Human Service Transportation at the Crossroads

FRANK W. DAVIS, JR., LAWRENCE F. CUNNINGHAM, DAVID A. BURKHALTER II, AND STEVE LE MAY

Human service transportation is evolving to meet growing social needs. Unfortunately, the legal situation is somewhat confusing because human service transportation, for-hire common carriage public transportation, private transportation, school bus transportation, and volunteers all have different origins under the law. Changing government programs have a tendency to change the legal test that differentiates the liability of each of these legal forms. This paper describes some of the trends that are occurring and the way they affect liability, insurance, and other issues.

Human service transportation needs have evolved from the needs of the young, aged, and poor for access to basic human services such as nutrition, education, and medical care. Both nonprofit and government agencies have instituted transportation programs to meet these needs. Unfortunately, the innovativeness of these responses has generated problems for authorities who regulate transportation, policymakers who administer transportation problems, and insurance firms who insure the vehicles.

This paper addresses several different questions that are important in organizing human service transportation programs:

1. Why are traditional regulatory concepts inadequate to facilitate the growth of specialized transportation?
2. How have these traditional concepts limited the legal and philosophical definitions of transportation options?
3. What have been the legal liabilities imposed on forms of transportation development under the concept?
4. What has been the impact of these legal forms on legal liability and insurance rates?
5. What has been the impact of government actions in shifting legal liabilities of human service transportation programs? and
6. What regulatory and legal issues must be resolved to foster the development of human service transportation programs?

TRADITIONAL REGULATORY CONCEPTS

Transportation has been an instrument of public policy throughout the history of our nation. Public policy has sought to fund, promote, and regulate the transportation industry to meet a wide range of public needs, including economic development, national defense, nondiscriminatory services, and safety (1).

The primary tool for control, the public utility concept, was developed during the late 19th century. This concept was originally used to regulate railroads but was later extended to electrical, telephone, water, and sewer service. With this concept, companies were awarded an exclusive franchise for a geographical area. In return, they agreed to charge reasonable and nondiscriminatory rates and provide a reasonable level of service (2). The exclusive franchise allowed the businesses to raise sufficient capital to replace equipment and provide protection against competitors desiring to serve the most profitable customers.

The regulatory body that oversaw the public utility franchise could control the level of services provided to the public by requiring prior approval for changes in service level if the business wanted to retain the franchise. At the same time, the body could also generally ensure a profitable business environment for the utility (3). The regulatory body always had the alternative of inviting a competitor to operate the franchise. Consequently, the franchisee's continued operation was dependent on willingness to meet the regulator's service standards and prescribed standards for rate increase.

The public utility concept was initially used to regulate "natural monopolies," e.g., railroads and electrical utilities. However, with the passage of time and increased government involvement in business, the concept was extended to industries perceived as natural monopolies as well as those posing a threat to public utilities.

CHANGE PROCESS

One weakness of the public utility concept was an inability to react to the changing needs of its customers. The very nature of the concept precluded special services for those with special needs. The public utility was prohibited under both the concept and subsequent laws from personal and/or place discrimination (Section 3, Interstate Commerce Act). The regulatory mechanism in pursuing nondiscriminatory pricing precluded the pricing of services based strictly on their cost or competition. In keeping with this regulatory philosophy as well as to control cost, public utilities typically provided a limited range of services, all of which were suited to the largest group of average users rather than to the various needs of the marketplace. The inability to price in accordance with the cost of servicing different customers and competitive forces and the utility's preoccupation with this limited range of services were two important factors that greatly inhibited the development of specialized services by regulated carriage (4).

The public utility model, although based on logical principles, has retarded the design of specialized services to meet the needs of such nonaverage or nonstandard users as young children, the mentally afflicted traveling without escorts, and the nonambulatory rider dependent on wheelchair, crutches, walker, or other assistance devices. Other individuals with special needs, such as the blind, those that were unable to get to the public utility stations or bus stops, and those that lived in very rural areas in which the public utilities did not provide service, found that they did not fit into the mainstream planning of the public utility concept.

A second weakness of the public utility concept was its inability to utilize or compete with new technology (5). After the very rapid growth of railroads, trolleys, and subways prior to World War I, the public discovered the flexibility of the automobile. As a consequence, ridership on traditional public utilities declined rapidly. This decline began in the 1930s, and except for increases in ridership during World War II when gasoline and tires were rationed, ridership has continued to decline. Since the regulatory bodies had no funding authority, they could influence the transportation company to provide a specific level of service if the company remained profitable (the company had no incentive to stay in business without a profit). Thus, the utilities were allowed to abandon service in those areas in which they lost money, such as rural areas and suburban areas. The regulatory bodies, realizing that they could not control ser-

vice levels unless they could protect the revenues of the franchised carriers, sought to prevent the development of either specialized for-hire services for nonstandard users or the use of private transportation to meet these needs. The regulators simply extended regulation to industries that were viewed as "competitive threats," e.g., motor carriers (Motor Carrier Act of 1935).

TRADITIONAL REGULATORY CONCEPTS AND RESULTING LEGAL DEFINITION OF TRANSPORTATION

As a consequence of the conditions discussed above, the transportation of passengers has evolved from two separate and distinct legal, regulatory, and philosophical areas. These two distinctively different areas are as follows:

1. For-hire transportation: For-hire transportation includes those companies that are descendants of the original public utilities, such as the National Railroad Passenger Corporation (Amtrak), inner-city bus companies, mass transit systems, taxicabs and airport limousines, as well as other regulated carriers. The primary legal test for these carriers is that they receive compensation for their services as an inducement to provide transportation (for-hire carriage) and that they hold themselves out to serve the general public (common carrier).
2. Private transportation: Private transportation is the transportation of family, friends, and neighbors in which no money changes hands.

The limited range of nondiscriminatory service for standard users, the abandonment of nonprofitable routes, and the complete absence of for-hire transportation in many rural and suburban areas left no option for large groups who could neither use the public utility nor transport themselves in their own vehicle. Finding other options illegal, they asked the government for assistance. The first of these groups was school children, whose parents put strong pressures on the school boards to provide extensive school bus transportation. Government, concerned over limiting the use of public funds and the legal protection of the for-hire franchisee, limited the use of school bus services to the transportation of school children, and compensation for hauling school children was avoided. Next, individuals found that their churches could purchase buses and provide Sunday morning rides to church, trips to summer camp, senior citizens' excursions, trips to church conventions, as well as tours for adults. Church buses hauling church members were generally held to be exempt from public service commission or regional transportation authority regulatory practices since any compensation was considered to be a contribution or the state regulatory statutes were modified to specifically exempt church and school buses.

More recently, new funding programs and interest in the needs of the elderly, the handicapped, the young, and the poor have created public and charitable agencies that have become intensely interested in solving the needs of these groups, who have traditionally not been able to participate in the mainstream of American activities. These organizations soon realized that their humanitarian objectives could not be met unless these individuals could be transported to the various human service programs. They realized that these transportation needs could not be served by the traditional for-hire modes nor could the individuals provide private transportation for themselves, so pressure was brought on both government and charities to fund transportation for these special groups. Thus, a third category of transportation provider has developed in reaction to the limited range of services available from the for-hire transportation provider and the extensive legal restrictions placed on private transportation. This third category is defined as follows:

Human service transportation: Human service transportation is provided by a government, social service, or charitable institution for their program beneficiaries, clients, or members to the activities sponsored by the organization.

Legal Liability of Transportation

The liability of each form of transportation has evolved from very diverse legal philosophies. For-hire and private transportation developed under tort liability law, whereas human service transportation was exempt from lawsuit under the doctrine of governmental and charitable immunity. Under tort liability, for-hire transportation was virtually an insurer of the safety of the passenger with no defense from suit. Private transportation was negligent (and thus liable) only if reasonable care was not exercised. Volunteers (under special legislation) could be held liable only if they did not exercise slight care. In most cases, a volunteer could not receive any benefit from providing the transportation, not even reciprocal driving as in the case of carpooling.

Evolution of Tort Liability in the United States

Automobile liability law in the United States is based on negligence. The tort of negligence establishes a rule for imposing liability for unintentionally caused harm. Negligence establishes a standard of care to which individuals are required to adhere or be rendered liable. The standard of care is often referred to as the reasonable-man standard. The tort of negligence, however, is a recent (1825) development in the field of law (6, p. 140).

American courts have wrestled with the notion of duty. While it is generally held that a common carrier of passengers is not an insurer of the safety of its passengers, it has been said that the duty to protect its passengers stops just short of insuring the passengers against injury. In a few cases, it has been simply stated that common carriers of passengers must exercise "a high degree of care," "a very high degree of care," or "extraordinary care" for the safety of their passengers (14 American Jurisprudence 2d 916 and the cases cited therein).

It was in the evolution of duty that the courts began to establish three levels of duty. If the transportation provider was a for-hire common carrier such as a railroad, the carrier was expected to exercise the highest degree of care since the passenger had little control over the safety practices of operating the vehicle. A private carrier, on the other hand, was expected to act as an ordinary person or use ordinary care to prevent accident or injury. An individual picking up a hitchhiker, however, was only expected to use slight care, that is, to see that injury to the passenger was not caused willfully and wantonly.

As the concept of duty developed, the courts recognized and adopted the theory of negligence per se. Ordinarily the appropriate standard of care is the reasonable-man standard, but when there is a statute, the statute may prescribe the appropriate standard of care. Violation of the statute may therefore constitute negligence per se.

Evolution of Extended-Care Standard

The duty of common carriers with reference to the safety of their passengers is founded on principles of negligence. The origin of the theory of liability dates back to ancient Roman law.

The courts by virtue of several precedents have made the common law affecting common carriers clear (Mann versus Virginia Dane Transportation Company, Inc. 283 N.C. 734, 198 SE2d 558). Although a carrier is not an absolute insurer of the safety of the passengers, the carrier does owe the passengers whom it offers to transport "the highest degree of care for their safety as is consistent with the practical considerations and the conduct of its business."

The fundamental assumption that reduces the risk of the common carrier of passengers from that of being an absolute insurer of the passengers to the highest degree of care was the fact of "the passengers being capable of taking care of themselves." [Governmental immunity has been explained by Justice Holmes in Kawguankoa versus Polybank (1907, 205 U.S. 349, 353).] Recognizing this legal principle, the common carriers were reluctant to carry passengers who were limited in their ability to take care of themselves, although there is limited case law to indicate the way the courts would evaluate the carrier's obligation to these individuals. One way the common carriers limited service to special groups was to require an escort or fully capable adult to travel with the person to assume responsibility for taking care of that individual. In this way, the carrier would retain the traditional defense that the passenger or passengers and their escort were fully capable of taking care of themselves. Often the escort was given free passage to perform this duty.

An evolving area of concern to common carriers is the expanding of regulations to specify who the carrier will offer to haul. In return for federal dollars, local transportation systems are required to adhere to all applicable federal regulations or lose federal funds. Since the common carrier is held to the extreme-care standard and injury occurs because a standard is not fully followed, the carrier will have no defense and is subject to punitive damages as well. This is the concept of negligence per se. Therefore, not only is the carrier subject to an extended standard of care, but the legal duty of the carrier to the public is rapidly being expanded by new regulations.

Tort law reform has had a tendency, as shown by the state no-fault statutes, to be concerned about more certain reparations, eliminating small suits, and spreading the cost of the "inevitable" accident among all parties involved. Ironically, however, for-hire carriage has generally been expected to assume the total cost of all passenger injury. Even in no-fault states, where the individual's coverage on the family-owned vehicle makes payment for the injury (follow the family state), the for-hire carrier is expected to provide all coverage (follow-the-vehicle principle) in case of injury.

Evolution of Governmental Immunity

The doctrine of governmental immunity as it was recognized in the United States in the early 19th century evolved out of English common law. The doctrine of governmental immunity was based on the theory that "the King could do no wrong" and that the sovereign could not be sued without its consent.

The doctrine of governmental immunity was authoritatively recognized in the United States in 1821 when the Supreme Court, speaking through Chief Justice Marshall, stated that no suit could be commenced or prosecuted against the United States without its consent (Hargrove versus Lawn of Cocoa Beach, 95 So. 2d 130, and Baker versus City of Santa Fe, 47 N.M. 85, 136 p 2d 480).

The doctrine of governmental immunity is no longer an absolute protection from suit. Recent court decisions and the mood of the country favors allowing governmental entities to be sued just as private entities can be sued [8 American Jurisprudence 2d, Automobiles and Highway Traffic 486 (1963)]. In most instances, either the doctrine has been abolished or modified by the courts or consent to be sued has been given by the legislatures. This is especially true in connection with liability arising out of the operation of a motor vehicle. Even in those instances in which the doctrine is still in force, there is the possibility that a judicial challenge would be successful based on the trend of the case law, and, consequently, liability insurance has been purchased.

Evolution of Charitable Immunity

Generally, liability has been the rule and immunity from liability the exception, since society has created rules of conduct for individuals interacting with members of the social unit. At one time or another, however, there had evolved over the years the viewpoint that charities and charitable organizations should be immune from their torts because of the nature of the services that they deliver to the public.

Immunity was bestowed on charitable institutions at a time when the public and some private groups who were generally religiously motivated were developing and endowing institutions to care for those unable to care for themselves. Charities were encouraged, and public interest demanded that charities be protected in order to carry out their benevolent work. These fledgling charities did not have the financial support or backing to enable them to pay off tort claims and survive. In many instances, their sole support was a single donor or a single trust fund. The possibility of destruction by a substantial award in a negligence action presented the charity in the latter half of the 19th century with a cost that could not be borne.

Modern-day charitable organizations bear little resemblance to their predecessors. From their humble beginnings as institutions depending on "the humane instincts of individuals or small informal groups" [Freezer, The Tort Liability of Charities, 77 U.Pa. L. Rev. 191 (1928)], charities have gradually evolved into a "thing of steel and stone and electricity, of boards and committees, of card indices and filing systems, and rules and regulations" [77 U.Pa. L. Rev. 195 (1928)]. Charities are now more than able to withstand substantial judgments without any termination of activities or any diminishment of donations. Similarly, and very importantly, charities can procure liability insurance, which defeats any argument that donations would be used for the payment of damages to tort victims. The purchase of the liability insurance has become an ordinary and necessary expense.

The demise of the doctrine of charitable immunity was signaled by the landmark decision of President and Directors of Georgetown College versus Hughes [130 F 2d 810, 812-813 (D.C. Cir. 1942)]. In that well-reasoned opinion, Justice Rutledge, then sitting on the Court of Appeals for the District of Columbia wrote:

> Generally also charity is no defense to tort. For wrong done, it is no answer to say, "He did not pay and was not bound to pay for the service

I gave him." One who undertakes to aid another must do so with due care.

At the time of the Georgetown College decision in 1942, only four states had imposed unqualified liability on charities [130 F 2d 810 (D.C. Cir. 1942)]. However, the doctrine of charitable immunity has now been repudiated in the majority of states. Charities thus no longer have protection from suit.

Development and Decline of Automobile Guest Statutes

Automobile guest statutes, which deny recovery to a nonpaying automobile passenger injured as a result of the host driver's ordinary negligence, have existed at one time or another in the majority of states. The reasons most frequently given as underlying the statutes are the prevention of collusion between host and guest and the encouragement of hospitality on the part of owners and drivers of automobiles. Typically, the guest statutes (and/or authoritative judicial decisions that achieve the same result) eliminate the driver's liability for injuries to guests other than those injuries arising from "gross negligence," "willful and wanton conduct," "disregard of the right of others," "intentional conduct," "intoxication," or a combination of these or similar terms.

The economic conditions of the 1930s gave particular force to the hospitality argument used to justify the guest statutes. The Great Depression created a substantial increase in the number of hitchhikers on the nation's highways. It was feared that these strangers would take advantage of generous but unsuspecting motorists and offend society's sense of fair play without the guest statutes.

From their inception, guest statutes presented abundant definitional problems. What is a guest? Who can be a guest? What if the accident occurs in a private driveway? Can a host be a guest? What if the guest is entering or leaving the car? What if the car has come to a momentary halt? What do "gross negligence," "willful misconduct," and "intoxication" mean? American Jurisprudence (2d) undertakes to answer the problem when it says that none of these terms is susceptible to exact definition.

At present, the status of guest statutes in the United States is declining. In 1939, 27 states had legislatively enacted guest statutes. Forty years later, only 10 of those guest statutes remain.

Effect of Law on Liability on Each Type of Transportation

As a result of these different legal philosophies, each of the three forms of transportation is viewed in a completely different light when injuries occur. The key tests to determine which legal philosophy will apply are well known. These tests and standards are listed below:

1. For-hire transportation (tort liability):
   a. Test: compensation, holding out to public
   b. Legal standard of care: extreme care
   c. Regulation: entry, rates, discrimination, routes, schedules, claims, safety, financial responsibility
   d. Taxes: traditionally viewed as extensive revenue source
2. Private transportation (tort liability):
   a. Legal test: ownership of vehicle and items transported, no compensation
   b. Legal standard of care: ordinary
   c. Regulation: safety, financial responsibility
   d. Taxes: moderate tax source
3. Human service transportation (immunity from lawsuit):
   a. Legal test: source of funds, public or private contributions
   b. Legal standard of care: slight
   c. Regulations: safety, financial responsibility
   d. Taxes: exempt from taxes or recipient of taxes

For example, if an organization provides both vehicle and driver to provide transportation for a fee, this was considered to be for-hire transportation. If the service was also offered to the general public, it was called common carriage and the strict legal standard applied.

If, on the other hand, the organization leased a vehicle from a car rental agency and hired a driver from a temporary employment service, this was considered to be private carriage as long as both the driver and the vehicle were not supplied by the same organization. In this case, the driver had a duty to the passenger to use ordinary care to avoid an accident. Government typically regulates private transportation only for levels of safety (vehicle inspection) and financial responsibility that the individual must meet in case of an accident. Typically, the taxes have been limited to gasoline taxes, sales taxes, license fees, and perhaps property taxes.

A carrier was considered to be a human service carrier if its funding came from government sources or private contributions and it had a specific relationship to the passengers. School buses, for example, could only haul school children or teachers. Church buses could only haul church members or visitors. YMCAs could only handle members or persons attending their activities. Traditionally, these forms of transportation benefited from the concept of governmental immunity, and charitable vehicles were exempt from taxes and often received tax-free gasoline and free license plates (state tags) and were exempt from sales tax or property tax. The guest statutes applied whenever someone gave a person a ride and where no compensation was involved.

Effect of Legal Forms of Transportation on Insurance Rates

The Insurance Services Office (ISO) is a statistical and rating organization supported by the insurance industry to collect accident statistics, analyze loss statistics for each type of transportation risk, and indicate the rates that are required for the industry as a whole to earn a target rate of return. Each insurance company then uses these advisory rates as an indicator of loss experience for that specific type of risk. Thus, the ISO advisory rates are the best-known way of comparing actual settlements for each type of transportation activity. Table 1 provides a comparison of advisory rates for a 12-passenger van operating under identical conditions except for legal status.

Part of this difference in advisory insurance rates can be explained by a difference in miles traveled, passengers transported, accident rates, and suit consciousness. The term "suit consciousness" is used to define the general public's expectations as shown by the tendency to pursue claims, the tendency to press suits for larger claims, the tendency of juries to award larger claims, the tendency to pursue litigation, and all other factors that affect the cost of settling the claim. For example, taxicab or bus passengers have a greater

Table 1. Comparison of insurance rates for various types of transportation.

Classification	Base Rate ($)	Primary Factor	Secondary Factor	Extended Limits Factor	Nonfleet Rate ($)
For-hire carrier					
Intercity bus	1597	1.00	-0.25	1.66	1988
Taxi (six-passenger car)	1120	1.00	N.A.	1.66	1859
Urban bus	1597	0.75	-0.25	1.66	1988
Airport limousine	1597	0.60	-0.25	1.66	927
Human service carrier					
Social service agency	1597	0.50	-0.25	1.66	662
Social service contractor	1597	0.50	-0.25	1.66	662
School bus (government owned)	147	0.95	-0.25	1.66	171
School bus (contractor owned)	147	0.95	-0.25	1.66	183
Church bus	147	1.00	-0.25	1.66	183

Notes: The social service agency and contractor rates were set by judgment, since the ISO did not have a separate statistical classification for them until October 1, 1979.
The vehicle used was a 12-passenger van, $500 000 single limit, in Knoxville, Tennessee, up to a 50-mile radius.

tendency to sue the company than do passengers on a church bus.

The importance of this suit consciousness is a slowly changing variable. If the general population is familiar with the traditional concept of governmental and charitable immunity, it may take decades after states pass laws allowing themselves to be sued (or after court decisions allowing suits) before the change fully becomes the mindset of the general population to the extent that suit consciousness fully reflects the change.

Government Actions Rapidly Changing Transportation Suit Consciousness

During the last 20 years, there have been three major government actions that are rapidly changing the suit consciousness of each form of transportation: (a) government steps to fund the preservation of the traditional transportation public utilities, (b) general erosion of governmental and charitable immunity, and (c) demise of the guest statutes.

Traditionally, public funding was limited to the government transportation providers such as school buses, which were protected by governmental immunity (as well as the laws that required that all other vehicles stop for school buses loading and unloading). In the 1960s, however, government became heavily involved in attempting to preserve public utilities such as Amtrak and mass transit that could no longer remain economically feasible without substantially curtailing routes or receiving an infusion of new equipment and capital. When government preserved these services, it also assumed all the legal and regulatory expectations that had been part of the for-hire transportation industry that government was now replacing. Therefore, the government takeover and/or financial support of mass transit, Amtrak, and Consolidated Rail Corporation (Conrail) and the proposed funding of intercity bus services have tended to move all publicly supported transportation from the area of governmental immunity into the category of for-hire common carrier. This shift is accentuated by the fact that there is very little difference in the way that mass transit and school bus services are provided or funded except that mass transit is administered by a transit authority and school bus service is administered by a school board and that transit is open to the general public.

Since it is legally in the best interest of the injured for the transportation service to be held to the for-hire standard of care, the natural result of governmental involvement in transportation is to have the suit consciousness of school buses and human service transportation become more like the suit consciousness of mass transit. As this occurs, insurance rates on school buses will surely become closer to urban bus insurance rates.

In addition to increasing suit consciousness toward human service programs, involvement of government in the traditional for-hire transportation area is also bringing additional responsibilities and obligations to human service carriers. For example, there is a well-understood body of labor law that applies to for-hire carriers, as, for example, the New Orleans passenger train case, Section 13(c) of the Urban Mass Transportation Act of 1964, Section 405 of the Rail Passenger Service Act of 1970 (Amtrak Act), and Section 516 of the Railroad Revitalization and Regulatory Reform Act of 1976. Also, for-hire carriage has the traditional regulatory requirements that restrict entry and exit and place other restrictions on the ability of the carrier to modify service without public hearings. Thus, the shift toward identification of all government transportation as for-hire transportation has major ramifications for human service agencies.

The second action of government has been the general erosion of governmental and charitable immunity as well as the abolition of guest statutes. This erosion, whether by statute or court decision, has forced the human service transportation providers to be viewed either as for-hire carriers or as private carriers, since they are the only legal option once the immunity of the human service area is removed.

Federal highway programs such as transportation systems management and ridesharing are focusing on improving the efficiency with which existing vehicles are used. These programs are basically private transportation programs.

Too often, human service transportation planners design their delivery system around funding guidelines, theoretical economies of scale, or a desire to eliminate duplication of services without realizing that slight program variations make major changes in the laws that apply to the programs. For example, these situations may exist:

1. If a human service agency accepts fares from clients who are willing and able to pay for their transportation, the agency's legal and insurance classifications will change and become subject to all the requirements of for-hire carriage.
2. If a federal program such as Section 18 of the Surface Transportation Act of 1978 requires that the general public be served, that transportation program becomes a common carrier, since that is the legal test of a common carrier, even though 98 percent of its passengers may be program beneficiaries of human service agencies.
3. If a church loans or leases its vehicles to a human service agency to transport the elderly, they

will no longer be insured as church buses but as those of a social service agency. If the social service agency charges the senior citizens a fee to cover the cost of operating the buses, compensation is involved and the agency and vehicles legally become for-hire carriers, and suit consciousness and insurance rates again increase.

4. If a human service agency reimburses a volunteer 15¢/mile (or any amount) to help cover the cost of operating the volunteer's vehicle, the agency may be held liable as a for-hire carrier because of the compensation test. (South Dakota's Attorney General ruled that payment of 15¢/mile to volunteers made them public livery, and thus they must be regulated and insured accordingly.)

5. If a public service commission or regional transportation authority attempts to regulate insurance requirements or safety aspects of human service agency transportation, this generally makes the human service transportation for-hire carriage, since the regulatory bodies in most cases only have authority to regulate for-hire carriers.

6. If transportation of the elderly is done by the Office on Aging, it will be viewed as human service transportation. If the same service is performed by the regional transit authority, it will almost certainly be treated as common carriage with all the suit consciousness, labor protection, and public hearings this involves.

7. If a volunteer receives first-aid training and uses it to render first aid to an injured human service passenger, the Good Samaritan statute will probably apply. If a transit authority driver receives the same training and renders the same aid, it will probably be considered part of the driver's job and the extreme-care standard may apply.

CROSSROADS FOR HUMAN SERVICE TRANSPORTATION

Currently, human service transportation is seeking a direction and many different programs are moving in different directions. In general, the U.S. Department of Transportation (DOT) has stressed the public utility philosophy of transportation with its accompanying legal-care standard, its labor protections, and its required public review on any service change. As can be expected, DOT programs have emphasized the systemwide, full-accessibility, public-utility approach.

The Department of Health and Human Services (HHS) has generally retained the mission orientation of the human service program in which transportation is a means to an end rather than the primary purpose. These programs generally fund essential transportation for specific types of program beneficiaries or coordinate volunteers to serve particular needs. In general, HHS programs take a mission orientation to Section 504 guidelines, i.e., does the service meet the need?

The carrier-management philosophy of DOT follows the public-utility concept of consolidating all human services transportation under a single provider to eliminate duplication of service. The mission orientation of HHS suggests the coordinating of all possible transportation options by someone who is primarily responsible for seeing that the human service agencies get the service that they need but has little desire to operate vehicles. Ironically, most human service planners give little or no attention to the legal form of transportation they propose and wonder why contractors, transit authorities, and others are reluctant to provide various types of service.

Until these legal philosophies are changed by statute, the legal form of the transportation is probably more important for the success of the transportation mission than any other variable. Ridesharing could not progress until legal barriers were changed. Now there is a model ridesharing law (7) and model human service law (8) for introduction into each state.

Until such steps can be taken, however, a key component of every transportation plan should be an impact analysis of the legal form of transportation selected. The impact analysis should include insurance cost, liability issues such as Good Samaritan laws, operating flexibility, labor issues, public hearing requirement for each type of change, suit consciousness, and resource availability such as borrowed or leased vehicles. Unfortunately, many planners dismiss these considerations as a necessary cost of protecting the passenger. Ironically, many if not most passengers in human service transportation programs are already receiving medical protection from Medicare, Medicaid, the Veterans' Administration, developmental disabilities, or other government programs. Also, many are not working, so they would not collect for lost wages. Since Medicare, for example, must pay hospital costs anyway, the main benefit supplied by the expensive common carrier insurance coverage may be for the right of the insured to collect more than once for the same injury and the ability to collect sizeable settlements for pain and suffering.

CONCLUSIONS

Traditional regulatory concepts have proved inadequate to facilitate the growth of specialized transportation. Traditional concepts have limited the legal and philosophical definitions of transportation to the detriment of special groups. Recent court decisions have weakened or removed guest statutes and governmental and charitable immunity. Human service transportation is thus left without legal protection and is forced to obtain liability insurance at often excessive rates.

The erosion of governmental and charitable immunity tells us what human service transportation will no longer be, but there is little to indicate whether the legal philosophy of for-hire common carriage or private transportation will ultimately be adopted. The insurance industry must know and cannot guess, so to be on the safe side they usually predict that the philosophy will become more like that of for-hire carriers. Thus, rates will be very high in many cases.

Human service transportation has arrived at a point when key issues need to be addressed. The uncertain legal status of human service transportation needs to be resolved so that human service agencies can continue to provide a vitally needed service at a reasonable cost. By eliminating the legal uncertainties, insurance companies can then develop rates and collect statistics without being overly conservative, and the beneficiaries of human service transportation can be assured of continued service and adequate coverage.

REFERENCES

1. D.V. Harper. Transportation in America. Prentice-Hall, Englewood Cliffs, NJ, 1978.
2. A.E. Kahn. Economics of Regulation: Principles and Institutions. Wiley, New York, NY, 1979.
3. D.P. Locklin. Economies of Transportation. Richard D. Irwin, Inc., Homewood, IL, 1972.
4. H. Mertins, Jr. National Transportation Policy in Transition. D.C. Heath and Co., Lexington, MA, 1972.
5. G. Eads. Railroad Diversification: Where Lies

the Public Interest. Bell Journal of Economics and Management Science, 1974.
6. W.L. Prosser. Law of Torts. 4th ed., West Publishing Co., St. Paul, MN, 1971.
7. Model State Law to Remove Legal Impediments to Ridesharing Arrangements. National Committee on Uniform Traffic Laws and Ordinances, Washington, DC, Sept. 4, 1979.
8. The Rural Transportation Insurance Initiative. National Governor's Association, Washington, DC, 1979.

Methodological Issues in Collecting Primary Data on the Transportation-Handicapped

LALITA SEN, ERSKINE WALTHER, JULIAN BENJAMIN, AND RICHARD S. WATT

Issues of definition and identification of the transportation-handicapped and methodological questions of sample-frame selection, formulation of questionnaires, and survey administration techniques in studies of the transportation-handicapped are explored by using data from a survey conducted in Greensboro, North Carolina. The Greensboro study used four different sample frames that represented different methods of sampling and eligibility screening of respondents. Respondents captured by the alternative sample frames varied in meaningful ways on socioeconomic variables, number and types of handicaps, mode choice and travel frequency, and degree of cooperation with interviewers. The impacts of alternative questionnaire formats and survey administration techniques on respondents with various physical handicaps are explored. Specific applications of observed sample-frame biases to accomplish research objectives are suggested.

The study of the transportation-handicapped poses numerous methodological issues. Of major concern are the issue of how to identify the transportation-handicapped and the related issue of data-collection methods.

Identification of the transportation-handicapped is a problem because, although some handicapped individuals may be highly visible in public, the group is not homogeneous, and individuals rarely work in or are affiliated with one specific organization that can be helpful in identifying those who are transportation-handicapped.

Underlying the problem of identification is the more fundamental problem of definition. Who are the transportation-handicapped? When does an individual become transportation-handicapped or cease to be handicapped for transportation purposes? These questions have perplexed many researchers in the past. The resolution ultimately reached has been determined by specific research objectives, available literature, and available descriptive data. These items have been particularly important in determining procedures for the selection of survey respondents.

Methods used to identify the transportation-handicapped have ranged from the approach taken by the U.S. National Health Survey (1), which was based on the respondents' perceptions as well as their physical disabilities, to the 1974 study by Michaels and Weiler (2) in which medical conditions, mobility limitations, and functional requirements were used in combination to identify three levels of transportation-related handicaps. Many alternative methods for identifying the transportation-handicapped are discussed in detail in the study Elderly and Handicapped Data Collection (3) conducted by Peat, Marwick, Mitchell and Company. Although this study does examine previous studies as well as information and opinions solicited from panels of experts, there is no hard data base to enable comparisons between techniques or to support the conclusions drawn in the study.

In this paper, data collected in Greensboro, North Carolina, will be used to analyze differences between samples collected by different techniques as well as any special problems or difficulties encountered in any of the four alternative sample frames used for the data collection. It is important to note that alternative sample frames are being compared and not alternative sampling methods, which apply within a given sample frame.

SAMPLING TECHNIQUES AND PROBLEMS

In theory, the most desirable sampling method for a general study of the transportation-handicapped is a random sample. However, the prediction equations developed in the Grey Advertising study (4) conducted at the national level showed that only 4 percent of the population in a typical urban area is transportation-handicapped.

To obtain 200 usable completed interviews for a study of the transportation-handicapped in Greensboro, North Carolina, this 4 percent figure required the screening of 5000 members of the general public. This was done by telephone; 5000 telephone numbers were selected at random from the telephone directory. This method of course introduced the bias that only those with listed numbers would fall into the sample. It was observed that this screening was time-consuming and expensive and that some of those identified as handicapped were not willing to be interviewed. As a result of both these factors, three other sample frames were used to ensure the sample population desired for the Greensboro study: a 100 percent sample from client lists provided by social service agencies; self-identification through response to advertisements or publicity in newspapers, radio, and television; and a sample from a list of current users of the Greensboro Agency Transportation Express (GATE), the special transportation service for the elderly and the handicapped in Greensboro. Of the four techniques, random sampling of the general public took the most time, followed by sampling from agency lists. These approaches therefore showed the highest costs for the initial identification of transportation-handicapped individuals.

Due to the limited number of personnel available for the project, there was sometimes a lag between the initial contact and the follow-up home interview. As a result, a number of potential interviews