AUTOMOBILE AND PUBLIC TRANSPORTATION FOR RETIRED PEOPLE

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• CONSIDERING the preeminence of the automobile as a means of transportation in the United States, one is hardly surprised that most research on transportation and older people deals with driving automobiles. As Bracey observed, "in America, the ability 'to go places' depends so very much on the ability to drive an automobile without which you can be literally marooned in your own house" (1).

Most studies have been concerned with problems created by the older automobile driver. Marsh (2) states, "Today the aging driver is a significant factor in traffic, and he will steadily become a more important factor. For his numbers are already growing very much faster than the total number of drivers, and for several reasons this large growth will continue for years." Marsh calls for "greatly increased attention to a neglected area of highway transportation—'the aging driver'."

A central issue has been whether age is related to highway safety. McFarland, Tune, and Welford found that people under the age of 24 and those over the age of 60 have "worse records" than those in between (3). However, these authors point out that both young and old people are "more frequently blamed for accidents in which they are involved" and conclude that "age by itself cannot be regarded as an adequate basis on which to make a decision concerning a person's ability to drive" (3). The California Drivers Record Study of 1964 indicated that accidents and citations tend to decrease with age until extremely old age, where there is a tendency for accidents to increase slightly (4).

Physical impairments and poor health may account for the relationship between old age and driving. Waller observes (5) that "about 25 percent of all drivers, including people with problems associated with aging, have relative impairment to performing driving tasks" and concludes that "much of the excessive accident experience among drivers age 65 and older is attributable to senility, cardiovascular disease, and other medical conditions found more frequently among older people, rather than to age per se."

Changes in sensory-motor functions relevant to driving also tend to be age related. Hearing decrements increase, visual acuity decreases, and problems with peripheral and night vision increase with age (6). Concern has been expressed with regard to the deaf driver (7). A review of information on age changes in vision suggests that the appropriate time to re-test vision of automobile drivers would be between the ages of 50 and 55 (8). Therefore, while Marsh may properly conclude that, "chronological age is not a sound criterion for appraisal of driving competence" on an individual basis, it is nevertheless true that sensory-motor deficits and physical ailments—and therefore certain driving problems—are more common among older people.

The effects of higher incidence of ailments and sensory-motor losses may be compounded by changes in the conditions of driving. Both highway and city driving present increasingly complex perceptual-motor problems and increasing pressure for speed. Laboratory studies have demonstrated that these conditions penalize the older person and that the penalty is particularly severe when new learning is required (6). Because of the constant building of highways and the rerouting of city traffic, even people who

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do not move their places of residence or change the destinations to which they drive may be required to learn new pathways. In addition, the older person is likely to own an older automobile (9), and the inferiority of his equipment places him further at a disadvantage in regard to competent driving.

THE STUDY

The study described in this paper is concerned not so much with the problems created by the older driver as with the problems he experiences and with the extent to which automobile driving facilitates personal satisfaction and social contribution during the post-work years. Who are the retired people who drive? Where and how often do they drive? What problems do they experience? How is their mobility limited by these problems? What do they perceive as the primary causes of these driving problems? Who are the people who do not drive? What implications does this have for their personal fulfillment and social contribution?

Data Collection and Subjects

In order to provide information on these issues, data were collected from retired people in San Antonio and San Francisco during interviews in their homes. This paper reports on the first phase, which involved a 1.3 percent sample of the retired population of San Antonio. The group was consisted of 283 men and 426 women, including 120 Afro-Americans, 404 Anglo-Americans, and 185 Mexican-Americans. The average age of the respondents was 67.5. About 5 percent were under 50 and a similar number were 85 or older; 82 percent were 65 or older. The median income was \$1,797, slightly higher than the national median for persons 65 and older ($\underline{10}$). During working years most of the interviewed men and most of the husbands of interviewed women had held jobs in the middle levels ($\underline{11}$). Less than 10 percent had worked in professional or top managerial positions, and a similar number had been unskilled laborers.

Extent of Driving in Retirement

One important question is, To what extent does driving an automobile meet the needs of retired persons? One basic aspect of this question is the proportion of retired people who drive. While nearly 90 percent of households headed by persons under 65 have automobiles, less than half of those households headed by persons 65 and older own automobiles $(\underline{1},\underline{9})$. The number of drivers among older people is even smaller. Many non-drivers live in households that include someone who is a car owner. In the present study, 55 percent of the Anglo-American men were drivers. They were also heads of households. Only 33 percent of the Anglo-American women were drivers. Rates were much lower among minority groups: 39 percent of Afro-American men and 22 percent of Afro-American women and 32 percent of Mexican-American men and 12 percent of Mexican-American women were drivers $(\underline{12})$.

For people in the active working years, driving a car is the preferred and most common form of transportation. It is less often possible among the retired persons. Two out of three of the people interviewed in this study did not drive at all. Nevertheless, dependency on driving tends to persist into retirement. Absence of an automobile available for use tends to be reflected in a low mobility rate, rather than in use of a different form of transportation, and in dissatisfaction with ability to get about. Drivers were consistently favorable and nondrivers were unfavorable in evaluating their mobility outside the home. Overall, for respondents in this study, driving an automobile was the most common way of getting about. Riding as a passenger in a private automobile was a close second $(\underline{13})$, and riding in public transit was a poor third $(\underline{14})$. However, the overall rate of going about outside the home was very low $(\underline{15})$.

The numbers of people who had quit driving nearly equaled the number of drivers. Furthermore, less than half the drivers would drive anywhere. This means that 15 percent of the total group were easily able to meet their needs to go places by driving an automobile. The majority of drivers recognized or set some limitation on their driving. A significant proportion either had been issued licenses for daytime driving only or had decided they should no longer drive after dark because of poor night vision.

Even in daylight, some would not take long trips, and about 40 percent would not leave the city. Approximately 25 percent would drive only in certain parts of the city, and

over 15 percent drove only within their own neighborhoods.

These figures indicate that, if Bracey's observation is accurate, the majority of retired people tend to be "marooned" in their own houses, and an even larger proportion of them cannot come and go freely to do what they want during the years of their retirement. For many people beyond the working years, driving a car meets transportation needs only partially, and for most, driving does not meet needs at all. This situation has serious implications in a society so highly dependent on the automobile. For people who cannot drive, transportation problems may severely limit all aspects of life during the retirement leisure years.

WHO DRIVES?

Who are the one-third of people who drive? How well does driving meet their needs for transportation?

Financial Status

Economic status was the most important factor in determining who among these retired people drove automobiles, where and how often they drove them, and how well this form of transportation met their needs. The people who owned automobiles had relatively good incomes. In general, these people also lived in good housing and had retired from high-level jobs. It seems rather obvious that purchase and upkeep of automobiles were possible only for persons with relatively large incomes. Surely for the 50 percent with household incomes under \$1,800 per year, the costs of car ownership would seem prohibitive. Income was also the most important reason for giving up driving. Nearly half the ex-drivers said they had quit driving because they could no longer afford an automobile or its maintenance.

Car Ownership

If a person owned a car, he was likely to drive it for every transportation need—to visit his relatives and friends, to shop, to attend religious services, to see the doctor, to obtain other services, and to go to places of recreation. Furthermore, the car owner was likely to say he was well satisfied with his transportation to each of these destinations. He was unlikely ever to take a bus somewhere he needed to go or to walk except for exercise or with a pet, although he gave high marks to both public and pedestrian transit.

Car ownership was almost completely predictive of frequency of driving. Nearly everyone who owned a car usually drove it every day, while driving was infrequent among those who did not have cars of their own. Only 5 percent of the respondents were ever lent an automobile to drive. This lending was even more rarely on a regular basis. Usually there was an understanding for emergency situations only. This arrangement was not satisfactory to the borrower, but made him feel dependent and indebted to the lender, who was most often a relative (75 percent) but sometimes a friend (25 percent).

Health

People who did not drive not only tended to have no cars of their own, to have low incomes relative to those of the rest of the group, to live in substandard housing, and to have retired from low-level jobs, but also tended to rate their health unfavorably. Drivers who considered themselves in poor health tended to restrict the range of their driving and the destinations to which they were willing to drive. Health was also an important reason for retired people to stop driving. In this regard, also, health was second only to money. Forty percent of the ex-drivers in this study said they gave up driving because of health problems.

Ethnicity

There was a strong tendency for car ownership to be less common among members of the two ethnic minority groups (Afro-American and Mexican-American) than among the ethnic majority. In addition, a disproportionately small number of drivers who would drive "anywhere" were minority-group members. For example, half of the Anglo-American drivers but more than 85 percent of the Mexican-American drivers put some limitations on their driving. These variables are, of course, interrelated: economic status, housing, and health are inferior among the ethnic minorities.

Sex

In all ethnic groups, but most clearly among the Mexican-Americans, men were more likely to be drivers than were women. This was not because women gave up driving in larger numbers but because fewer women had ever learned to drive. This difference may be a historical one, and future generations of retired people may include more nearly equal proportions of men and women drivers. Although women who had driven showed no greater tendency to quit, those who continued to drive were more likely to place some restriction on their driving than were male drivers.

Location of Residence

There was a clear relationship between car ownership and location of residence in relation to centrality-peripherality within the city. If a person lived farther toward the periphery of an urban area, he was more likely to be a driver, and his driving was less restricted if he was a driver. For example, only 20 percent of the people who lived in the innermost five zones had automobiles, and over one-third of these car owners limited their driving to their own neighborhoods. In contrast, well over half of the suburban residents were drivers, and only 5 percent of them admitted any restriction on their driving.

Location of residence is, of course, related to several other correlates of car ownership and extent of driving. On the whole, incomes tended to be higher and housing better in the new, outer suburbs, and people who retired there tended to be better educated and to have held higher level jobs during their working years. Place of residence was also associated with sex distribution and with ethnicity. However, neither sex nor ethnicity accounted for the relationship between location of residence and automobile driving.

Actually, the sex distribution worked in reverse. The highest concentration of men was in the inner city. While, in general, men were more likely to be drivers, the incidence of driving was lowest in the inner city. Ethnic-minority neighborhoods were distributed unequally throughout the zones based on distance from the city center. They were not predominant in the city center, but they were predominant in the zone immediately surrounding it and in the middle zone of urban-suburban interface. Most residents of the downtown hotel area were members of the ethnic majority. At any rate, the distribution of retired people according to ethnic background does not account for the relationship between location of residence and tendency to drive an automobile. If only members of the ethnic majority are considered, the relationship is apparent: A retired person is less likely to drive if he lives farther in toward the city center; a retired person is more likely to drive if he lives farther out toward the edge of town.

No doubt there is a complex relationship between the determinants of where one lives and the determinants of transportation behavior and attitude. Mobility is both cause and effect in relation to location of residence. Retired residents of the new, outer suburbs tend to drive cars everywhere they go, partly because they are physically and economically capable of doing so and partly because there is no other way to get anywhere. They either go by automobile or do not go at all. Suburban residents sometimes commented that they "couldn't live here without a car." Some said that even if their licenses were not renewed, they would continue to drive because otherwise they could go nowhere. Some avoided answering the question about the validity of a driver's license. A few volunteered the opinion that they really should not be driving, that they

probably were not safe on the road, but that they had no choice if they were ever to get out of the house.

The most immobilized and unhappy individuals were suburban residents who did not drive or who had no one to drive them. Farther in toward the center of the city, the public transportation services were better, in general, and it was more feasible to walk to some destinations. Respondents from the inner city, who were least likely to have automobiles, did the most going about (16). Some were long-term residents of this area, but many were relative newcomers who had moved into the center of town when they had lost their car or their license, when they had decided that they should not drive at night or on freeways, or when they were widowed. For many, the conscious purpose was to live where there were other people and where access to activities and facilities was relatively easy and inexpensive without a car.

The Driver and the Nondriver

The "typical" retired person who drove, then, was an Anglo-American man who lived in a nice house in the suburbs with his wife. He had a relatively good income and rated his health favorably. His education was better than average, and during working years he had held a job at a relatively high level. In retirement, he drove practically everywhere he went and was satisfied with his transportation.

The person least likely to drive during retirement, or, for that matter, the person least likely ever to have driven a car, was the Mexican-American woman. The people most unlikely to be drivers were residents of Afro-American or Mexican-American neighborhoods who had low incomes, substandard housing, and negative opinions of their own health. They had less than average education and had worked at low-level jobs. These people were not well satisfied with their means of transportation and found it difficult to get to most destinations. Residents of the central city were also unlikely to drive, and they were not well satisfied with their means of transportation, which was most likely to be their feet, but they were more mobile than people who lived farther out.

DRIVING PROBLEMS

Despite the fact that less than half the drivers said they could drive "anywhere," less than 15 percent of them acknowledged any problem with their driving. Similarly, only 12 percent of the ex-drivers mentioned fear as a factor in their decision to stop driving. The problems most frequently mentioned were heavy traffic and parking. Health was mentioned very infrequently. This low incidence of "problems" is no doubt due in part to the fact that these people stayed out of driving situations that were problematic for them. It may also be partly defensive. Anticipations of having to give up driving were very strongly negative (17), and denial of any problems with driving may be partly an attempt to ward off this threat.

Reasons for Problems

Changes in People—This possibility of defensive reduction of one's own driving problems is supported by the fact that most respondents readily named a variety of driving problems when asked about "older people in general." Interestingly, they attributed most of the problems to changes in people as they age rather than to external circumstances. The leading problem was deteriorating vision (82 percent). Slowing of response was the next most often mentioned problem (79 percent). Other important changes that these respondents attributed to growing older and that they thought caused driving problems for "most older people" were nervousness (75 percent), stiffness and crippling (62 percent), lack of confidence (58 percent), and difficulty in adjusting to new things (55 percent). They also mentioned the tendency to "orneriness" on the part of the older driver and his increased sensitivity, his lessened alertness, and the decreased rapidity of his thinking as well as of his reflexes. Many respondents commented that, because of the slowing of thought and action, the older driver was particularly likely to be made nervous by the speed of traffic.

Changes in Conditions of Driving—To a somewhat lesser extent, problems for the older driver were also attributed to changes in the conditions of driving. Speed was the major villain (60 percent). According to these respondents, vehicles are becoming too fast and too powerful and, therefore, increasingly unsafe. Streets and roads are increasingly hazardous because, more and more, they are inadequate to handle the traffic. There are too many cars on the road (51 percent). Traffic signals are an increasing problem because they are more and more complex and confusing. Freeways and interchanges are difficult for the older driver because they confuse him. Other drivers make driving more difficult because they pass on the right and because "youthful drivers are dangerous."

Response to Pictured Problems

Speed—The data from direct questions were supplemented with responses to pictures of potentially problematic driving situations administered only to drivers. The projective types of data supported the direct-question responses in indicating that speed of traffic was the most urgent problem. Furthermore, the picture-test reactions suggest the problem is so acute that it activates psychological defenses on the part of many older drivers. An overall defensiveness score was higher for responses to the traffic-speed picture than for any of the other four driving situations. Many respondents became visibly emotional while responding to this picture. A surprising number (26 percent) showed signs of anxiety, and even more (34 percent) went to considerable trouble to deny that they felt anxious, which suggests a high rate of a strong negative effect.

Projective "intrusions" were most frequent in stories about this picture as was mention of death and injury. Inability to cope with the traffic speed situation was suggested by the large number of stories in which the psychological "mechanism" for dealing with the situation involved some form of avoidance or denial of speed rather than active mastery. Some respondents refused to incorporate the speed factor into their stories, despite the clear pictorial representation and specific verbal instructions. Others insisted they would never get into a situation like that and therefore could not talk about it.

Intersection—Another picture showed an intersection with many signals and signs. The task was to solve a left-turn problem. The responses to this picture mirrored the confusion many of these people must experience in such situations. They spoke of confusion, their stories were confused, and sometimes the effect they expressed seemed inappropriate to the content of the responses. Some of the "solutions" would lead almost inevitably to traffic accidents or citations.

Potential Collision—The picture of a potential collision evoked two rather distinct patterns of response. One was intensely self-righteous and involved strong hostility toward the "other driver" sometimes expressed in profanity. Ninety-five percent of the responses were extrapunitive and blame-avoidant. Mention of death and injury were almost as high to this as to the speed picture. In a second pattern of response to the potential collision picture, the person avoided the story-telling task occasionally by simply refusing to tell a story at all but much more often by limiting himself to a description of the stimulus material. When these people were asked how they feel when they are in situations like the one pictured, they usually said, "It doesn't bother me."

Driving With a Nervous Passenger—A fourth picture showed two persons in the front seat of an automobile. The respondent was instructed to take the viewpoint of the driver, and the passenger was described as nervous. The role of driver with a nervous passenger was surprisingly evocative. Anger was directly expressed as often as in the collision stories, and the denial of anger was six times as frequent. Anxiety was high, also, second only to that exhibited in talking about the traffic-speed situation. Aggression was 15 times what it was in regard to the collision picture, but it was always inhibited to a subvocal level, and most of it was not directed at anything or anybody, including the self. Hostility was very strong and was unfocused. Verbal excesses such as swearing were at their peak in stories to this picture. However, the driver in the story was unlikely to "tell off" his passenger let alone aggress against him physically. The profanity and other verbal excesses occurred as asides and seemed to serve as a

tension-reducing function for the respondents. First-person stories were very common, and generally there seemed to be close identification with the pictured driver. The typical solution was, 'I won't do a thing," with the clear implication of a strong desire to the contrary.

These data suggest that the backseat driver is a real burden to the older driver and is one that he feels he must bear without any form of retaliation or even any effort to defend himself. No doubt this results from the fact that their passengers usually are spouses or other members of their families or old friends and are people who have no other way to get places. This finding is particularly poignant in view of the fact that

the people he drives probably tend to be terrified as passengers (18).

Night Driving—Stories to the night-driving picture suggest that this problem is accepted in a rather matter-of-fact way by a large number of retired people. When shown the picture and asked to tell a story, nearly half said they did not drive at night, or, if they found themselves in such a situation, they would try to get off the freeway as quickly as possible and onto a less frequented road where there would be fewer lights coming toward them. These responses usually were accompanied by little effect. An opposite pattern of response occurred in a minority of cases. It involved considerable expression of negative effect and strong denial of anxiety in regard to night driving. In this pattern, the content of the story involved some variety of determined frontal attack on the problem of driving into many headlights and insistence that it really was no problem.

Ethnic Group Differences

Members of both ethnic minority groups were more likely to acknowledge problems with their own driving than were members of the ethnic majority. About a third of the Afro-American and Mexican-American drivers said they had some driving problem, while only 1 percent of the Anglo-Americans did. Of course, the minority-group drivers tended to have older automobiles that were in less good repair, they had less money for automobile upkeep, and they probably tended to be in poorer health, which may explain the fact that more of them reported problems in regard to driving.

Even in discussions of "the older driver in general," there were differences between ethnic minority and majority respondents. The difference here was in regard to the types of problems and their causes. Generally the minority-group members were more likely to attribute problems to changes in persons as they age, while ethnic majority-group members tended to attribute problems to situational factors and the external con-

ditions of driving.

Even in regard to designation of the one environmental condition of driving, which causes the most difficulty for people as they age, there were ethnic differences. Traffic speed was most frequently named by all groups. However, there were strong ethnic differences in designating the next most important factor. The Anglo-Americans named freeways, the Afro-Americans named traffic signals, and the Mexican-Americans named the number of cars on the road.

IMPLICATIONS

Drivers tended to be men who had good educations, incomes, and health and who retired in ethnic-majority neighborhoods in the suburbs. Among drivers, persons with these characteristics were most likely to feel they could drive "anywhere," with no restrictions. Drivers tended to perceive many problems for "the older driver" but not for themselves. This may be due to the total dependence of many of them on driving. They felt that, if they had to stop driving, there would be no way to get to any of the places they needed and wanted to go. In general, drivers were satisfied with this transportation and were even more satisfied when driving was less restricted. However, only a third of the respondents were drivers at the time of data collection, and only half of them drove "anywhere."

Although few of the older drivers in this study admitted to "problems" with their driving, projective types of data suggest that much of the denial of personal difficulty with driving is defensive and covers considerable negative emotion. The large majority

were well aware of serious problems for "the older driver," and most acknowledged voluntary or compulsory limitations in their own driving. Therefore, only a small percentage of the total group of retired people were freely able to meet their transportation needs by driving automobiles. As the speed and complexity of traffic increase, this proportion of drivers may be expected to diminish further. Clearly, the private automobile does not provide adequate transportation for retired people at the present time. Insofar as the ability to go places in this country depends on driving an automobile, a large proportion of retired people are "marooned" in their own homes.

For retired people, and probably others, most destinations are too far from home to walk, the physical conditions for pedestrianism tend to be poor, and the social milieu is perceived as uncaring or even hostile $(\underline{19})$. The offer of rides with another driver in a private automobile is grossly inadequate to meet the retired person's needs to get

about (13).

Public Transportation

This leaves public transit. How well does it serve people in the retirement-leisure period of life? Over 40 percent of the respondents in this study never rode a bus, not even occasionally, while one person in five rode a bus as often as once a week. Nearly 10 percent did not even know the locations of the bus stops nearest their homes. Obviously, to more than two persons in every five, public transit was irrelevant to transportation needs.

Some people were less likely to use the bus than were others. Car owners were least likely to take the bus. If the person could go by car, he did so. How about the majority who did not drive? Their use of public transit depended on several things. One was the location of the person's home. Bus riding was most common and most frequent among residents of the heart of the central city, diminished with distance from the city center, and was very rare among residents of the new suburbs near the periphery of the city. Largely, this reflects the distribution of public transit service. Bus stops are far apart, and schedules are meager in the suburbs. Within the more central urban areas, the distance from home to the nearest bus stop was a factor. As the distance increased between the bus stop and the residence, the probability that the person would use the bus decreased. The additional distance of even one block was some deterrent.

Retired persons who lived in ethnic-minority neighborhoods (Afro-American and Mexican-American) were more dependent on public transit because fewer of them had automobiles, and they used the bus to a greater extent than did residents of Anglo-American neighborhoods. One-half the Anglo-Americans never used public transit, not even on occasion, and less than one in ten rode on a bus more than once a week. One-third of the Mexican-Americans and only one-fourth of the Afro-Americans never took a bus, while one minority-group person in every five rode a bus several times each week. This ethnic-group difference does not reflect the distribution of bus service but runs counter to it. Practically every resident of the ethnic-majority neighborhoods (99 percent) lived within one block of a bus stop, while this was true for less than 70 percent of the residents of Mexican-American neighborhoods and less than 50 percent of the residents of Afro-American areas. The retired people who lived in minority neighborhoods rode the bus more often than residents of majority neighborhoods, despite the fact that they had to walk farther to catch a bus.

Socioeconomic status was related to car ownership, use of public transit, and ethnicity. Respondents with lowest incomes rode the bus or stayed home. Generally, persons who depended on the bus for transportation during retirement had tended also to live in substandard housing. Furthermore, they tended to be persons alone—the widowed, the divorced, and the never-married—who did not have relatives or friends nearby.

Among automobile drivers, those who drove the most tended to be best satisfied with this transportation. To the contrary, among users of public transit, frequency of use was inversely related to satisfaction. Automobile drivers who never rode a bus evaluated that service very favorably. People who took a bus very seldom, and were not dependent on it as the major means of transportation available to them, rated it a satis-

factory means of getting about. However, people who had to depend on public transit found considerable fault with it.

Disadvantages

Nearly all of the people (90 percent) who ever rode buses said the schedule should have shorter intervals. One-half that many mentioned the difficulty or impossibility of getting a bus directly to the desired destination. The steep risers on the bus steps was a major problem to half the retired people who rode buses. Three steps instead of two was the most common suggestion. One-fourth of the respondents recommended redesigning the doors so that people need not fear being caught in them or hit by them.

Another suggestion was better coordination of bus stops and pedestrian facilities. For example, the residents of one home for older people could catch the in-town bus a block from where they lived and could get to the bus stop without crossing a major street. However, after leaving the bus on the return trip when they were tired and might be carrying bundles, they had to cross high-speed, heavily traveled thorough-fares. They were apprehensive about getting across during the short walk-light interval. Anticipations of this finale sometimes outweighed the advantages of the outing and caused the retired person to stay at home.

Shelters from the weather and benches to sit on at bus stops where long waits were common and, because of the exact-fare policy, change-machines were recommended. Also, it was suggested that it would be nice to have someone to help the retired person in descending at stops and in getting on the bus. The primary need for assistance was with the physical task of getting onto the bus and getting off again without falling, being caught in the doors, or making other passengers too impatient by their slowness. Some needed warning that the destination was near to ensure time to prepare for alighting and to verify that it was the desired destination. Assistance with bundles would also be welcome. Being assisted by an employee of the bus company would not signify dependence. On the contrary, the knowledge that such an employee was there would reduce apprehensions about taking trips and therefore increase frequency of trips, and it would extend the period in which the retired person felt capable of going about the city on his own.

Advantages

The majority of bus users were unable to state any advantages for it. Small numbers mentioned that they felt safe in the bus or that it was inexpensive or comfortable. Some people found it convenient because of the location of the bus stops or the schedule that fit well with their needs or because they did not have to worry about traffic problems. A few mentioned enjoyment of an outing on the bus and the opportunity to be in the company of other people.

By implication, another favorable reaction to public transit was revealed. Some respondents went out of their way to make clear that the suggestion of someone to help in no way derogated the bus drivers. Throughout the study, criticism of bus drivers was amazingly sparse. No one in the group mentioned rudeness, discourtesy, or thoughtlessness on the part of a bus driver, although a good many reported these traits in other passengers. No one mentioned careless or unsafe driving of a bus, although a large proportion of those who rode as passengers in private automobiles were made very nervous by the driving (13). The respondents seemed much more confident with professional drivers than with relatives and friends who drove them places.

CONCLUSIONS

The overall view of vehicular transport during retirement years is not encouraging. Generally, this study showed that, while automobile driving is very satisfactory transportation for those who have it, most retired people do not have an automobile. Furthermore, the people least likely to have cars and to drive, and most likely to have problems with driving if they did, were those most in need of convenient transportation and least capable of using public transportation—members of ethnic minority groups, the unwell, the uneducated, and the very poor. The retired people who used public

transit had a number of serious problems with it and used it rather infrequently, while many never rode on a bus. In general, public transit did not provide very frequent or satisfactory access to any element of the community in which they lived. Public transit provided transportation for less than a fifth of the respondents traveling to the doctor and for shopping, and it was used to gain access to recreation and community service by much smaller percentages of the group.

These results support Bracey's observation that the inability to drive an automobile in this country leaves one "marooned" at home. Trends in speed and complexity of traffic suggest a lowering of average age for converting to ex-driver status and a longer period of dependency on public transit to gain destinations beyond walking distance. As it exists, public transit does not meet well the needs of the older person who does not drive. Unless transportation is devised to support mobility during retirement, this increasing segment in the life history of many persons will be one of loneliness and inactivity rather than one of self-fulfillment and social contribution.

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