revenues of \$3.9 billion. We operate in 3631 communities, some of which are supposed to be transportation disadvantaged. We have 262 000 vehicles and we pay our way—this year we will pay \$25 million in federal gasoline taxes. When the Highway Trust Fund was originally authorized we pointed out that 85 percent of our travel was over local streets. Now we will not only be in competition with various modes of transportation that are taking important segments of our ridership away, but we will also be subsidizing those modes through our taxes.

We have worked with UMTA on a number of projects, including an analysis of taxicab operating statistics published in 1975, an instruction manual for uniform reporting of taxicab statistics, a program for processing and analyzing taxicab statistics, and a compendium of provisions for model ordinances for regulating public paratransit. We feel that this has been part of our contribution to the base of knowledge that is necessary to develop paratransit to its fullest potential.

I also would like to address the issue of local participation in transit and paratransit operations. A superagency is not the answer to this problem; it would create an overhead burden that would become intolerable. A number of years ago we saw a tremendous move for the consolidation of a great number of private companies in the private sector. The result was an overhead burden that destroyed a lot of small successful companies.

One of the other areas that concerns me is all the rhetoric about section 13c. At times I get the feeling that a number of people in transit think we're out to destroy unions. Section 13c does not worsen the condition of labor with respect to their employment. In fact I do not see this as a bargaining instrument; it is simply a device to protect the employees, whether they are union or nonunion, whether they drive taxicabs or are in transit. I believe it gives adequate protection and should not be misinterpreted or extended into other areas or used as a device to solicit different forms of transportation or create a superagency to perform all the functions. We've heard criticism that the metropolitan planning organizations and the state transportation agencies are inadequate to do the job. But somewhere there must be

an existing organization that can adequately administer a program of transportation for the various municipalities. If we wanted to create a superagency to coordinate all activities—including planning, financing, and marketing for both line-haul transit services (circulation, feeder, and charter service) and paratransit services (dial-a-ride, shared-ride taxi, car pool, van pool, and subscription bus)—it would be faced with a tremendous task, not only in regard to the state legislature but also in regard to the transit authorities of the cities, counties, and municipalities.

I think we in the taxi industry have the know-how and the opportunity to generate additional traffic for both paratransit and transit service. We're in the private sector and we are still paying our way. The major cities in the United States that have large taxicab operations can survive. We are looking to the federal government for the development of a paratransit vehicle. We have been unable in 20 years to persuade a manufacturer to design a vehicle especially to meet these needs. I think there are tremendous opportunities for cooperation between transit and paratransit operations, but I don't believe that one group should dominate the other; I don't believe there is sufficient funding in any federal or state program to administer such an operation. It is well known that transit has very serious financial difficulties. I cannot see how this additional burden would assist them in providing better service to the public, which is what the whole question is really about. I think it is simply time for the taxicab industry to sit down and analyze where it goes from here.

QUESTION: Is the approval of the transit agency necessary for starting a car-pool or van-pool program?

JAMIESON: Each urban area in the United States has an entirely different situation. What I was suggesting was that a transit agency can focus the advocacy of transit in each area. Exactly how it is done will differ according to what mandate is received from the state legislature, the council of governments, or the municipalities. Whether it is a contractual matter or the transit agency simply receives federal funds (either planning or demonstration funds) and assists the operator or interested party, it serves to help out those who want to implement a form of paratransit. For example, if a Red Cross agency wishes to coordinate volunteer services, they may need some federal funding. If the transit agency is making funding applications day after day, it could be the agency the Red Cross would go to for help. We are suggesting that the transit agency, because it is in day-to-day contact with other governmental services, could be the focal point for anybody in the paratransit area to go to for assistance.

QUESTION: What has to be done to deregulate the taxi industry so that they can provide a jitney service?

GALLAGHER: You have to get the support of public transit, which initially backed the establishment of antijitney laws. I think the decision is mainly theirs and not ours.

JAMIESON: Since there are many municipalities in an urban area doing the regulating, it is necessary first to standardize the type of regulation. In that process you can work out where it is appropriate for the shared-ride concept to complement larger vehicle transit. It is as simple as that; I think it can be done. The first step would be to try to bring together in one urban area a standard or model form of regulation.

QUESTION: I am not sure whether your position paper states that all paratransit services must be coordinated or funneled through a transit agency.

JAMIESON: There are varied opinions within the industry. We're going to have considerable difficulty encouraging certain bus operations to be cooperative with different forms of paratransit. We hope to persuade them that the transit agency can serve as a model, an advocate, and that whatever they can do to assist paratransit they should do.

ROOS: One of the issues that came up at the TRB conference in Williamsburg and again here is whether any advocate should be the one to decide in what direction we should be going or whether we should be setting up some neutral organization.

JAMIESON: When you start to look for a neutral organization that is not a superagency, you go through the categories of a state department of transportation and metropolitan planning organization (MPO) and work your way down. If you want to minimize government you make the most effective use of what you have and combine it so that a single agency can represent an efficient organizational concept.

QUESTION: Are you saying that paratransit should be provided through APTA and the transit industry rather than a governmental organization?

JAMIESON: I don't think APTA needs to get into all facets of this. I think there is a very effective taxi industry and we have often seen that taxis and public transportation can complement one another and go after the 90 percent market that both of us are interested in. We want to promote public transportation in place of the individual automobile.

QUESTION: But are you saying that you do not want to have your transit members compete with the taxicab companies for a given sector of paratransit services?

JAMIESON: No, I don't think we want to say that. You have to look at the type of work that has to be done and, if it can more appropriately be done by the taxi industry, so be it.

QUESTION: Will the ITA take a position opposing jitney services?

GALLAGHER: I would say that we would take a position not opposing it. Several of our operators have already proposed jitney services; there is one jitney service that has been operating since 1930 in Jacksonville, Florida. A broad look is being taken at it throughout the country, but it won't be easy because of the existing ordinances in so many communities.

QUESTION: What is the role of the MPO, particularly with respect to the dissemination of information about the type of transit that is available in metropolitan areas?

JAMIESON: The MPO consists primarily of local elected officials making decisions for their metropolitan area. If we can get the information to the MPOs, whether it is from the private or the public sector, that could be an excellent way to make the information available because it goes right back through municipal and county structures. It would be very helpful to use the MPO in this way.

GALLAGHER: We are becoming involved with and we have some representation on MPOs at the present time. The question is what role UMTA will play in determining which agency is going to handle this funding. I think it is a decision that has to be made, and made firmly, by

UMTA. UMTA has more control of this situation, through the allocation of dollars, than we have. We believe that there should be an organization that is responsive to the public and to the communities they represent and that it should be a planning organization. Our major objection is only that the organization that is going to do the planning and funding should not also be the operating agency and the one to determine who is going to supply services at the lower levels and what kind of competition in bidding there will be. I strongly believe that UMTA has to clarify its regulations and take a firm position; the idea of simply passing out dollars as soon as a local area says we can do this or that with them, without giving them a clear-cut opportunity to decide exactly how they can be best invested, is a tremendous mistake.

ROOS: This seems to be an appropriate point to shift into the next set of presentations, which concern the role of the federal government.

BIRNIE: I would like to speak about the role of UMTA and how we think we might effect the delivery of paratransit services. We don't dictate how services are to be provided, nor do we provide services. So basically our role has to be catalytic or assisted. UMTA's interest in paratransit stems from an interest in the opportunity for urban areas to decide how they can best formulate their transit and paratransit systems, with paratransit providing an opportunity to improve mass transportation in that area. We can support paratransit services when they are selected by a community with both capital and operating assistance.

I'd like to touch on some of the other roles we play both for paratransit and for all transportation services, although they have some special significance for paratransit services. I think I should also emphasize at this point that UMTA is not the agency for any one mode. We favor neither coordinated line-haul nor paratransit services; we believe these services should be available as options for communities in producing their own transportation systems. UMTA plays the role of facilitator of innovation at both the local and state levels of government, which don't always have the ability or the resources to examine and implement innovative services. Through the UMTA research and demonstration programs we can examine and explore various aspects of paratransit services, including some of the difficult institutional issues that are before us. We can explore vehicle technology, vehicles, computers, and dispatching equipment; we are also examining the delivery of services, especially the integration of these services. While the technology for paratransit is not particularly new, the integration of these services has given a new dimension to mass transit systems. We help to implement the systems by providing information for the research programs. When we become convinced that there are opportunities to implement services around the country we can, through our demonstration programs, provide 80/20 matching funds to help implement these services in communities.

There is another, quite different way that we can help innovate in paratransit. Since paratransit is not all that new technologically, there is a great opportunity to innovate on the local level. The federal government doesn't have the corner on innovation. The presence of section 5 funds, which are allocated to urban areas, gives them an opportunity to innovate with paratransit services. These services are very flexible and people at the local level are probably in the best position to tailor these services to the individual market, devise new ways to apply these services, and put them together productively. They are also in a good position to deal with the idiosyncrasies of local institutional arrangements. If urban

areas can overcome some of these barriers and innovate, the UMTA funds are there to support them. UMTA will continue to provide a center for the exchange of information, especially among the academic community and various providers of transit service. We hope to continue to fund conferences like the one at Williamsburg and to cooperate with TRB on the exchange of information, which is especially vital in the case of paratransit services.

There are smaller roles in which UMTA has a bearing on paratransit services. We are concerned that there be equity in the distribution of services within the urban area. We have always reviewed applications for federal funding to make sure that services are available to the elderly and handicapped and to minority people; paratransit certainly offers an opportunity to serve both of these groups better than we have in the past. UMTA has recently begun to focus on the distribution of services in the urban area. Our new proposed policy on major urban mass transportation investments specifically mentions that in developing their plans urban areas should give explicit attention to community development and local circulation systems; this will be an inducement to the implementation of paratransit services, as will the new transportation system management (TSM) requirement, which specifies that all communities give serious consideration to the delivery of paratransit services. Communities that have regulations that may be an obstacle to the delivery of these services will surely be asked by UMTA to reexamine those regulations. Since the new TSM requirement asks communities to examine their entire transportation systems to see how they can make more effective use of these systems, paratransit must be considered in this reexamination.

Another important aspect of the federal posture is the requirement to develop coordinated systems, which is especially important in terms of paratransit. If we're seeking a multidimensional system that is innovative and reacts sucessfully, the way we develop paratransit services is very important to the success of these services. We must provide a forum where the various providers and the special interests in the communities can come together for a more comprehensive look at the delivery of these services. I believe there could be adverse impacts from merely deregulating the taxi industry and opening up the service completely, without any thought for coordination. On the other hand, I think UMTA's posture toward private operators is another partial inducement to providing service. UMTA has said that private operators must be given an opportunity to compete for the delivery of all paratransit services, whether they are managed or coordinated by the transit operator or by the MPO.

HEMPHILL: To discuss the role of the federal government you have to figure out what the federal government has as its objective for the whole metropolitan transportation issue. Secretary of Transportation Coleman summed it up reasonably well in his national policy statement: "An efficient metropolitan transportation system requires a mix of modes-public and private, properly coordinated and utilizing the relative advantages of each." He went on to say that one of the most important ways to do this is to promote equal competitive opportunity for all forms of transportation. With that as the objective, you have to look at the tools available to the federal government. First, there is funding; second, there is regulation or deregulation using a law or other requirement; and third, there is the development and dissemination of information, which may be less powerful than the other two tools.

In terms of funding, it is clearly recognized that the federal government has a substantial influence on the development of urban transportation systems, not only through those agencies represented here but also through the Federal Highway Administration (FHWA). I think it is also reasonably clear that there has been an increase in the amount of public funds granted to mass or public transit opportunities in the last 5 to 6 years. I expect this to continue, correcting what many people see as an imbalance between the resources that went to building highways and those that went directly for public transportation systems. It is hoped that these funding patterns will promote something approaching equal competitive opportunity for all modes.

On the question of regulation and deregulation the federal government, at least the Ford administration, is strongly interested in removing economic regulatory barriers. The question is how to do this, because most regulatory barriers to equal competitive opportunity for metropolitan systems tend to be either state or local regulatory barriers. The third tool, the use of information, can help overcome some of these barriers, and others can be overcome with another regulation. I think that, to some extent, is what may be intended by the TSM requirements. A TSM design whose objective is efficient transportation at the local level may make it increasingly clear that changes are needed in some of the local regulatory barriers. The regulations can also be influenced through the federal funding. One part of the guidelines for state energy conservation plans that will be published soon includes a provision for mandatory right turn on red that we think will permit substantial saving of energy.

Finally, in terms of providing information, it is still appropriate for the federal government to educate private providers about the potential of various paratransit alternatives. The Federal Energy Administration is concentrating a large portion of its resources both on the providers and on the state and local decision makers so that they can incorporate some paratransit alternatives in their state energy conservation plans and in their TSM plans. The competitive marketplace works to the advantage of the providers and the users of a metropolitan transit system, perhaps not as well as a thoroughly coordinated system but certainly better than one vast overall agency coordinating everything.

ROOS: Let me give one who represents a metropolitan area a chance to respond.

AEX: It seems to me that we've overlooked the fact that the federal regulations say that each metropolitan area must develop a comprehensive transportation system plan and that the plan must use all of the existing public and private opportunities. I don't think there is any question that sooner or later, just as there was an absolute prohibition against competition with private bus operators, there will be a requirement that those who receive federal money must not and cannot compete with existing private operators; it is inevitable. I am not privy to the inside meetings of such organizations as the International Taxicab Association, but I am sure they are aware of what the National Association of Motor Bus Owners accomplished when they backed legislation that prohibits the receiver of federal money from competing with the bus operator. Most of us don't object to that particularly, especially now that we have had the benefit of some ex-

I hope Jamieson's observation—that one of the deficiencies in the MPO at the present time is that the private operators aren't participating—will be acted on by such private providers as the taxicab people. At a meeting of an MPO there will be the representatives of the federal government, the state, and all of the local elected agencies, but as for the providers, there are only public transit operators, not the private taxicab operator or any of the other private operators of paratransit. I believe they must be brought into the MPO. Then I think we'll get some results.

One of the most important roles for paratransit in metropolitan areas is to assist traditional transit with the problem of balancing the peak and off-peak service to improve the use of resources-manpower and equipment. This imbalance between peak and off-peak periods is the thing that has almost wrecked the transit industry, and will eventually wreck it if we don't find some solution. I think transit will therefore look more favorably on paratransit as time goes by, because paratransit can alleviate some of the problems of the traditional transit industry. Paratransit can also enable traditional transit to go into low-density areas and make transportation available where it is needed. In this country 50 percent of the people live outside of the central city, with little or no public transportation provided, even by the private sector. People often ask me why the taxicabs in Rochester don't object to what we're doing; it's because there aren't any taxis in Rochester doing what we're doing. One of the principal roles of paratransit is to get public transportation out where people need it in the low-density rural and suburban areas.

Feeder service is very important, whether it is a taxicab feeding a line-haul bus or a demand-responsive bus feeding a line-haul bus. The only way people can use a line-haul bus going down a main highway is to have somebody feeding it and this is an important role for paratransit, as is its role in serving the handicapped and elderly, in particular the handicapped. If every fixed-route bus in this country were retrofitted, we still wouldn't be able to serve the handicapped unless the bus could go to the handicapped person. Paratransit can also increase the geographical limits of the labor market, either in the central city or outside, for both the employer and employee.

I think paratransit will be the avenue through which a lot of automation is brought into transit. Transit hasn't had the opportunity to use automation the way most other businesses have. I think the opportunity will present itself more and more through paratransit. I was surprised to learn that taxicabs had been using computers for years—many years before we started thinking of using that tool in the transit industry. To sum it all up, I think the role of paratransit is to aid in the development of an effective alternative to the automobile, particularly on the home-to-work trips.

QUESTION: What are the options or alternatives that are available to private operators right now to enable them to get into paratransit?

BIRNIE: Although we don't protect exclusive-ride taxi service, we have taken a stance to allow providers to come in to new services; if a new service is being developed and it is a paratransit service, you would have an opportunity to show your resources and compete for that service.

QUESTION: Is the transportation authority the final judge on paratransit services?

BIRNIE: UMTA has to determine whether private operators have been included in the program to the maximum extent feasible, so we're the final judge on that.

QUESTION: I am from Arkansas and have been in the shared-ride business for about 30 years; we transport more than 3000 people a day and could transport 6000 a day. We are waiting patiently for the federal government

to make up its mind, but soon we will be incapable of providing paratransit service because we will be broke. Any social organization in town can get funds under section 16b2 and we have no say. Are we going to survive or do we have to sue our own government to protect ourselves?

BIRNIE: I can assure you that we don't want you to sue. That section has been amended so that, before any grant can be made under section 16b2, private operators have to have an opportunity to state that they are willing to provide that service.

QUESTION: What do you do in low-density areas where mass transportation cannot do the job?

BIRNIE: Of course UMTA cannot tell a community what kinds of services to provide. However, we have asked, in the development of plans for low-density areas, that adequate consideration be given to paratransit and we are going to review plans for that. We can't mandate paratransit services but, once paratransit services are selected in urban areas, we say that any existing private operators must have the opportunity to compete for those services. I don't think we can be stronger than that.

QUESTION: I am from Jackson, Mississippi, where the city fathers run the transportation system. They went into the minibus business in 1974. They did not give me the opportunity to do the work although I have adequate vehicles and equipment—everything to do the job without putting additional money into it. I have made proposals to run it for less than half of what they are running it for but they turn a deaf ear. How do you resolve that problem?

BIRNIE: I am aware of your case. I know that our Capital Assistance Office, which will be making that grant, is taking your protest very seriously; in fact I think someone was down there about a week ago.

QUESTION: How can you reconcile the fact that UMTA says that a transit authority should use existing operators to the fullest extent possible before going into business itself, but the Department of Labor won't approve a section 13c agreement unless it includes protection procedures for labor unions, requiring in effect the operation of a closed shop? I see a conflict in policy here.

BIRNIE: I can't speak for the Department of Labor, but I think that whether there will be a demand for a closed shop remains to be tested. We have some cases in which section 13c agreements have been negotiated where that isn't the case. We ought not to be too apprehensive about that. I think we will have to go forward in good faith and see what the products of these negotiations are.

QUESTION: If I am seeking a grant, should I go to the regional office or directly to Washington?

BIRNIE: I think it depends on the matter you are discussing. We handle a number of requests on policy issues, but if you are talking about getting a grant, you should go to the regional office; they know the particulars of your case and can work with you all the way.

QUESTION: What office in UMTA should we communicate with if we do not receive responses to our needs in the region?

BIRNIE: The Office of Policy and Program Development.

COMMENT: I would like to criticize the fact that, in all these meetings, we never bring in the people who have been in the paratransit business-the social service agencies. There are probably more transportation programs and operating assistance funded by the Department of Health, Education, and Welfare than by UMTA. The point I am trying to make is that people keep talking about "urban" and "metropolitan," but 48 percent of the people live in rural areas and have more critical transportation problems than those in urban areas. For them, it is not a matter of making transportation more convenient; it's a matter of providing basic transportation to receive health services and so on. In a lot of areas, where there wasn't even a cab service, these people had to be taken care of by the agency providing the social services. It is only in the last 12 months that UMTA finally woke up to the fact that half the people live in rural areas; I am very critical because I don't think rural needs are being addressed.

ROOS: The next question we pose to the panelists is: What are the three most important short-term objectives with respect to paratransit and how do we achieve them?

JAMIESON: First, in each urban area we should establish effective coordination in the family of transit services, including the many facets of paratransit. There isn't any standard way to do this—each is unique—but in APTAwe are ready to cooperate and to do what we can to bring about a total transportation system tailored to the particular area.

Second, we must demonstrate the mutually supportive roles that paratransit and transit can play. I think we've seen Karl Guenther and Bob Aex do these things very effectively in Ann Arbor and in Rochester. But there is much more that can be added to the work they have already started. In areas where there is a high potential for paratransit, if transit is cooperative and plays a supportive role, it can build up the paratransit opportunities.

Third, we must resolve the remaining critical issues we have—insurance issues, clarifying the role of the federal government in the funding of transit and paratransit, and improving the flow of funding to the service providers.

GALLAGHER: I'm not an advocate of administrative law, but I think that the Department of Transportation, and UMTA in particular, must come out with some very sound laws to protect existing institutions that are providing transportation. I feel that one of the greatest needs is coordination of transit services, whether they are in the private or public sector. The taxicab industry believes that car pooling can be a very important operation during peak hours. It can transport people to downtown areas in the central business district and allow them the opportunity to use taxicab or transit in off-peak hours, which is when we want to gain ridership. We have tremendous diversity within the taxicab industry. There is no reason we can't provide feeder service to transit and other services, particularly in the area of package delivery. We have been operating services for the elderly and handicapped for a number of years, mostly with local funding. We often forget that all the California dial-a-ride programs are either state or locally funded. I see no federal money coming into this. If this process continues, it will again be the responsibility of the local government to determine what type of paratransit operations they are going to install in the local area. I see no substantial movement by UMTA to institute these programs except on a demonstration basis.

I agree that the rural programs are very important. West Virginia has a demonstration grant and program that is going to spend approximately \$21 million in trying to establish services for the rural areas. UMTA is sponsoring a number of seminars throughout the country on rural transportation. I think taxicabs are going to play an important part in developing services in these areas because they can provide it at low cost. They can maintain and service the equipment. I believe this is one of the important markets that is opening up for the taxicab industry; it offers new ridership that does not exist at this time.

There is no simple answer to the problem of regulations. I think we have to have a clearer concept of what the regulations should be. There has to be a philosophy developed about the purpose of transportation in the urban and the rural areas. I thought it was very simple—that we're trying to serve the riding public out there. But it gets so complicated with the existing regulations that it becomes almost impossible to continue a high level of service without conflicts.

I also believe strongly that there should be more basic research, especially on ridership characteristics. Gilbert did a study in North Carolina that impressed us because we found that in the lower income brackets we had approximately twice the ridership we had originally estimated. Some time ago Chicago spent more than \$1 million on a ridership study by Carroll that was the basis of all planning for the city of Chicago for about 20 years. It seems to me this is one of the areas in which UMTA can provide a very vital service, particularly to the private sector. Perhaps the transit people know the market better than we do; maybe they have conducted more intensive efforts in that area. But this is not a small project. I think it's one that should be developed on the basis of university participation, probably a consortium of universities.

HEMPHILL: I can set out what I see as the next three objectives for paratransit very briefly. First, I think we have to spread the word that it works; more people need to get that message. Second, we have to identify and examine those regulations at both the state and local levels that prohibit or inhibit active car-pooling and van-pooling programs; than we have to eliminate them. Finally, we have to establish reasonable insurance rates for car-pooling and van-pooling situations.

AEX: One of the most important short-term objectives is the recognition of existing privately owned paratransit services. A second objective is the removal of regulations that prevent those privately owned paratransit services from functioning on a shared-ride basis. Third, we must examine the role of labor. Sooner or later someone has got to present a test case for section 13c. Does it in fact prevent an agency that is receiving UMTA money from contracting with a union or nonunion paratransit provider if the paratransit service does not eliminate any union jobs?

BIRNIE: I think the most important short-term objective is to develop an atmosphere in which the providers of paratransit service, public transportation, and even commuter services can come together and cooperate. UMTA has hoped that the MPO will serve as a forum for all these service providers. I think a transit operator should think of his company not just as a provider of service but as an agency that can coordinate services and ensure that people know the services are available. Taxi operators need to broaden their thinking. There is a great opportunity in shared-ride service, and the taxi industry appears to be moving in that direction. At present taxi operators are worried about competition, especially to their exclusive-ride service, which is the heart

of their business, but they should also look forward to other opportunities. Transit labor ought to see that it is in its long-term interest that a number of these services be provided on a volunteer basis or by private operators; with the financial pressures on the transit industry today, many of these services must be provided at lower costs if they are to be significant for mass transportation. I think we need to test the interaction among these services in an integrated system and study how things affect one another so that we can put them together successfully to mutually benefit one another.

QUESTION: I think the exclusive-ride providers are not fearful of competition in any sense when it comes from shared-ride modes. I think what we are most concerned about are the inhibitory local regulations. UMTA should be interested in exerting its influence, but in local communities that have such regulations, I think you are going to have to do more than use some kind words.

BIRNIE: TSM element is the key here. We're not telling communities at this point that they have to do anything to change their local regulations. If we are considering paratransit services and local regulations are inhibiting the efficient provision of the services, we'll certainly be asking a lot of questions.

QUESTION: What is being done about the rising cost of insurance, particularly for car-pooling and van-pooling programs, and what is the role of the federal government in regard to insurance?

HEMPHILL: In terms of local regulations, our first problem is that we don't know exactly which states have regulations that will turn out to inhibit various forms of ride sharing. UMTA is funding a study by MIT, but that will only cover a few states. We will evaluate the state regulations that would inhibit ride-sharing activities, but that doesn't cover the metropolitan areas. We don't have the funds or resources to do a survey of every regulatory constraint in the country. In terms of insurance, the problem seems to be that the insurance companies are conservative organizations. They don't feel they have enough data or experience with ride-sharing arrangements, particularly van pooling, to do much about the rates; therefore they have set them high so that all their risks are covered. I think we'll probably have to end up sponsoring a couple of serious meetings with top insurance executives and ask them to give us a fair break. It is difficult at this point because there really isn't much operating experience yet.

QUESTION: Why are you creating, in the MPOs, another obstacle that we have to go through before providing services?

BIRNIE: We think the MPOs are serving a valuable function. They are there to coordinate all the services of the area and to develop those services. They should be impartial organizations and we think that is to your advantage.

QUESTION: How about the use of paratransit for supplementing peak-hour operations? These can be the most expensive operations because of the peak/off-peak imbalance.

JAMIESON: We need to shave the peak or fill in the base; our problem is that we have too many vehicles operating in the peak and sitting idle in the base period. We think paratransit can aid in both areas. Filling in the base is perhaps more difficult, but a shared-ride taxi can help

by working in lower density areas and bringing people in to fill up that base period. This will take a lot of cooperation and more demonstration of techniques, but I think we can work something out between transit and paratransit.

AEX: The way paratransit can assist traditional transit during peak hours is not by taking people out of the buses but by taking them out of the automobile. The way paratransit can assist traditional transit during the off-peak hours is by feeding people to buses that have low ridership, especially in the low-density suburban areas.

ROOS: The final segment of the program will permit each participant to make a closing statement.

AEX: Improved mobility must be the primary goal of transit, and this can only be accomplished if every form of transit is used in a comprehensive way to get people from where they are to where they want to go. The system must use traditional transit and paratransit, which must include the automobile on a shared-ride basis, the taxi on a shared-ride basis, the van with 10 to 12 passengers per vehicle, the jitney, the dial-a-ride vehicle, and all the other forms of transit that provide an alternative to the vehicle occupied only by the driver. The diversity of needs demands a mix of transit modes to effectively meet these needs. Paratransit has already demonstrated that it can enable a transit system to better meet those user needs. Improved mobility at the same time reduces pollution, reduces congestion, and reduces energy consumption. Improved mobility must be our primary goal for all those reasons.

BIRNIE: We in UMTA think that paratransit is more than a promise; it is an emerging reality and we know there is a demand for these services now. Future systems will be multimodal and will be more market oriented. We believe that paratransit services should be carefully and perhaps incrementally implemented; we believe that all parties, providers, decision makers, and the general public have a stake in ensuring that these systems are successfully implemented. If mass transportation is to be successful, we are going to need a full spectrum of public services the public can rely on, both so that those who are transit dependent have full service and so that we can attract more people away from the automobile. We should think in terms of going after the larger share rather than talking about a small piece of the pie and how we are going to serve that.

GALLAGHER: I am in agreement with the statements that have been made in summary here. There cannot be two sets of rules, one for government-owned operations and another for private-enterprise companies. It is hard to imagine putting publicly owned transit systems back in the private sector; neither do the taxicab companies care to become government owned and operated. It seems reasonable that the government agencies involved should seek the most cost-effective method of providing urban public passenger transportation. The taxicab industry believes that, in certain modes of operation, its productivity and cost performance are superior. Therefore, in order to seek an equitable arrangement in public passenger transportation, the industry has advocated that (a) the rider be subsidized, (b) contractual arrangements be entered into for public passenger transportation with the private companies that are the most cost-efficient, and (c) direct subsidies be provided for capital improvements and operating expenses to private companies that are currently providing services at costs below the replacement and operating costs of the new system. The ITA

strongly favors the first recommendation and hopes that the additional recommendations will not need to be implemented.

JAMIESON: I think APTA has taken a first step to build a bridge between the transit industry and the paratransit industry. It has encouraged its members to cooperate in this subject and to get the various operators in urban areas to become more involved in paratransit services. I think the transit industry is in a position to provide cooperation in building up the market and serving the public in the spreading urban areas.

ROOS: I must say I'm very encouraged by the closing statements. Although there were tremendous differences in the opinions expressed here on a variety of subjects, the participants seem to be very close together in terms of some general objectives that we are aiming for. It's important that we try to achieve those objectives in a cooperative fashion rather than look for areas of conflict and that we take whatever opportunities there are in areas where little or no conflict occurs.

REFERENCES

- R. F. Kirby, K. U. Bhatt, M. A. Kemp, R. G. Mc-Gillivray, and M. Wohl. Paratransit: Neglected Options for Urban Mobility. Urban Institute, Washington, D.C., UI 171-4800-8-4, 1975.
- D. Roos. Institutional Changes Needed to Foster the Development of Paratransit. TRB, Special Rept. 164, 1976, pp. 105-113.
- 3. B. R. Stokes. Paratransit: Some Preliminary Observations From the Transit Industry. TRB, Special Rept. 164, 1976, pp. 27-30.
- R. V. Gallagher. Taxis in Multimode Paratransit Operations. TRB, Special Rept. 164, 1976, pp. 31-34.