OLDER AMERICANS AND TRANSPORTATION: A CRISIS IN MOBILITY

A REPORT

BY THE

SPECIAL COMMITTEE ON AGING UNITED STATES SENATE



DECEMBER 1970

Printed for the use of the Special Committee on Aging

U.S. GOVERNMENT PRINTING OFFICE

53-472 O WASHINGTON: 1970

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(II)

FOREWORD

"I've always heard that solitary confinement is the worst form of punishment. Now I've seen what that means."

> -Testimony from a Community Action Worker before the U.S. Senate Committee on Aging, September 9, 1969.

Solitary confinement is rightly regarded as a harsh punishment to

be imposed only under exceptional circumstances.

And yet, to the witness whose words appear above, "solitary confinement" referred, not to a penalty imposed within a prison, but to a way of life which has become all-too-common among older Americans living in their own homes.

His testimony happened to deal with rural Iowa; he spoke of great distances between farmhouses, of low income and poor health, of the day when the family automobile or truck becomes too old or too expensive or too dangerous to operate. He described people who "are heartbreakingly lonely, forced to live in isolation because they must hang on to the only security they know."

That bitter fate is not limited to rural America, by any means. The Committee on Aging has heard from other witnesses who have encountered such isolation in the midst of cities or on the "Elm Streets" or

"Ridgecrest Lanes" of supposedly comfortable suburbs.

More than one social worker has told us of visits to dwellings in which an elderly person has died, unnoticed by his neighbors and forgotten by his family.

And many elderly couples or single persons have told us they live almost entirely within their own walls, overwhelmed by illness, despair, or fear of crime.

This report has been prepared partially to sound an alarm about

social isolation among the elderly.

But more fundamentally, its purpose is to document the fact that transportation inadequacies are intensifying many other difficult problems faced by the elderly in the United States today. Low-income individuals are hardest-hit, but so are those with fair-sized retirement incomes. Transportation is the lifeline to services they did not need until they became old. Without mobility, they are denied much else.

If, for example, a 70-year-old pays his monthly Medicare premium for physicians' services and then discovers he can't find or locate transportation for treatment, he may well decide to ignore early symptoms

of illness. Ultimately he may be hospitalized instead.

If a community—using federal funds and its own tax money builds a "senior center" with excellent facilities but with little accessibility from public transportation, its usefulness may be limited to those who need it least.

If a widow who lives in public housing is hesitant to go to church because she's heard that purse-snatchers or muggers wait at bus stops, she may well lose vital contacts with the friends she need for wellbeing and peace of mind.

If a man and wife must decide to do without food stamps because they can't afford a taxi to the bank at which stamps are sold, they may soon decide to live on tea and toast in order to have money for

prescription drugs.

There are many other "if's"; and they are discussed on the following pages. In addition, this report offers several recommendations for actions that can and must take place within the near future. For these reasons alone, this report would be useful to legislators, administrators, and those who work directly with the elderly.

In addition, this document has been published approximately one year before a White House Conference on Aging and two months after the enactment of the Urban Mass Transportation Assistance

Act of 1970.

This report is meant to direct the attention of the White House conferees—and those now planning preliminary conferences during the first half of next year—to the importance of transportation as a problem area among older Americans. Conference planners have already designated transportation as a major "need area"; it is to be hoped that they continue to place appropriate emphasis upon this vital

subject.

With enactment of the Urban Mass Transportation Assistance Act, Congress has provided a long-term Federal commitment which is essential for development of new and improved mass transportation facilities. This legislation is intended to reduce our almost hypnotic overdependence upon automobile travel for travel within congested metropolitan areas. The special needs of the elderly should receive due consideration by federal and local officials when they plan new facilities or redesign old ones. It's not enough to produce a bus or a subway system which can be used only by able-bodied commuters; the facilities should be designed for ease of use by the elderly and by others who may not be able to cope with inconveniences. Here again, the Congress has a responsibility. It must make certain that all citizens are served, and served well, by the development of new transit lines.

Much of the information used in this report comes from testimony taken by this Committee, or from studies conducted by Federal agencies or by the National Council on the Aging. A major contribution was made by participants in a workshop on transportation and the aging funded earlier this year by two Federal departments and by the United States Administration on Aging. Commissioner on Aging, John Martin 2 together with others responsible for that joint enterprise, have the thanks of this Committee for their cooperation and

willingness to share their knowledge with us.

Senator Harrison A. Williams, Chairman, U.S. Senate Special Committee on Aging.

¹ See p. 111 for details.
² See p. V for preface by Commissioner Martin and representatives of the Department of Housing and Urban Development and the Department of Transportation.

PREFACE

The Workshop on which this report is largely based ³ represents a milestone in inter-agency cooperation and has served to focus professional and public attention on the problems and potentials of transportation for assisting in improving the quality of life for older Americans.

To the best of our knowledge, the Workshop on Transportation and Aging, convened in Washington, D.C., May 25–26, through a jointly-funded grant to the Polytechnic Institute of Brooklyn, was the first systematic effort to accumulate a body of information on mobility in the later phases of life and among the nation's twenty million Americans over 65.

The Workshop was an essential first step in the process of rational problem-solving. It served to present the transportation problems of the elderly to members of the transportation community and to acquaint the latter with the elderly's needs. On the other hand, social scientists were given an overview of the central concepts of transportation design, economics and operations. Most importantly, however, the Workshop provided an opportunity to evaluate existing information and assure its dissemination and utilization, to identify gaps in knowledge and service, and to point the way to needed research, demonstrations and policies.

It has taken some time to recognize that opportunity for mobility counts heavily among the requirements for an adequate quality of life. With the wisdom of hindsight, it becomes perfectly clear that lack of transportation, in many localities, was, and still is, at the heart of various services delivery problems, a missing component in program planning, and a central component of pressing problems such as social isolation and limited access to social opportunities.

Mobility and transportation are not synonymous. While complementing each other they remain distinctly different. Mobility is an end, transportation one means to that end. Mobility implies the exercise of personal judgment and capacity for movement, transportation implies a means of movement. Thus, improving older people's opportunities for mobility will require more than improved vehicle design, rerouted buses, and traffic safety signals. The effort will require a totality of improved transportation services and improved programming for

³ This report also draws from testimony taken by the Senate Special Committee on Aging and other Congressional units; and it also utilizes findings from other studies.

the aging. There is little point, for example, to the municipal transit authority's purchase of barrier-free buses to transport older people who have no place to go. Recognizing this, we are better prepared to examine the role of transportation in assisting mobility and acknowledge the significance of concerted Federal action on behalf of that effort.

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OLDER AMERICANS AND TRANSPORTATION: A CRISIS IN MOBILITY

DECEMBER 29 (legislative day, DECEMBER 28), 1970.—Ordered to be printed

Mr. Williams of New Jersey, from the Special Committee on Aging, submitted the following

ŘEPORT

INTRODUCTION

Economic deficiencies dominate most problems faced by older Americans.

And—as made clear in recent studies and other documents issued by this Committee—concern about retirement income is well-placed.

Outright poverty, or day-to-day skimping just above poverty levels, afflict the later years of millions of Americans. Our national goal of an "adequate income in retirement in accordance with the American standard of living" is far from fulfillment. A major effort, early in this decade, is needed to put this Nation on the road to true retirement security.

Vital as this effort is, it should not blind policy makers to the fact that the elderly require certain services almost as much as they need adequate income. In some cases—such as a "friendly visitor" to a house-bound elderly individual—the service may be regarded as even more essential than dollars because it enables the elderly person to remain in familiar surroundings, rather than in an institution.

Transportation has a similar "multiplier" effect. With it, a couple or single person can more easily cope with adjustments or hardships that come with age. Without it, they may enter into what has been described

¹ As stated in the preamble to the Older Americans Act of 1965.

as a "syndrome of deprivation." As one sociologist 2 has said of the elderly:

You get low income; you get poor health; you get an absence of transportation facilities, and the net result of this is something that is very different than any one of these things individually. (Emphasis added.)

In this report, the Senate Committee on Aging declares that the transportation-or mobility-difficulties now encountered by many elderly citizens of this Nation have already reached the crisis stage.

Furthermore, the committee sees a genuine possibility that today's problems are likely to be worsened by living patterns already far different than those which existed when today's elderly were young.

In addition, the Committee offers recomendations for action and research intended to ease today's problems while preventing future ones. To borrow from a statement made at a recent workshop on transportation and aging, the goal here "is to permit the elderly to feel that they are leading normal, fruitful lives in a well-balanced community, and not just existing in God's Waiting Room." 3

² Statement by Donald P. Kent, Ph. D., Department of Sociology, Pennsylvania State University, at the Interdisciplinary Research Utilization Workshop on Transportation and the Aging, Washington, D.C., May 25–26, 1970.

³ Statement by Louis J. Pignataro, Director, Division of Transportation Planning, Polytechnic Institute of Brooklyn, at Workshop cited in footnote 2.

"Transportation is a critical need which must be organized and provided to give him [the older person] access to the basic services of the community-consumer needs, food, banking, legal, health, welfare, educational and recreational; as well as to support his need and right to participate in social life." 4

"Mobility is the capacity, the capability, and the opportunity to move, while transportation is the physical means of moving." 5

"Transportation is access to opportunities." 6

"[Our] research consultant described transportation as the glue which can combine services for the elderly."7

PART ONE

CAUSES AND DIMENSIONS OF THE PROBLEM

Definitions and comments of the kind excerpted above are appearing with increasing frequency in conferences, reports, and congres-

sional hearings related to aging.

Partially, this emergence of transportation as a high priority issue is caused by complaints from the elderly themselves. At 6,000 forums conducted in September 1970 as a curtain-raiser for next year's White House Conference on Aging, for example, many participants identified transportation as second only to income and health problems. A surprisingly large number named transportation as the Number One problem.8

Partially, the growing awareness of transportation inadequacies is caused by the dramatic deterioration of transit systems in many urban and rural areas, a trend which is closely related to new living patterns arising from the flow of population to newly developed suburbs, dependence upon the automobile to meet the new requirements of suburban life, and the large numbers of elderly "left behind" in old city neighborhoods and in rural America.

^{*}Statement by Walter M. Beattie, Jr., Dean, School of Social Work, Syracuse University, at hearing before the U.S. Senate Special Committee on Aging, "Long-Range Program and Research Needs in Aging and Related Fields," December 5-6, 1967, p. 97.

*Statement by Mrs. Joni Markovitz, Tri-State Transportation Commission, New York City, at Workshop cited in footnote 2.

*Statement by John H. Bell, Director, Senior Citizens Mobile Service, YMCA of Metropolitan Chicago.

politan Chicago.

News release, White House Conference on Aging, Office of Public Information and Public Affairs, December 1, 1970.

And finally, transportation is receiving more and more attention because recent research findings are focusing attention, not only on problem areas, but upon the positive results which take place when limited, but significant, attempts are made to provide improved mobility for our elders. Helpful as the research is, it also clearly indicates that much more is needed before we can shape a comprehensive national policy on transportation, mobility, and the elderly.

I. THE ELDERLY: INCOME, ATTRIBUTES, NEEDS

Older Americans should be likely customers for good transit facilities. They are numerous (20 million now past age 65; a total of 28 million expected by the year 2000). They have leisure time for triptaking (only about 20 percent have employment of any kind). They have a large aggregate income (about \$60 billion in 1969). In spite of widespread chronic (but not necessarily disabling) illnesses, 95 per cent reside outside of institutions.

But the elderly have other characteristics, each of which diminishes

mobility:

A. INCOME: HALF AS MUCH AS WORKERS

Total income may be \$60 billion for all persons past age 65 in the United States today, but it is thinly spread for most. Here, briefly, is a review of their economic status:9

-Income of older families and individuals is roughly half the income of their younger counterparts. In 1968, older couples had a median income of only \$78 a week. For elders living alone or

with non-relatives it was \$33 weekly.

-One-fourth, or almost 5 million, of all older people live in households with incomes below the poverty level. Since 1968, poverty among Americans past age 65 actually increased by 200,000.10 For all other age groups, poverty declined by about 1.3 million.

Proportionately, older consumers spend a greater portion than younger people on food, housing, household operations and—even

with Medicare—on medical care.

Transportation takes an average of 9 cents out of every dollar in their limited budgets. It is their third highest expenditure, exceeded only by housing and food costs.11

B. MEDICAL AND PHYSIOLOGICAL CHANGES

Older Americans are not only far more numerous than they were just a decade ago; the oldest part of the older population is growing faster than the younger. The median age is now 73. Four out of every 10 older people, almost 8 million, are 75 and over. Of these, more than 1 million are 85 and over. Only a third, or about 7 million,

⁹ Excerpt from paper presented by Herman B. Brotman, Chief, Research and Statistics, Division of Program and Legislative Analysis, Social and Rehabilitation Service, Administration on Aging, Department of Health, Education and Welfare, at Workshop cited in footnote 2. For additional details, see hearings and working papers of the U.S. Senate Special Committee on Aging, "Economics of Aging: Toward a Full Share in Abundance."
¹⁰ Quote from news release of Senator Harrison A. Williams, September 8, 1970.
¹⁸ Based on Bureau of Labor Statistics "Three Budgets for a Retired Couple in Urban Areas of the United States," BLS Bulletin 1570-6 Autumn 1969.

are under 70.¹² Undoubtedly, this increase among long-lived persons is a contributing factor to the greater number of chronic illnesses and decline of some physiological functions. These bodily changes are directly related to transportation needs and problems of the elderly.

Among them:

DECLINING VISION: Peripheral vision (the ability to see things from the side) declines slightly with age. Although one can see large objects easily, such as automobiles, this may hamper the ability to see people rushing past on a crowded street. Approximately 1.9 million older persons are afflicted with diseases that seriously impair vision, however, and of these, about 380,000 are legally blind. With age, there is also a decreased ability to ascertain colors, especially green.¹³

HEARING Loss: Between 5 and 13 percent of all women, and between 7 and 17 percent of men over the age of 65 have some hearing loss, ranging from minimal to significant. Only 4 percent of these indi-

viduals use hearing aids.

The Brain: Reaction time is slightly diminished in older persons. But, according to one geriatrician,¹⁴ "It is the reaction to several events, such as responding to an oncoming car or moving in a crowd,

when it is seriously diminished."

The changes in the brain cells, and diseases such as arteriosclerosis, which cause confusion and disorientation, can create severe problems for older pedestrians so afflicted. The mentally impaired elderly (according to the National Institute of Mental Health, anywhere from 15 to 25 percent of elderly persons living in their own residences have some degree of mental impairment) may be severely depressed and confused, given to wandering and forgetfulness. This, of course, can cause serious problems in any transportation setting.

Locomotion: There is a decrease in speed of walking and performing most tasks, which tends to cause anxiety among older people when they try to catch a bus, move through crowds, or cross at stoplights.

EFFECTS OF MEDICATION: It has been amply documented that the elderly spend more money on drugs and use more medication than any other age group. Of the 20 medications most commonly used by older persons, it was found that 12 have sedating effects on the brain, as a side-effect to their purpose. These medications take the edge off awareness of surroundings and activity; and thus, can be a safety hazard to older pedestrians using them.

In spite of such deterioration, it is estimated that 81 percent of older Americans have the capacity for mobility without assistance. Only 8 percent have some trouble getting around but can manage, possibly using a mechanical aid. Another 6 percent need the help of another person; only 5 percent are homebound. As one authority in

the field has said: 15

The picture of the decrepit, doddering oldster is a gross exaggeration. The overwhelming majority of older people

Based on AoA findings cited in footnote 9.
 Excerpted from paper presented at Workshop cited in footnote 2 by Leslie Libow, M.D., Chief. Geriatric Division, Mount Sinai Hospital Services, Elmhurst, New York.
 Excerpt from paper cited in footnote 13.
 Excerpt from paper cited in footnote 9.

can manage in the community if society permits. They would manage even better if society would encourage such activity through the provision of essential services. (Emphasis added.)

II. CHANGES IN LIVING PATTERNS

Suburbanites have become the major population group of the

United States.

With publication in September of the first 1970 Census returns, the Nation had documentation of the fact that the move to suburbia—begun on a mass scale in the 1920's, interrupted by World War II, and accelerating ever since—had finally left cities behind.

Most large cities, in fact, lost population during the 1960's. But the 25 largest metropolitan regions had gained 8.9 million—almost

solely because of suburban growth.

To older Americans, this latest evidence of far-reaching change in American living patterns has special meaning. In 1969, almost one-third of all 65+ Americans lived in the center city. Of the additional 30 percent living in metropolitan areas, most lived in older suburbs.

As people "left behind" willingly or unwillingly, the elderly faced severe pressures to their way of life and to their very role in life.

And in rural areas, too, the forces for change have become more intense within recent years, but isolation and inattention have perhaps made them less visible.

The magnitude of new social influences upon the elderly—decades in

the making—are suggested in the following two excerpts:

We must look at the people and the society as a whole—the realities of an urbanized, industrialized, and technological age and all of the rapid changes implied. I think you will find at the heart of these changes not only uprooted human beings, but also uprooted concepts and relationships. The extended multi-generational family under one roof is indeed rare today... Pushed out of almost all of its formerly significant roles and concomitant statuses, today's older citizen lives in a state of isolation in the midst of a crowded world of faceless corporations and younger people dependent on current cash wage income with all the insecurity that that implies. 16 (Emphasis added.)

There was a time in American society when there used to be a neighborhood which would have in it a physician, a grocercy store, a church, a recreational lodge and so forth. We now tend to have a new ecology where things tend to be grouped. There will be a shopping center on one edge of the community; there will be a medical center at another point in the community; and you have this specialization of functions located in specific areas... This is obviously... geared to individuals who live in one section and can drive to the shopping center and drive to the medical center and so forth. It obviously... poses problems for the aged.¹⁷

High among those problems are the deterioration of whatever resources—public and private—remain when younger individuals and

¹⁶ Excerpt from statement cited in footnote 9.
¹⁷ Excerpt from statement cited in footnote 2.

families make the move from city to suburb or from the rural country-side into metropolitan areas.

A. "HOUSE ARREST" IN URBAN CENTERS

Old neighborhoods, old buildings, and low-income older people seem to go together almost automatically. Just as experience has demonstrated that older, less mobile people often are found in disproportionate numbers in urban renewal areas, so, too, are a significant number of senior citizens likely to be found in what will become model neighborhoods.

That comment, made at the beginning of hearings by this Committee on the "Usefulness of the Model Cities Program to the Elderly,18 was amply supported at the hearings which followed and by statistical studies. One Model Cities Administration tabulation showed that the population of 60+ was more than 20 percent in six target cities and between 10 and 20 percent in 35 others. Of all the elderly living in the center city, 27 percent were below poverty levels.

High as the proportion now is, it could go higher. Strong evidence

High as the proportion now is, it could go higher. Strong evidence for this conclusion was provided in a study ¹⁹ of a 22-county area which encompasses New York City and portions of northeastern New

Jersey and western Connecticut.

In 1960, there were 1.6 million 65+ persons in the region, or 9.6 percent of the 17.1 million population.

Within 15 years, the number of elderly is expected to rise to 21/2

million, or about 10.6 percent of total population.

This growth, however, will be anything but geographically uniform. In New York City, where there are now more than 1 million persons of age 65 and beyond, the increase may be by as much as 200,000. Some growth is expected in the suburban counties of the region, but there the elderly are expected to comprise a *smaller* share of the total population than they now do.

The implications are, said the report, that expanded social services will be required in the core of the region as well as in the older suburban counties. This shift in age composition has been recognized by many social planners in the region, but the impact has yet to be seen

by some.

But—in spite of the clear need for improved services in the oldest urban neighborhoods, the trend is toward deterioration. For the elderly, this problem is especially severe, as can be seen from these summaries of the situation in three of the cities visited by this Committee for hearings on model cities and the elderly.

ATLANTA: The Model Neighborhood here is home for 45,000 people. There are no physicians, dentists, large chain grocery stores, or banks in the areas. The three pharmacies are all located in the western section. Seventy percent of the housing is substandard. Transportation is so "grossly inadequate," that model

¹⁸ Excerpt from statement by Mrs. Marie C. McGuire, Assistant for Problems of the Elderly and Handlcapped, Department of Housing and Urban Development, at hearing of the U.S. Senate Special Committee on Aging, "Usefulness of the Model Cities Program to the Elderly," p. 20, Part 1, July 23, 1968, Washington, D.C.

¹⁹ As described by Lawrence V. Hammel, Manager, Demand Forecasting Tri-State Transportation Commission, in a paper, "Regional Planning and Implications for the Future," presented at the Workshop cited in footnote 2.

cities directors were considering a "3-level" system providing (1) a passenger van for daily needs within the neighborhood, (2) a beltline bus service around the model neighborhood area and (3) connection of the beltline to the main bus routes serving the rest of the metropolitan area.²⁰ Of the elderly, 50 percent have an income of less than \$1,000 a year.21

SEATTLE: Here, 20 percent of the Model City area population is 65+, including a large number of men living in "single occupancy rooms," all of whom have complex needs embracing health services, adequate housing, nutrition programs, and leisure time activities. There is no nursing home in the area; and "there is a lack of certain home services vitally needed to maintain the el-

derly in an independent living situation." 22

SYRACUSE, N.Y.: Of the 26,000 65+ persons in Syracuse, more than 25 percent live in the model city neighborhood, which covers only 5 percent of the city land area. Model City planners see a clear need "to expand housing, job, and income opportunities." Other factors to be given "searching consideration are safety, transportation, neighborhood facilities, and pedestrian access to necessary services."23

Thus was the situation as seen by government officials now attempting to devise model neighborhood strategies for delivering much-needed services to the elderly and others. How does the situation look to the elderly themselves? A spokesman for older residents of Louisville, Kentucky—testifying in April 1970 in support of the Urban Mass Transportation Assistance Act 24—provided part of the answer when he said that many older persons in cities live under a form of "house arrest." This condition is caused in part by unavailability of transportation, but also by the deterioration of the very facilities that would make it less necessary for them to leave their neighborhoods.

He gave this description:

I looked it up just last night. In an area in which there were 37 drug stores 57 years ago—and I go back 50 years because at that time I was a salesman selling to drug stores—there are now 7 drug stores left.

In an area in which there was 5 drug stores, a little suburb of Louisville, there is none left. In another area there are 7 left out of 14, and this in an affluent area of our

The same thing has happened to grocery stores. Where

²⁰ Excerpt from statement by Mr. John Johnson, Executive Director, Model Neighborhood Program of Atlanta, at hearing of the U.S. Senate Special Committee on Aging, "Usefulness of the Model Cities Program to the Elderly," pp. 429–430, Part 5, Atlanta, Georgia, December 11, 1968.

²¹ Excerpt from statement by Mr. Albert Horvath, Executive Director, Senior Citizens Services of Metropolitan Atlanta, Inc., at hearing cited in footnote 20, p. 434.

²² Excerpt from statement by Mr. Morton Schwabacher, Chairman, Seattle-King County Council on Aging, at hearing of the U.S. Special Committee on Aging, "Usefulness of the Model Cities Program to the Elderly," p. 160. Part 2, Seattle, Washington, October 14, 1968.

²³ Excerpt from statement by Mr. John W. Hildebrandt, Commissioner, Syracuse Department of Urban Improvement, at hearing of the U.S. Senate Special Committee on Aging, "Usefulness of the Model Cities Program to the Elderly," Part 4, pp. 330–331, Syracuse, New York, December 9, 1968.

York, December 9, 1968.

24 Excerpt from statement by Mr. Arthur S. Kling, Chairman of Advisory Committee. Greater Louisville Council of Senior Citizens Clubs, Louisville, Kentucky, at hearing of the Subcommittee on Housing, of the U.S. House of Representatives Committee on Banking and Currency, p. 559, Washington, D.C., March 3-5, 10-12, 1970.

there were 11 independent grocery stores on one highway, there is now one left. There are five chain stores and my wife has to take a bus to get to any one of them, whereas formerly she could walk up to the corner and had the choice of three grocery stores at our nearest corner, about a thousand feet away.

To buy a spool of thread there is only one place on Bargetown Road, a street that extends about three and a half miles. This is in a shopping center where there happens to be a department store. But at no other place can you buy a

spool of thread.

The same thing has happened to doctors' offices. The doctors now have abandoned their neighborhood offices. They moved into the medical centers, and you have to take a bus or car to get to them. Very often you have to cross an arterial highway, with a great deal of traffic, to get to the doctor's

The same way with the movie.

Crime as a Cause of Isolation.—For many older central city residents, fear is a primary cause of immobility—fear of violence and crime.

Fear of course is not measurable. But at hearings before this Committee and in other discussions, it has become clear that the elderly, in increasing numbers, stay at home behind locked doors after dark and even during some daylight hours.

The same may be said of younger persons in high-crime areas, but the elderly are among the most vulnerable victims of street crime. As

one retiree said of the problem in Baltimore: 25

We have two problems with transportation. One of them is we see a bus every half hour, maybe three-quarters of an hour. A lot of our retired people not only don't have the time to stand and wait an hour, a half hour, but they are not able to do it. A lot of them are very ill in some way. They have some handicap in their walking. And a lot of them—we have two things to worry about. If they stand on the corner any length of time, then they don't know whether their pocketbook is going to be snatched away or what is going to happen. A lot of them stay away from churches. They stay away from clubs, the social clubs that we have.

One New York City study²⁶ indicated that of 137 elderly interviewees, each had been mugged at least once.

In Los Angeles, directors of a transportation program for the elderly were puzzled by the large number of complaints about infrequency of bus service.27

Pressed for further information, the elderly bus riders said that they were afraid to wait—for more than a few minutes at a time—at bus stops.

Excerpt from statement by Mr. Norman Seaton, Chairman of Retirees Council, Region 8. United Automobile Workers of America, at hearing cited in footnote 24, p. 562. Cited by Douglas Holmes, Ph. D., Director, Center for Community Research in New York City, at hearing of the U.S. Senate Select Committee on Nutrition and Human Needs, Part 14, p. 5304, Washington, D.C., September 9-11, 1969.

37 Abstracted from statement presented in Workshop cited in footnote 2 by Mr. Donald Dove, Project Director, Transportation Employment Project, Los Angeles, California.

Much the same comment was made in other papers presented at a recent conference (see footnote 2). There is increasing evidence that—even public transportation may be available—older people may be too frightened to walk to the bus stop, train or subway system and then wait for transportation to arrive. (See appendix 2 for news article on "Jewish War Veterans Project Will Aid Jews in Inner City.")

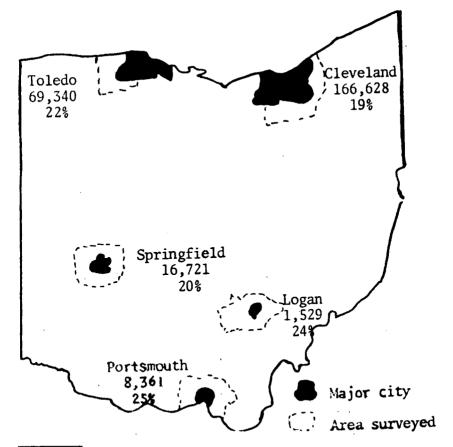
B. THE OHIO STUDY: BIG CITIES AND SMALLER ONES

Changing life patterns among the elderly—and limited mobility of the older population—are not limited solely to the central city areas

already discussed.

A new study ²⁸ of five Ohio cities—ranging in population from 876,000 to 6,000 (see map for numbers of elderly) has provided valuable information about the extensiveness of transportation problems among the elderly in widely-varying population centers.

PROFILE OF THE FIVE COMMUNITIES SHOWING POPULATION OVER 55 YEARS OF AGE AND PERCENT OF 55 YEARS AND OVER TO TOTAL AREA POPULATION



²³ "Transportation Needs of Older People in Ohio," a study of persons aged 55 years and over in five Ohio cities published in 1970 by the Ohio Department of Mental Hygiene and Correction and the Ohio Division of Administration on Aging.

And, as the following summary suggests, mobility limitations loom large for the 3,447 persons whose responses were analyzed:

-42 percent reported the need for transportation beyond any

available.

-"A shocking 22 percent had annual incomes of \$1,000 or less," and "altogether then the project data indicated that 58 percent (some 2,000) of those surveyed had incomes under \$2,400," clearly indicating, "that there will be little or no money available for transportation after the necessities of housing, food, utilities, household supplies, medicine, and clothing are purchased."

-Most desired activities for which there were inadequate means of travel were: shopping, 24 percent; visiting friends, 23 percent; attending church, 23 percent; keeping doctor and/or dentist appointments, 22 percent: recreation and social activities, 14 percent.

Some 31 percent reported owning a car while 34 percent reported

the ability to drive.

—Of the 55 percent of respondents who admitted to physical limitations, 41 percent said they had difficulty in walking and 20 percent said they had difficulty in seeing. Only 1 percent was confined to a wheel chair.

-"Low income, high transportation rates [fares], lack of friends, relatives or volunteers to drive individuals to places they must go and lack of appropriate services combine to make life less pleasant than it could and should be for our senior citizens."

Seeking further information on mobility needs of older Ohioans, researchers compared findings from the 5-city study with a study of Mansfield ²⁹ and other communities in Richland County. Mansfield, the county seat, has a population of 52,000; the total county population is 135,000. Despite differences in scope, method, and certain findings, the 5-city survey and the Richland County survey yielded important similarities in pervasiveness of low-income, age ranges, and the need for lower-cost transportation as the most important single factor.

"Finally," the report declared, "it must be noted that the State study established that 43 percent of those served had transportation problems and the Mansfield reported 41 percent. This finding poses a challenge of considerable magnitude for community solution in serving

more effectively our older citizenry."

PROJECT FIND: SOME SIGNIFICANT FINDINGS—Another study which dealt with a "mix" of communities—though on a much broader geographical scale than the Ohio studies—was offered by the National Council on the Aging in its final report on Project FIND.³⁰

Project directors described the frequency of transportation difficulties expressed by the elderly poor as "probably one of the most surprising findings of Project FIND." They reported that one-third of the poor respondents have transportation difficulties, and that about one-fifth of the "near-poor" also so reported.

The FIND report added: 31

Of these, 41% of the poor and 30% of the near poor said they had difficulties with transportation often or very often;

²⁰ "Transportation of the Aging in Richland County and Ohio," by Jerome Kaplan and others, the Ohio State University Research Foundation, 1970.

²⁰ "The Golden Years . . A Transhed Myth," a report prepared for the Office of Economic Opportunity, January 16, 1970.

²¹ P. 82, publication cited in footnote 30.

23% of the poor and 19% of the near poor had trouble occasionally. Thus, only about 37% of the poor and about onehalf of the near poor who reported having transportation dif-

ficulties find these problems not to be major.

The reasons given for lack of transportation are usually "cannot afford transportation" (91% of those lacking transportation often or very often), and "public transportation is not very good" (67% of those lacking transportation often

or very often).

Amount of income appears to be very important in the degree of difficulty experienced. Very small amounts of income added to that of persons living at the poverty line appear to result in considerable alleviation of transportation problems. Indeed, the most striking aspect * * * is the substantial improvements in transportation which are indicated just at the point of the poverty line. Thus, fewer couples with incomes of \$2000-2499 than those with incomes of \$1500-1999 report difficulties often or very often. This is even more striking in the case of single persons reporting difficulties often or very often at the \$1500-1999 level as compared to the \$1000-1499 level. Similarly, the percent of those reporting difficulties rarely rises appreciably for either couples or individuals with incomes over the poverty line.

C. RURAL AMERICA: LIMITED RESOURCES, MAJOR NEEDS

Rural America is not readily definable. It encompasses mountain belts, gently rolling farmlands, communities that may be "just over the next ridge" from each other or hundreds of miles apart. Its flatlands are as varied as the desert or the wheat plain. Its people may be found within a few dozen miles of the biggest metropolis.

But, if no definition will fit, a general description has been of-

fered: 32

... a rural area is not necessarily in a farming belt, nor is it necessarily a town which has a specified population, such as 2,500 or under. Instead we can say that a rural area is one in which:

1. Population is sparse, and small concentrations of popula-

tion are few and far between.

2. Delivery of services—including transportation or health care—is rendered more difficult by wide dispersal of population and limited sources of funding;

3. Where the countryside is not given over primarily for

industrial purposes.

For its study of "Older Americans in Rural Areas," the Senate Committee on Aging has taken testimony in several states which have large rural populations. Here again, changing life patterns are intensifying transportation problems of the elderly. Some examples:

²² Statement by Senator Vance Hartke at hearing of the U.S. Senate Special Committee on Aging, "Older Americans in Rural Areas," Part 1, p. 2, Des Moines, Iowa, September 8, 1969.

Iowa: As smaller "family farms" dwindle in prosperity and number and younger people move to other states, the percentage of elderly rises in rural Iowa; this trend may continue into the 1980s. 33 Twelve counties already have 16 percent of their population in the upper age bracket. "Transportation," said the former Governor of the State, 34 "is a major problem for people residing in small communities and in rural areas. Passenger service by railroad is almost non-existent, and where it does exist, persons go long distances to reach terminals that accept passengers. Transportation by motor bus is also non-existent in a large portion of the small towns . . . and in many of the smaller communities there is no taxi service."

EASTERN KENTUCKY: Dwindling employment in coal mines has been a major reason for out-migration by the young. Left behind, in small towns or "up the hollow" by dirt road, are the elderly. "Few people ever visit them. Those they know best and are most interested in live hundreds of miles away and seldom return." wrote one witness, author of "Night Comes to the Cumberland." 35 The President of the Senior Citizens Association of Eastern Kentucky told the Committee: "A problem closely related to loneliness is one in need of transportation . . . The need to see a physician, to purchase drugs, to purchase groceries, is a hard one to fulfill for the older person. He must depend upon the public facilities offered, and in the rural areas this is limited mostly to taxicabs which are expensive. Neighbors oftentimes offer their services in assisting the older person with his transportation needs, but too often this is not dependable enough to offer the senior citizen the security he needs."36

Indiana: Many factors, including the high cost of land and the property tax, are causing a decline in small scale farming. A Farmers Union spokesman 37 said that transportation is perhaps the biggest problem faced by rural Americans: "But when economics . . . failing eyesight . . . or when insurance policies stop, then the problems of the rural elderly increase rapidly. . . . Buses have bypassed many rural areas. Trains no longer

MISSISSIPPI: "In this area, the Central Mississippi Delta," said one witness 38 at a hearing in Greenwood, "the percentage of the aged is growing faster than that of other areas in the State." Young persons migrate in hopes of employment opportunities, leaving elderly relatives "lacking the knowledge and skill to pro-

vide their own health care." A representative of the Tufts-Delta

Statement by Edward B. Jakubauskas, Director and Professor of Economics, Iowa State University, at hearings cited in footnote 32, p. 48.

4 Statement of Honorable Robert D. Blue, Chairman, Iowa Commission on Aging, at hearing cited in footnote 32, p. 9.

5 Excerpt from statement by Harry M. Caudill, Attorney at Law, Whitesburg, Kentucky, at hearings cited in footnote 32, Part 3, Fleming, Kentucky, September 12, 1969, p. 204.

5 Excerpt from statement by Mr. Clyde H. McKee, President, Senior Citizens Program, Inc., of Hazard, Kentucky, at hearings cited in footnote 35, p. 222.

7 Statement of Dr. Blue Carstenson, Director, Farmers Union Manpower, Senior Member Council, and Green Thumb Programs, at hearings cited in footnote 32, Part 4, New Albany, Indiana, September 16, 1969, p. 251.

38 Statement by Mrs. Leola Williams, Project Director, Food and Nutrition Program for Aged, STAR, Inc., at hearing cited in footnote 32, Part 5, Greenwood, Mississippi, October 9, 1969, p. 326.

Health Center said that almost total lack of transportation is a major obstacle to provision of health care. Said another witness: 39

Few elderly people [here] have ready access to transportation. Many live in relative isolation, often residing in a . . . house way back in the woods off some cotton field . . . At the present time, we know of many elderly people who actually give up a part of their food to buy transportation to go get food stamps—those fortunate enough to buy them.

ARKANSAS: This is a State of widely varying rural areas, including wide expanses of mountains and delta farmlands. Though new agricultural methods and increased tourism are promoting prosperity, much of the rural elderly population suffers from limited economic resources and remoteness. The director of a project called CASA (Community Activities for Senior Arkansans) told the Committee that lack of mobility is one of the greatest of their problems: 40 He asked:

How does a widow living alone in the rural areas get to the doctor's office when she is ill; to the stores to purchase food, drugs, and clothing; to church to worship; or to the hospital if she has an accident? In most cases she has three choices: she can, in some cases, with her already meager income, hire a neighbor to take her, or she can walk. Or, as is too often the

case, she can do without.

IDAHO: The Committee took testimony in a small community in

which one long-time resident said this: 41

These older people have done the hard work. They have harvested the timber; they did some mining; they have run the mills; they have milked the cows; they have picked the fruit; and they built the churches and schools and raised tremendous families. .

In this Idaho valley area, in which the residents—as described by the hearing chairman—have a "spirit of sturdy self-direction," the State and local government had joined with the people in providing a bus service which, while greeted with some suspicion, has become an integral part of their way of life. Later, at an afternoon hearing in Boise, the director of the Idaho Office on Aging commented further: 42

The top priority program for the elderly in rural areas is transportation. However, transportation is a broad term. Transportation for what? Emergencies, semi-emergencies, shopping, recreation, relief from isolation, pick-up for commodity distribution, over what type of terrain distances to be traveled, costs versus maintenance. Idaho has experimented with airport-type limousines, station wagons, school buses,

Statement by Mr. John Hatch. Director of Community Health Action, Tufts-Delta Health Center, Mound Bayou, Mississippi, Part 5, hearings cited in footnote 38, p. 348.

Statement by Mr. J. R. Jones, Project Director, Arkansas Farmers Union CASA Project, at hearings cited in footnote 32, Part 6, Little Rock, Arkansas, October 10, 1969, 426.

Statiment of Mr. Paul Owens, Eagle, Idaho, at hearings cited in footnote 32, Part 7, Emmett Idaho, February 24, 1970, p. 479.

Statement of Mr. Herb Whitworth, Director, Idaho Office on Aging, at hearing cited in footnote 32, Part 8, Boise, Idaho, February 24, 1970, p. 526.

volunteer passenger cars, reduced taxi fares. While we feel we have the answers to some types of transportation, each of these would meet transportation problems in a rural area, but not all of them. Each, in itself, can be quite expensive.

WEST VIRGINIA: AN INTENSIVE LOOK

Transportation emerged so often as an issue at the hearings on the rural elderly, that two days of field hearings ⁴³ in West Virginia were devoted almost entirely to that topic.

Public transportation is virtually non-existent, and if a friend can take you to get the medication [you need] you will probably be charged anywhere from \$5 to \$22 for the services.

So said Mrs. Joan Ross, Executive Director, Southwestern Community Action Council, Inc. Mrs. Ross also provided the Committee with some statistics from the Project FIND Study, conducted in three West Virginia counties in 1968, which point up the transportation problems facing the rural elderly. Out of a subsampling of 508 persons from Wayne and Lincoln Counties (from the original 4,500 people surveyed in Cabell, Lincoln and Wayne counties), well over half (63.1 percent) said they had trouble getting medication because of transportation problems. More than one-quarter (30.2 percent) could not shop for themselves.

A dramatic case-in-point was cited in the West Virginia Commission on Aging report on the State White House Conference on Aging forums conducted throughout West Virginia this past September: 44

Forums were told of elderly people who could not get to the doctor's office or to the drug store to get a prescription filled because they had no way of getting there. Neighbors, disadvantaged themselves, often charge to take older people to town, and if it is necessary to wait all day at a doctor's office, there will be an extra charge for the driver. One man in a rural area adjoining Kanawha County told his Forum that a single trip to the doctor's office in Charleston had cost him one-third of his monthly social security check. Living in an area with neither bus nor taxi, he paid a neighbor \$9.50 to drive him for a nine a.m. appointment. He actually was seen by the doctor at 2 p.m., so he had to give the driver, who was waiting in the car, a dollar for lunch. Total so far, \$10.50. The doctor charged him eleven dollars for the examination and a laboratory test. Total so far \$21.50. Two prescriptions, filled in Charleston on the way back home, cost him nine dollars and fifty-three cents. Total for the day: \$31.03, none of it covered by Medicare. Time: 10½ hours, from the time he left home at 7:30 in the morning until he returned, exhausted, at six in the evening. One result—it would be a very long time before he would feel able to go to the doctor's again,

⁴³ Part 11, hearings cited in footnote 32. Dogbone-Charleston, West Virginia, October 27, 1970: Part 12, hearings cited in footnote 32, Wallace-Clarksburg, West Virginia, October 28, 1970.

49. 10, West Virginia Commission on Aging report on White House Conference on Aging, State Forums, 1970.

although the physician told him to return in two weeks. Another result: the driver told him he would have to charge \$12.00 for the next trip if it again meant all day.

According to one witness at the West Virginia hearings, "If you live up a hollow and your road washes out, it does not make any difference if you are rich or if you are poor, or if you are young or if you are old, you still can't get out of that hollow. If you need medical services and you live up a hollow and there aren't any medical services . . . or any health services to speak of for anyone in the county, it does not make any difference if you are old or young or rich or poor if the service is not there . . .".

Perhaps the most debilitating result of the out-mitigation from rural America is the almost total lack of (accessible) medical manpower. Coupled with non-existent or inadequate transportation, this presents an insurmountable barrier to the good health and mobility of older persons. It is not uncommon for an entire rural community to be served by one elderly physician—if at all. And, that physician may be as far as 25 miles away from an individual's home often over roads that are

impassible during inclement weather.45

One such West Virginia physician, Dr. G. O. McClellan, testified before the Committee this past year. At 60 years of age, he told of keeping his office open 24 hours a day, 7 days a week, because he and one other physician (who is past 85 years of age) serve the entire county—some 17,000 persons. He illustrated still further, the direct relationship between transportation and health in rural areas:

We see people who have been sick or acutely ill for several days and we sometimes ask, "why have you waited so long?" They say: "well, I live in such and such a place, it is only Saturday or Sunday that I can get anyone to bring me to the doctor's office." The people are working during the week and there are only one or two cars in the community and . . . therefore we have got to depend when they are not working or on Sunday.

He continued, "Most of the time you have to pay [for the transportation] . . . because in the community where someone does this work, they are doing it so often they could not afford to do it without some pay."

III. THE DECLINE OF PUBLIC TRANSPORTATION

We live with basically historical hangovers in the design of transportation networks, most of which are arterially oriented, that is, oriented to a single center, and it is almost impossible to find a transit system that provides anything like adequate peripheral or lateral movement.—From Statement made by Director, Program of Urban Transportation of Massachusetts Institute of Technology May 26, 1970.46

Older Americans, as this report has already suggested, are heavily dependent upon public transportation—where it exists.

And yet, such access to mobility is denied to them more and more not only because of their own economic problems and other personal

 ⁴⁵ P. 7, report cited in footnote 44.
 46 Paper presented by Mr. Henry Bruck at Workshop cited in footnote 2.

factors, but also because of a general decline in transit capability in

large and small communities throughout the United States.

That decline has been discussed in some detail within the Congress of the United States within recent years and, for purposes of this report, will be only briefly summarized here: 47

-Fares increased threefold from 1945 to 1968 but the number of

passengers decreased by two-thirds.

—American Transit Association studies show that an industry-wide deficit of \$11 million in 1965 had risen to \$130 million in 1968.

-Some 120 companies have disappeared since 1954 as a result of bankruptcy, abandonment, or absorption into other companies. It should be remembered that terminations or reductions of service are not limited to the "big city." Of the 120 shutdowns or mergers, 70 were in cities of less than 25,000 population. (There also seems to be an inclination to take corrective action in the smaller communities: 27 grants have been made under existing federal mass transportation programs to cities of less than 25,000 population, and a preponderance of the total number of all grants have gone to cities of less than 500,000.)

Adverse Effects of the Decline

Fifty to eighty percent of transit riders in metropolitan areas have a family income of under \$4,000. Increases in fare levels work hardships on those still in the work force, but for the elderly the problem is even more severe, as indicated in this summary of the adverse effects of the decline in public transit 48 (also summarized from report cited in footnote 47).

Growing difficulties for the great numbers of people who cannot afford private automobile transportation or who cannot use it readily (e.g., the aged, the young, and the handicapped);

Increased public costs for streets and highways to handle the accompanying growth in automobile traffic and, if present trends continue, a likely doubling of that cost in the 1970's;

Continuing, frustrating, and expensive congestion which does not diminish because new highway capacity is soaked up by induced demand;

Adverse environmental impact of the private auto-highway system in urban areas, particularly the heavy contribution to urban air pollution of more and more private autos traveling at reduced speeds; and

Inefficient use of many current urban highway and street networks, through the increasing use of these systems by

low occupancy vehicles in urban areas.

Effects of Fare Increases.—Since the 1957-59 base year, local transit fares have increased by 2½ times as much as all other items on the Consumer Price Index.

⁴⁷ Material abstracted from Senate Report 91-633, 91st Cong., December 22, 1969, A Report of the Committee on Banking and Currency to accompany S. 3154, Urban Mass Transportation Assistance Act of 1969.
⁴⁸ P. 6, report cited in footnote 47.

In Kansas City, transit fares were recently increased from 35 cents to 50 cents. Many elderly persons in that city-especially low-income individuals-have been restricted to their own areas because of the increase.49

Washington, D.C. raised transit fares from 30 cents to 40 cents during the past year. Approximately 24 percent of the elderly residing

in this Capitol city have incomes under \$1,000 a year.50

In Chicago, transit fares were recently raised from 40 to 45 cents for regular passengers. Although the reduced fare for the elderly 51 has remained at its original rate of 20 cents (one way), transit fares may be increased again shortly, and at that time the reduced fare may also increase. If and when this occurs, even reduced fares may be too

costly for many elderly Chicagoans.

Problems in Paterson, N.J.—Approximately 20 miles from New York City, this historic city—once a hub for the silk mill industry faces transit problems similar to those in other smaller cities which have been surrounded by huge metropolitan areas. During a recent conference on transportation and the elderly,52 the Chairman of the Passaic County Council on Aging, said that several bus and train schedules within the city and in the county as a whole are designed for the New York Commuter rather than the inter-county traveler. He added:

Little or no improvement has been realized in public transportation on a local basis. Major attention for the future is focused on highways, rather than municipal and county roads or means of expanding public conveyances.

To the elderly person living in Paterson, the transportation deficiencies have very direct consequences. As summarized by the Executive Director of the City Office on Aging, they are: 53

1. Cost—which limits mobility for those on limited fixed income. This relates to employment for those who need a little extra work to supplement social security payments, participation in education, recreation and social events, visiting family, friends, clinics, physicians, hospitals, shopping, etc.

2. Schedules—during week-days and Sundays long waits are necessary involving time and exposure especially danger-

ous to health in bad weather.

Many people are deprived of work and opportunity to worship in their own Churches because they have no way to get there.

3. Routings—involving two fares are an extra drain on the pocket book and limit older people to their own living areas or neighborhood.

⁴⁰ From paper presented by Mr. Henry Perry, Director, Multiservice Transportation Project, Kansas City, Missouri, at Workshop cited in footnote 2.

⁵⁰ From testimony by Mrs. Anne B. Turpeau at hearing cited in footnote 26, p. 5325.

⁵¹ See "Reduced Fare Programs" in Part Two of this report.

⁵² Excerpts from testimony at the conference were entered into the Congressional Record of December 19, 1969, by Senator Harrison A. Williams, beginning on p. E10790.

⁵³ Miss Constance Midkiff, Executive Director, Paterson, New Jersey, Office on Aging.

4. Lack of safety in the loading and unloading zones is often reported. Many complain of the difficulty of getting on and off busses. The handicapped are virtually isolated because of this problem.

THE COST OF CORRECTIVE ACTION

The Institute on Rapid Transit—representing systems carrying more than 2 million passengers in the United States—has declared that the "crisis is now" in public transportation. William J. Ronan, Institute President and Chairman of the Metropolitan Transportation Authority of New York, has argued before Congressional units for a Federal commitment "on a large enough scale and on an assured and continuing basis."

"To do the job," he told one committee, 54 "the Federal assistance, we think, should be in the order of the magnitude of \$10 billion minimum assistance for the next decade. The rapid rail transit needs—subways, commuter railroads, and other guided systems for moving people—alone will require under our most recent estimates \$17 billion for essential improvements and extensions and for urgently needed new

systems."

(Additional discussion of urban mass transit legislation may be found in Part III, Recommendations.)

Summary 1970-79, capital requirements of the rapid transit industry—preliminary

4.0	
	millions
1. Existing rapid transit systems (New York, Chicago, Boston, Philadelphia, Cleveland, South Jersey, San Francisco):	
ModernizationNodernization	\$2, 594 5, 396
Total	7, 990
2. Existing commuter railroad systems (New York, Philadelphia, and North Jersey):	
ModernizationNew facilities	880 428
Total	1, 308
3. New rapid transit operations (Seattle, Los Angeles, Baltimore, Atlanta, Pittsburgh, Miami, Minneapolis-St. Paul, Washington)	8, 410
Grand total	17, 708
Source : Institute on Rapid Transit.	

To the older American, the growing national commitment—and the need for a greater commitment—in the effort to end the decline of public transportation is an issue far transcending his individual convenience and ease in reaching essential services. If present deterioration continues, today's hardships—and even dangers—will multiply and intensify. If, on the other hand, the present trend is altered for the better, the elderly will be among

those who benefit most.

⁵⁴ P. 59, hearings before the Subcommittee on Housing and Urban Affairs of the U.S. Senate Committee on Banking and Currency, July 23-24, 29, October 14-16, November 18, 1969, on S. 676, S. 1032, S. 2656, S. 2821 and S. 3154.

IV. THE ELDERLY AND THE AUTOMOBILE

Automobiles have been the major reason for the decline in public transportation, growing in popularity with the advent of post-World War II affluence and the dispersal of people and jobs to the suburbs.

But for the older person, the automobile has only limited value and in many ways it is his adversary, whether he is a would-be driver or a pedestrian.

A. THE DRIVER

Today, over half of all households with heads aged 65 and over in the United States own automobiles (55.1 percent)—an increase of over 5 percent age points since 1960, according to data based on a July 1970 Census report. 55 However, because most older households do not own newer-model automobiles—35.2 percent own 1966 or earlier models—car ownership alone does not assure the elderly that their transportation needs will be adequately met. The economic status of many older Americans might make it difficult to pay for the maintenance and repair costs of these older autos. In addition, automobile ownership does not assure the elderly of the ability to maneuver today's high-powered vehicles over streets, roads and highways that

have changed considerably since they were younger.

Effects of Changing Highway Design.—The very improvements in the Nation's highways that have helped create our mobile society may present barriers to the mobility of older drivers. High speed high-ways, expressways and freeways, and changing traffic patterns in their own communities, may conspire to make elderly drivers non-drivers most of the time.

There is increasing evidence that today's older drivers may limit themselves to certain times of the day in which they feel safe to drive, or the distances they will drive. 56 Failing vision causes many older drivers to drive only during daylight hours. Indeed, many are issued licenses which specify daylight driving because of poor night vision.57

The changes in highway design have also changed the face of many cities across the Nation. San Antonio, for example, is now "a big wheel with three highways cutting it into wedges . . .".58 Thus, even city driving tends to be more complex, and many older persons will only drive within their immediate neighborhoods.

Moreover, the improvement and expansion of our highways and the development of expressways and freeways, have produced "compartmentalized cities." Instead of neighborhoods, we now have the medical center, the education center, the business center and the shopping

center, each of which may spread over many acres of land. Once an older person reaches any of these "centers" and parks his car, he may find it extremely difficult to move about within the area. With the

See Appendix 3, p. 78 for tables on "Percent of Households Owning Cars, by Age of Head, Household Income, and Number of Cars, January 1960 and July 1970" and "Percent of Households Owning Cars, by Age of Head, Household Income, and Model Year of Latest Car Purchased, July 1970" prepared by Herman B. Brotman, Chief, Reports and Analysis, Administration on Aging.

From study on "Public Transit and Retired People," by Frances M. Carp, Ph. D., Research Specialist and Associate Director of the Administration in the Adult Development Program at the Langley Porter Neurological Institute, San Francisco, under a grant funded by the Administration on Aging.

From study on "The Mobility of Retired People," by Dr. Carp.

In paper presented by Dr. Carp at Workshop cited in footnote 2.

decline of the neighborhood, the "center" is becoming the only resource for the fulfillment of shopping, medical and other needs of the elderly. Thus, a question raised by one expert at a recent conference ⁵⁹ has particular bearing on the mobility of older persons today:

Of what use is it to bring an elderly person... to the corner of the shopping center if there is no internal transportation system to assist him in traversing the several acres of parked cars or moving from area to area within the center... We have yet to direct our attention to either inter- or intra-center transportation.

The Problems of Licensing.—Although 42 percent of all older Americans are licensed to drive, there is a tendency with increasing age to lose the license.

The aforementioned Tri-State Transportation Commission Study found that 76 percent of those surveyed were not licensed to drive. Although automobile ownership increases with rising income, the study found that of the high-income elderly surveyed, 80 percent had cars available, but only 37 percent were licensed to drive. ("Availability" presumes that the automobile may not belong to the driver, and therefore he might drive less.)

Many elders have difficulty renewing drivers' licenses after age 65. These ex-drivers, who have been dependent on an automobile for transportation for many years, often suffer the most severe loss of mobility.

A recent study indicates that there may be little reason for an arbitrary refusal to renew drivers licenses after age 65. Some major findings of the study show that drivers aged 65 and over:

—"Averaged 37 percent fewer accidents than would exist if their proportion of accidents were in exact ratio to their driving population.

—Represented 7.4 percent of the total driving population in areas surveyed, [but] they were involved in only 4.8 percent of all accidents.

—Averaged lowest of all age groups in the frequency of injury-producing accidents—40 percent below their proportionate share of the driving population.

—Averaged 7 percent fewer fatal accidents than their proportionate share of the driving population." 60

But, the elderly do have real difficulties in driving. With advancing age, there is a general decline in physical abilities. Reaction time slows, vision and/or hearing may be impaired, and the older driver may lose confidence in his capabilities. Thus, according to the study, "[T]he older the driver becomes, the more skilled in compensatory driving he must become to maintain his overall competence." ⁶¹

The Special Problem of Insurance.—Older drivers, living on fixed incomes, have been hard-hit by auto insurance rates which have in-

⁵⁰ In paper presented by Louis Gelwicks, Ph. D., Associate Preceptor for Architecture at the Gerontology Center, University of California at Los Angeles, at Workshop cited in footnote 2.

at the Gerontology Center, University of Camfornia at Los Augeles, at Wolkshop Cited in footnote 2.

© University of Denver College of Law study of "The Senior Driver in the United States" covered a statistical evaluation of licensing and accident involvement in 30 States and the District of Columbia. Funded in part under a grant from the Administration on Aging, March 1970.

© P. 18, study cited in footnote 60.

creased steadily over the past ten years, perhaps by as much as 50 percent.62 Other factors which may cause insurance problems for the other driver:

-He may find, after a lifetime of safe-driving, with no accidents; that his insurance is arbitrarily cancelled. 63 When he applies for a new policy elsewhere, his application is likely to be turned down because of the previous cancellation. 64 In many instances little or no consideration is given to the reason for cancellation.

-He may be relegated to the costly "assigned risk" category, 65 and be forced to pay about twice the amount than for normal automobile insurance for severely limited liability coverage. 66 Most plans of this type offer no coverage for collision, fire or theft.

As opposed to voluntary insurance plans which allow the insured semi-annual, quarterly or in some instances, monthly premium payments, assigned risk plans have no provision for premium financing. Thus, an applicant must pay the total premium if he wishes coverage. And, he must pay significantly higher finance charges and interest rates. Therefore, an elderly driver insured under an assigned risk plan has the expense of high finance

charges added to already costly premium rates.⁶⁷
An unexpected finding from a new study of auto insurance funded by the Department of Transportation,⁶⁸ is the number of elderly applicants (for assigned risk plans) who had not been previously insured. More than 10 percent of the older applicants in five of the eight plans studied, indicated no previous insurance. 69 The study speculates: "It could be reasoned that the lack of insurance was the result of not having a driver's license. However, this reasoning would appear to be invalid because in five of the six states in which information was available, over 95.0 percent of the over age [65] applicants had been licensed for 3 or more years. . . . In light of the above findings it would appear that these applicants simply chose not to purchase insurance and in New York and North Carolina drove in violation of the compulsory insurance statutes." 70

⁶² As reported in a "Wall Street Journal" article, October 6, 1970, "Many Motorists Find Auto Policies Cancelled for No Apparent Reason."

⁵² In a study being compiled by the Department of Transportation on auto insurance. Chapter IV of Motor Vehicle Assigned Risk Plans "The Characteristics of Assigned Risk Applicants Under 25 Years of Age and 65 Years of Age and Greater", it was found that: "The everwhelming majority of the over age [65] applicants had previously been insured . . . This of course indicates that at some point in the past these applicants had insurance but for one or a combination of reasons it was either cancelled or not renewed," p. 86.

insurance but for one or a combination of reasons it was either cancelled or not renewed, p. 86.

4 Senator Harrison A. Williams, in a statement to the Antitrust Subcommittee of the U.S. Senate Committee on Judiciary, on July 24, 1968, declared that many difficulties with automobile insurance coverage "spring from certain highly questionable attitudes about aging and the aged in this Nation. Those attitudes should be challenged at every opportunity"

4 The study cited in footnote 63 noted that "the proportion of assigned risks 65 and over is much greater than their proportion of the driving population. For example, in 1967, about 7.5 percent of all licensed drivers were 65 and over. This is somewhat less than one-half of their proportion in the plans," p. 29.

5 See Appendix 3 for chart showing "Average Basic Limits Premiums for Assigned Risk Applicants and Other Operators, Assigned Risk Applicants and the Voluntary Market," p. 68 report cited in footnote 63.

5 P. 42, study cited in footnote 63.

5 P. 42, study cited in footnote 63.

6 Automobile Insurance and Compensation Study," by the Department of Transportation. The study will be presented to the Office of Management and Budget early in in 1971 for review. (Twenty-three of the twenty-five volumes included in the study have been printed as of this date.)

5 P. 86, from study cited in footnote 68.

7 Pp. 86-7, from study cited in footnote 68.

While the Department of Transportation Study contains some valuable information about the older driver,71 Many important questions remain unanswered (and according to the Department of Transportation are not likely to be answered in the final two volumes). Considering the number of older licensed driversthose who are insured and who would like to be insured—a special detailed study is needed to determine the characteristics of these drivers and their problems with all types of auto insurance plans.

The study makes clear, however, that the older driver may be discriminated against simply because of age, when applying for auto insurance. For example, if (as the study states) the number of "clean" 72 elderly applicants is considerably higher than other age groups,73 then why do these people have such difficulty in applying for or renewing insurance policies? As hypothesized in the study; because so many of the elderly applicants are aged 70 and over, insurers could argue that, "Even though the applicant's past record is clean he will become a poorer driver and therefore is undesirable."

Shouldn't an older driver be given the chance to prove whether he is, in fact, a poor risk, before being arbitrarily refused insurance?

B. THE PEDESTRIAN: A FORGOTTEN MAN?

I am afraid to cross the streets downtown anymore. The cars go by so fast and I am unable to see the traffic signals. Also I am such a slow walker that when the light changes I am still in the middle of the street. So I have given that up completely.

That comment, made by an older woman in Ohio,74 sums up the problems faced by aged persons who attempt to cope with downtown street crossings or even with walk lanes in highway shopping center parking lots.

It also helps explain these facts:

- 1. Of the 10,000 pedestrians killed in 1969, 2,800 were older Americans.75
- 2. Their fatalities were almost three times as much as their ratio to overall population.
- 3. In terms of all pedestrian accidents, the elderly comprise 25 percent of the victims and only 10 percent of the population.76

One reason for the vulnerability of the elderly is the general decline in physical condition that often accompanies aging (see Section I of this chapter). Older people may contribute to their own pedestrian accidents by:

-Improper crossing at intersections.

-Jaywalking or crossing between intersections.

⁷¹ Primarily included in the study cited in footnote 63.

72 The term "clean" refers to those applicants who have no prior accidents or convictions, p. 56, study cited in footnote 63. A comparison is made of the characteristics of 3° P. 90-91, study cited in footnote 63. A comparison is made of the characteristics of assigned risk applicants under 25 years of age and 65 years of age and greater. It was noted that the number of elderly clean applicants was higher than other age groups.

74 P. 66 report cited in footnote 29.

75 Excerpt from paper cited in footnote 60.

76 Report cited in footnote 13.

-Walking on the roadway (in many rural areas, there is no place else to walk).

-Walking into traffic from between parked cars.77

But, the danger of accidents is only one aspect of the problem. The very environment in which older people live often makes pedestrianism a difficult and unpleasant experience.

The neighborhood still plays a very important part of the lives of many older Americans. It is not only where they live, but where they

see friends, shop and go to church.

For example, a survey of 750 registrants in the New York City Reduced Fares program found that the majority of all trips taken were walking trips—to neighborhood food markets, to church, to acquire medical care, or simply to take a walk in the neighborhood. Only a third of the trips involved public transportation. It is, in the words

of one expert, their "life space." 78

But today, neighborhood populations change from year to year, and older residents tend to remain long after relatives and friends have moved away. Without the sight of familiar faces or landmarks, such as the corner store, these older people may find the neighborhood that is so much a part of their existence, an alien and unfriendly place. Many of these communities have deteriorated and are now characterized by widespread crime. The elderly resident who once enjoyed walking in his neighborhood no longer does so, because he may be afraid of physical assault or attack. There is rarely a place to sit and rest. Parks are becoming dangerous places to walk through.

A recent Administration on Aging Position Paper 79 discussed the relationship of the elderly city dweller to his environment and his great degree of dependence upon walking as a means of travel. The paper suggested that there are "scores of able engineers and planners who can translate findings on the elderly's physical capacities into sound plans for street design, traffic signal control, pedestrian walk-

ways and the like."

It added "But still lacking is the popular acceptance of the conception that pedestrian safety and freedom from environmental hazard is a problem of considerable dimension and not one that should remain exclusively under the jurisdiction of the traffic control community. It is a problem appropriate to the purview of the urban designer, transportation planner, social gerontologist, and social welfare community." 80

In its discussion of Pedestrianism as a Mode of Transportation, the paper discussed a "variety of implications for the quality of urban life and urban planning." This part of the paper raises issues which are fundamental to any discussion of mobility and the elderly, and it

follows in its entirety:

First, it has a significant bearing on the extent to which the older pedestrian will emerge from his role as a "forgotten man". In other words, the problems of the older pedestrian

⁷⁷ Report cited in footnote 60.
78 Excerpt from paper cited in footnote 59.
79 "The Older Pedestrian: A Social Gerontological View," presented at the Seminar on Pedestrian Movement and Passenger Transportation Planning, Smithsonian Institution, November 20, 1969, by Miss June L. Shmelzer. Specialist in Aging, Research and Development Program, AoA, and Marvin J. Taves, Ph. D., Dire tor, Research and Development Grants Program, AoA. Department of Health, Education, and Welfare.

50 P. 4, paper cited in footnote 79.

would give added importance to debate of the issue of whether pedestrianism will be recognized as an important short-distance transport mode in the future. The social gerontologist is likely to argue in favor of such a recommendation; however, not necessarily to help alleviate traffic congestion in growing cities, but to assist in increasing the mobility of those who are unable to use an automobile, whether for reasons of age, health, income or all three. As Sumner Myers has said, "boldly stated, this is a welfare goal." We are likely to have the aged non-driver always with us. Many of today's drivers are likely to become non-drivers in their later years. The numbers who might do so remains a matter for research.

Second, on what will the elderly's ease of access to community facilities and services depend? For a "transportation dependent" group such as this, access depends not only on the extent to which the community provides efficient, inexpensive public or private transit, but also on the planner's ability to perceive the ways in which even the best of such services may be unsuited to the needs of special population groups. Thus, older people's access to the places that provide a stimulus to mobility will also depend on an accommodation of environmental design and transit modes to their physical and psychological capabilities. In the words of one of the experts:

. . . The person who for a variety of reasons has no car is increasingly barred . . . from what the city has to offer. Because . . . urban growth assumes the availability of private cars, everything becomes increasingly difficult to reach by other means. While there are many people who depend on transit for their mobility, they are too few to support a transit system extensive enough to provide anything approaching the mobility that other members of the urban community have. The frequency and coverage of transit service are determined by the numbers of people who are willing to use transit. If these people are relatively few, the system will provide relatively little coverage and relatively infrequent service; and the mobility of those who must use such a system is correspondingly circumscribed.

By delaying improvements in transit services we inadvertently may be imposing pedestrianism as a major transit

mode for our older population. (Emphasis added.)

Third, the older person's captivity in pedestrianism, whether accidental or designed, raises a variety of questions about the direction for public policies regarding the location and type of future housing for the elderly. It is now time for the controversy surrounding the development of various types of housing environments—age-segregated versus ageintegrated, scattered-site versus concentrated site—to be informed by considerations regarding the availability of transport modes suitable to older people's needs and abilities.

Here, another statement from an expert, although made in reference to planning in general, has a great deal of significance for older people:

By scattering and spreading rather than concentrating we fail to build communities and have less access to and less choice of jobs, friends, recreation, goods, services, housing, and travel.

Applying this thought to the plight of the elderly, one might say, "less access to and less choice of travel and thus less access to and choice of friends, goods, services, and recreation." Herein lies another good reason for discussing the older pedestrian in a broader context. Urban planning and development activities favorable to pedestrians and pedestrianism hold promise of bringing many social, psychological, and economic benefits to the elderly.

V. TRAVEL BARRIERS

Advancing years may not necessarily cause individual older Americans to regard themselves as handicapped in any way. They may feel just as fit as ever; they may have no fear at the many rigors—high steps in buses, fast-moving escalators at subway stations, unsheltered bus stops, lurching vehicles, etc.—that public transportation can impose upon them.

But it has become increasingly clear that such hardships can, and do, discourage many elderly persons from using transit systems that

may be their only hope for mobility.

It is also clear that they are not alone. A significant report ⁸¹ issued during 1969 gave this appraisal of the problem:

The chronically handicapped ⁸² currently comprise about 3% of the national population. Of these 6,093,000 people, 5,693,000 are potential riders of public transportation. In addition, the population over sixty-five is continually increasing, so that there are now more than 18,000,000 citizens who may have difficulty using available mass transportation. A significant proportion of the aging and handicapped populations are denied equal opportunities to work, shop and participate in social activities as a result of inaccessible low-cost transportation.

The second group of handicapped with which this study is concerned are those who experience mobility limitations as a result of an acute medical condition, or one which lasts less than three months. Analysis of the available data on this

^{81 &}quot;Travel Barriers: Transportation Needs of the Handicapped," prepared for the Department of Transportation by Abt Associates, Inc., August 1969.

82 The chronically handicapped are defined by the National Center for Health Statistics as those who have one or more long-term diseases on the "Check List of Chronic Conditions" or have had any disease or impairment for more than three months. The Social Security Administration estimates that 18.2 million non-institutionalized adults aged 18-64 in the United States were limited in their ability to work because of chronic health conditions or impairments. When the definitions of chronic conditions and impairments are made comparable, these estimates are almost twice those of the National Health Survey. The large discrepancy is due to differences in the procedures for identifying the population. Since data from the Social Security study were not available, all of the estimates are based on information from the National Health Survey.

population group indicates that it contains about 4.6 million people with short term illnesses or injuries, plus about 23 million who are over-or under size, pregnant, or advancing

in age.

The third important group of handicapped is those people who find using public transportation difficult or impossible because of the circumstances in which they are traveling. While most of these disabilities are voluntarily assumed and seldom thought of as handicaps (carrying bulky packages, leading small children, carrying a suitcase), they are relevant to the general public's willingness to use public transit. While these last two groups are important, it is less likely that improvement in public transportation will significantly affect their lifestyle.

Authors of the report concluded that "economically viable," specialized transportation systems could be designed and put into use for the elderly and the handicapped in cities with populations of 100,000 or more. (See Part IV—Conclusion, for additional discussion of this concept.) Transportation Secretary John Volpe, discussing the report in a speech on November 20, 1969,⁵³ commented:

One of the major obstacles to making transportation more accessible to the handicapped has been a general lack of knowledge about what modifications the handicapped require. This report should stimulate designers, planners, and operators to come up with better systems.

Making transportation systems more accessible will not only provide the handicapped with equal access to employment, education, health, and recreational opportunities, but will improve the quality of transportation for all travelers.

How can "accessibility" be increased? Among the suggestions offered in another survey: 84

Sheltered benches.—For example, sheltered benches, with firm armrests to help the infirm get up and down, with infrared heating units in the roofs above them would alleviate considerable hardship. One city recently made this improvement—but, typical of the thoughtlessness which is the nub of the entire environmental barriers problem, placed them on the street edge of the sidewalk, assuring that those who use them on a rainy day will be well splashed by passing traffic.

Subway gates.—Turnpike travel has proved that subway turnstiles are unnecessary and obsolete. The same type of automatic devices that make it possible to pay fare on a toll road without leaving one's car could be readily adapted to replace the inconvenient turnstiles that subways now use.

No-step buses.—No insoluble engineering problem requires that passengers must ride on top of the bus machinery rather

SI In Columbus, Ohio, November 20, for speech in conjunction with the 50th Anniversary of the funding of the National Easter Seal Society.

St. As abstracted and discussed by "The Goal is: Mobility, Background Information on Environmental Barriers and Transportation." prepared by Ruth Lauder for the National Citizens Conference on Rehabilitation of the Disabled and Disadvantaged, 1969. Distributed by the Social and Rehabilitation Service, HEW.

than under it, but, as one designer commented, the basic blue-prints for building buses haven't been changed in more than 40 years. If redesigned, a bus could pull level with the street curb and wheelchair users, along with everyone else, could get to a seat without encountering any steps. Although buses seem to be immortal—over half the transit buses now in use in the United States are 14 years old or older—they probably are not, and if all replacements were step free, the problem would gradually disappear. For more immediate relief, it is possible to install hydraulic lifts.

Well-spaced poles.—Overcrowding of cars during rush hours may be inevitable, but better spacing of poles would mitigate the problem for rush hour standees and help the disabled and infirm at all hours. Instead of placing poles in the center of aisles, they could be placed beside every other seat. This would give standees more places to hold to, leave aisles open for wheelchairs, and give the infirm the support they

need for getting up and down from their seats.

Computerized speeds.—Some of the newer transportation systems are finding it practical to control takeoff and stopping speeds automatically so that, by gradual acceleration and deceleration, there is no jolting and passengers can walk safely to their seats. Cheaper and more practical for many systems would be operator training which stressed consideration for all passengers and allowance of sufficient time for the aged and disabled to be seated before the vehicle moves. Frequent inspection would help to assure that this training was put into practice.

Collecting fares.—In many countries, two employees work on each bus, one of whom collects fares from passengers after they are seated and helps passengers who need assistance in getting on and off. An alternative to this increased manpower is a ticket box at each stop where passengers, by taking the precaution of having the right change on hand, can get their tickets before they board. Obviously, such boxes would need to be low enough for children and wheelchair users to reach.

One-way doors.—While it is difficut to control incoming and outgoing traffic, particularly in rush hours, more doors, especially in subway cars, would help. Buses sometimes control the problem by not opening the entrance doors until all passengers have left the exit door.

A background paper prepared for a conference later in 1969 year asked, however, whether improvements in transportation systems will be designed to benefit the disabled, and it gave this answer: 85

At present, the signs are not promising. Among communities that have begun to reform their mass transportation systems, only one thus far reflects a genuine effort to enable everyone to use its facilities—the Bay Area Rapid Transit

⁸⁵ A publication on "Transportation for the Handicapped", was issued by the Department of Transportation in November 1969. Among the references are several directly related to older Americans.

which serves the San Francisco area. Minneapolis and St. Paul are beginning to add accessibility features and in Washington, D.C., concerned citizens, armed with a mandate from Congress, are carrying on a determined battle to have their new subway system barrier free. A few other communities have added, or are planning some features that will make transportation somewhat more feasible for some disabled.86

Even broader action seems to be suggested in a recent Presidential Task Force 87 report which condemns "forced isolation of the Elderly" and declares:

. . . it is as important for the Nation to develop or have developed special transportation arrangements for older persons as it is for the Nation to meet their income, health, and other needs. If such systems are not developed, the Task Force is convinced that older persons will, in a society increasingly dependent upon the automobile, be effectively shut out of the life of that society. (Emphasis added.)

⁸⁸ A bibliographic list, "Transportation for the Handicapped," was issued by the Dept. of Transportation in November 1969. Among the references are several directly related to older Americans.

57 P. 41, "Toward a Brighter Future for the Elderly," the Report of The President's Task Force on the Aging, April 1970.

PART TWO

WHAT IS BEING DONE

Faced by a growing insistence that something be done about transportation problems of the elderly, Federal, State and local government officials are reacting in a wide variety of ways. Thus far, their efforts are more experimental than definitive. But each such effort illustrates further the magnitude of the problem and its varying aspects across the Nation.

I. REDUCED FARES.

At least fifty cities and communities in the United States have reduced transit-fare programs for the elderly. In some communities, participation is limited to the low-income elderly. Almost all programs require presentation of Medicare or other identification cards.

The rationale for reduced fare plans have been two-fold: First, that they would provide economic assistance to older people who need to use public transportation; and in some instances, to ascertain whether such plans would increase the revenues of transit systems by engendering

increased ridership of a large population group.

Conclusions drawn from two recent studies 1 of the impact of reduced fare programs for the elderly show that such programs do indeed help the elderly, and that ridership does increase. However, there is still some question about the effects the programs have on transit system revenues and operations.

The New York Experience 2

New York City inaugurated its reduced fare program on July 1, 1969. From that date on, all residents of that city who are 65 and over (and not employed full-time) have been eligible to ride buses and subways during the hours of 10 a.m. to 4 p.m. and 7 p.m. to Midnight five days a week; all day Saturday, Sunday, and holidays. The reduced fare is 15 cents—half that paid by the general population.

The cost of the program is borne by a City subsidy to the Transit Authority. Before any research on the program was available, the City agreed to pay the Transit Authority \$5,000,000 for six months plus ad-

¹ New York City and Chicago recently completed studies on the Impact of Reduced Fare Programs for the Elderly. The New York study, entitled "Elderly Ridership and Reduced Transit Fares: The New York City Experience" was funded by the New York Office of Aging under a title IV grant from the Administration on Aging. The Chicago study entitled "Reduced Fares for Senior Citizens." A Summary of that report, entitled "Elderly Ridership and Reduced Transit Fares: The Chicago Experience." is available from AoA, SRS, Department of HEW. The Chicago study was funded by the Administration on Aging and the U.S. Department of Transportation.

² Abstracted from study cited in footnote 1 entitled "Elderly Ridership and Reduced Transit Fares: The New York City Experience," which included several research efforts aimed at determining the degree of acceptance of the reduced fare program impact on the lives of the participants, and the extent of ridership under the reduced fare program.

ministrative costs. During the next two years, the City of New York

will pay \$30,000,000 for the program.

Approximately 1,000 commercial and savings banks served as the principal registration points for elders wishing to participate in the program; along with 53 Senior Centers, some union halls, little city halls, and the office of the Mayor's Urban Task Force.3 Significantly, according to the New York Office of Aging report, "the cooperation of the banks removed any taint of 'welfarism' in the program."

• Three months after the inception of the program, about 500,000 older people had registered. During the next seven months, another 100,000 persons joined the program.

As of September 1969, sixty percent of those eligible 4 had registered. As of May 1970 (latest figures available), 73 percent had

registered for the reduced fare program.

This enthusiastic response was aided considerably by the opportunities provided to older New Yorkers wishing to participate in this program—opportunities that may not be available to elders residing in other cities that are not as densely populated as New York.

There are two problems with the program which may be corrected

through further refinements:

1. Although the general elderly population responded in great numbers to this program, the middle class elderly appeared to be the most responsive. Registration was generally lower in poverty areas than the rest of the city. It may well be that some low-income older persons simply cannot afford even reduced fares on public transportation; or there may be other factors which contribute to the low response in poverty areas. There may also be a need to devise new and more intensive methods of reaching these older people in order to acquaint them with the availability of new programs.

2. On buses, the elderly show their reduced fare cards to drivers and drop 15 cents into the fare box. But the token system on subways is somewhat more complicated, and may constitute a barrier to the elderly's use of the subway system. Here, the elderly show their card to the token seller, pay 30 cents for a token and return trip coupon, then drop the token into the turnstile for the initial trip. The return trip must be taken on the same day, at which time the coupon is given to the token seller and the elderly are allowed to enter through the

turnstile.6

But these problems are relatively minor, and have not caused any significant loss of participation in the program. Indeed a survey 7 conducted six weeks after the inception of the program revealed that

³ In certain outlying areas where there are no senior centers, banks have continued to

In certain outlying areas where there are no senior centers, banks have continued to be used as registration sites.
 It is estimated that of the 1,017,782 older residents of New York City, 843,000 are eligible and capable of participating in the program (taking into account the 14.4% working elderly who are not eligible, and the 3% institutionalized older population), from study cited in footnote 1.
 The New York City Office of Aging is conducting a study in the poverty areas of the city which may provide information regarding the reasons for the low or non-participation in the reduced fare program in these areas.
 In the future, a special token box for the elderly may be designed.
 The ridership study was conducted by the Division of Transportation Planning Polytechnic Institute of Brooklyn, for the New York City Office for the Aging, 1970, as part of study cited in footnote 1.

bus ridership under the reduced fare plan increased by 26.7 percent over what it had been previously (between the hours of 10 a.m. and 4 p.m.).

The total weekly ridership of elderly persons, using all modes of public transportation available under the reduced fare program, is estimated to be about 1,400,000 during the designated hours.8

Considering that the total aging population of New York City is 1,017,782, of which only 843,000 persons are eligible for reduced fares, it would appear that the New York experience has yielded significant lessons for other major cities.

The Chicago Experience 9

The Chicago reduced fare program went into effect on April 20. 1969. All residents aged 65 and over are eligible to use the transit system (buses and elevated rail cars) at a half-fare rate (20 cents) with a standard 5 cent rate for transfers. The reduced fare applies only to the basic fare and not to zone, or out of city charges for suburbs. It is applicable from 9:00 a.m. to 3:00 p.m. on weekdays and Saturdays; and from 7:00 a.m. to 12:00 midnight on Sundays and holidays.

The Chicago Transit Authority is required by law to pay its operating costs entirely out of revenue from the fare box. Thus, a reduced fare program cannot be subsidized as the New York program has been. And perhaps because of this, the CTA has opposed efforts in the past to legislate a program designed to reduce fares for the elderly.

Indeed, when the board of the Chicago Transit Authority voted to establish a reduced fare program, it was stipulated that the success or failure of this experiment would depend upon whether or not the CTA was losing money, and how much, at the end of the six months trial period.

During the first three months of the program, the CTA made three separate revenue checks, which revealed a loss of revenue. But it is not known whether the loss is attributable to the reduced fare program, or other factors.10

A variety of methods were used in collecting, collating and analyzing the data on which the findings in the Chicago report were based.11 This produced some inconsistencies in the final report, notably the degree of increased ridership among the elderly, and the contradictory data about CTA revenue intake. However, each study indicates clearly that there was an increase in ridership after the reduced fare plan went into effect.

⁸ Estimate by the New York Transit Authority, in study cited in footnote 2.
9 Abstracted from "Elderly Ridership and Reduced Transit Fares: The Chicago Experience." A summary of final report of a study of the effects of a reduced fare program upon the elderly and an urban mass transit system, cited in footnote 1.
10 A new six-month study has been funded by the Administration on Aging and the Department of Transportation in hopes of providing conclusive evidence as to the financial feasibility of the Chicago program. The study will also develop model approaches for measuring and forecasting the effects of lower fares on the income and operations of transit companies, to be used by other transit companies and communities in planning and evaluating transit facilities and rate systems.

11 The overall research effort was conducted by the Division for Senior Citizens, Department of Human Resources, City of Chicago, with the Illinois Institute of Technology Research Institute, the Transportation Center at Northwestern University, and the Chicago Transit Authority, participating in the various phases of research activity.

Another reason for these inconsistencies may be that of Chicago's 400,000 elderly population, only 2,728 older individuals were surveyed—less than 1 percent of the total aging population. 12 What of the remaining 397,272 older Chicagoans? How many of these people participate in the program? How many are barred from participating because they cannot reach the two registration sites?

It is obvious that much more study is needed before reduced fare programs can be judged an asset or a liability to transit systems.¹³ Also, a greater effort must be made to reach all of the elderly who

might need and want to participate in such programs.

The answers to the questions raised by the New York and Chicago studies may differ considerably from region to region and city to city. New York and Chicago are the two largest cities in the United States, with all the problems and opportunities for seniors that "bigness" implies. Studies are needed to determine the impact of reduced fare programs in other cities—large and small alike.14

II. Specialized Transportation Programs

Today, a majority of older Americans do not or cannot drive or own automobiles. They are dependent upon public transportation systems that often are inaccessible, with service that is infrequent, usually unreliable, or not available at all in many areas.

Some communities have been experimenting with short-term measures to meet older persons' mounting transportation problems. Sometimes referred to as "mini-systems", these programs offer service to limited numbers of elderly for a limited period of time. And most

operate with severely limited resources.

The programs are helpful to those older persons served, however, and there is much to learn from them. Indeed, such "mini-solutions" may pave the way for the development of a more comprehensive program that will increase the opportunities for mobility for greater numbers of older Americans.

Many of the programs offer portal-to-portal service to groups or individual elders on an "on-demand" basis, through phone calls to a central dispatcher. Some, are actually miniature public transportation systems designed for the general population in areas where there was no such service previously.

A. TRANSPORTATION BY APPOINTMENT

An ambitious "Dial-a-Bus" concept has been developed at the Urban Transportation Systems Laboratory, Massachusetts Institute of Technology. 15 Under this proposed program, a fleet of computer-directed

¹² The survey sample was not representative of Chicago's total elderly population.

13 The Administration on Aging has recently learned that under the Los Angeles Reduced Fare Program, ridership has increased by approximately 24 percent.

14 See App. 6 for description and listing of other reduced fare projects and other transportation programs, from a report entitled "Developing Transportation Services for Older People," prepared by the National Council on the Aging for the Office of Economic Opportunity. May 1970.

15 Material abstracted from paper presented by Mr. Henry Bruck, Director, Urban Transportation Systems Laboratory, Massachusetts Institute of Technology, at the Interdisciplinary Research Utilization Workshop on Transportation and the Aging, Washington, D.C., May 25-26, 1970.

mini-buses would pick up riders at their doors and deliver them to destinations, throughout a given city or community. The passenger would simply place a call to a centrally located computer facility, which would communicate the address to the operator of one of the mini-buses, who would then pick up the passenger and take him to a local destination, or to a transit station for a long-haul trip.

Ultimately, it is envisioned that the entire operation will be automated. The bus (automobiles and trucks are also being tested) would

be locked into computerized routing systems.

This system has not been designed specifically for the elderly, or for any other age group. It was developed to meet the transportation needs of all the people in a given city, town or community. However, the elderly would derive great benefit from not having to walk to station stops, push through crowds, and maneuver in and out of large, outmoded vehicles in order to reach needed destinations.

However, the project is far from being operational at this point. As of this date, the designers of the Dial-a-Bus are still working on the development of a viable computer program for an entire large

geographic area.16

But there may soon be an opportunity to see a variant of the Dial-a-Bus in action. The New Jersey Department of Transportation is expected to implement a "manual" dial-a-bus program in which a fleet of special vehicles will feed into the mass transit complex in Haddonfield, New Jersey, serving the cities of Camden and Philadelphia. 17 If the program indicates a demand from the population for this type of service, then the Dial-A-Bus may ultimately be dispatched by computer.

YMCA Senior Citizens Mobile Service 18

Would isolated older people residing in large cities use a free transportation service to get where they need and want to go? In Chicago,

the answer seems to be a resounding yes.

This free transportation service, based somewhat on the dial-a-bus concept, was made possible by a research and demonstration grant awarded to the YMCA of Metropolitan Chicago by the Administration on Aging, from September 1966 through November 1969.

During the three years, participating elders made over 30,403 trips in the Y-Mobiles (two 7 passenger vans), to health centers, welfare agencies, supermarkets, senior centers, libraries, and special outings.

The Y-Mobiles operated seven days a week, ten hours a day, with special activities requiring some evening activity. Elderly residents of the area phoned in requests for transportation to the mobile service office, where they were scheduled into the next day's routing on a first come, first serve basis (except for emergency or health transportation needs). Older persons waiting for buses or taxis were also offered rides on the Y-Mobile.

¹⁶ Spoken communication with June L. Shmelzer, Specialist in Aging, Research and Development grants program, Administration on Aging, Social Rehabilitation Service, Department of Health, Education and Welfare.

17 The demonstration grant has been awarded by the U.S. Urban Mass Transportation Administration of the Department of Transportation, and will extend over an 18 month period. Approval of application is pending legal requirements to be worked out by State, Federal Government and the commercial transit system, according to Mr. Joe Silien, Department of Transportation, Division of Research and Development (12/3/70).

18 Material abstracted from AoA report, "Increasing Mobility Among Isolated Older People".

Drivers of the Y-Mobile were alerted by the dispatcher to special needs of elderly passengers, such as faulty vision, use of wheelchairs, and number of steps at the person's home. They were also in constant touch with the dispatchers through a two-way radio system installed in each van. In this way, if a special problem arose, the driver simply called into the Y-Mobile office for instructions; and if the dispatcher received a call for emergency service he could alert the driver for an

immediate pick up.

This program was designed for seniors who were isolated—hidden away behind their apartments and homes—in a high poverty and crime area of Chicago. Therefore, the drivers had to extend themselves to meet the unique needs of these older people—many of whom were feeble and ill—and suspicious of getting "something for nothing." They helped with problems that arose during trips, such as arguments about where a person would sit; carried packages; helped the more feeble riders up and down steps; and even knocked on doors if passengers were not waiting outside their residences for the transportation they had requested.

After the demonstration project was completed, the YMCA tried to find additional funds to continue this program, that had changed the lives of so many isolated older people. The Martin Luther King Urban Progress Center in Chicago has provided the YMCA with an additional \$20,000 and therefore the program can continue—for a short while—and on a severely limited basis. Only one Y-Mobile is now available and the area served has been narrowed to one poverty

neighborhood.

B. SPECIAL SERVICE BUSES

Cape May City Village Transit Authority 19

This resort community located on the Southernmost tip of the New Jersey Shore would seem to be an ideal place for retirees to settle. And in most respects, it is.

But, many of the 4,000 older residents do not drive, and these individuals find themselves increasingly isolated in an area that has no commercial bus service and only two taxis to serve the entire population.

In August 1968, the Cape May Office of Aging was awarded a Title III grant for a three-year demonstration project ²⁰ to create a transportation system—in which the elderly would receive top priority—but the system would also be used by the general population.

The funds paid for the purchase of a 9-passenger Volkswagen bus, salaries for a part-time director, full-time driver, part-time driver;

insurance and maintenance costs.

The bus operated from 8:00 a.m. to 5:45 p.m. six days a week. The regular routing schedule was arranged to transport persons from those areas which housed the greatest number of elderly to downtown shops, doctor's offices, business offices, entertainment facilities and connections with the public rail system for those who wished to make trips out of

¹⁹ Material abstracted from paper presented by Mrs. Anne J. Zahora, Executive Director, Cape May Office on Aging, at workshop cited in footnote 15.
⁵⁰ The State Office of Aging provided \$10,557.00 from Title III Older Americans Act funds, and the City contributed \$3,370.00.

town. But two days each week the routing schedule included two special trips, important to the well-being of the elderly residents:

-The local hospital, located 12 miles from the center of town, which

is the closest medical clinic serving the elderly.

-Stops at a Home for the Indigent Aged, which allowed elders to visit friends, and become active in volunteer services at the Home. Stops at a rehabilitation clinic and the mental health facility.

One-way fares for retirees were 25 cents locally and 75 cents to the hospital and clinics. The elderly could also purchase a commutation booklet which provided 5 trips for \$1.00. The cost to the general public was 30 cents locally and 75 cents to hospitals.

Although this service proved to be an invaluable asset to the older members of this community, the project was beset with financial diffi-

culties almost from the beginning.

An ever-increasing cost was repair and maintenance of the vehicle. During 1969 repairs amounted to \$691.39. And for the first three months of 1970 the repair bill came to \$872.69. These expenditures, added to the usual expenses incurred running a transportation system, heavily outweighed the project income. Indeed, according to Mrs. Anne Zahora, Executive Director of the Cape May Office on Aging, "If this facility was disigned for Senior Citizens only, the deficit would be considerably greater." Mrs. Zahora concluded, "It is my considered opinion that the Cape May Demonstration Project cannot continue to function unless it is well-subsidized by a State or Federal Agency."

The experience of the Cape May Village Transit Authority also clearly indicates a need for technical assistance for small communities in the development of transportation systems. If such assistance had been available, either from the State or Federal government, Cape May might have been spared the inordinate expenses incurred from a vehicle that was obviously not designed for consistent use with fre-

quent stops at slow speed.

When the project was terminated in June 1970, the Cape May Office on Aging prevailed upon the State Department of Transportation for assistance in continuing the transportation system, with the support of a petition signed by some 700 elders who had benefited from the service. After compiling additional statistics, corresponding and meeting with officials from the State agency, the Office on Aging was informed that "The State Department of Transportation does not fund this type of project." 21

Senior Citizens Bus Transportation Project 22

Many questions have been raised about the feasibility of using school buses during idle hours in order to transport the elderly to the places they need and want to go. The arguments against such an arrangement range from high insurance rates to the fact that most schoolbuses have physical barriers which make them uncomfortable

 ²¹ In spoken communication with Mrs. Ann Zahora, executive director of Cape May, New Jersey, Office on Aging, November 30, 1970.
 ²² Abstracted from article in "Aging," April 1970, "Transportation for Older Americans Starts in Prince Georges County" and spoken communication with Mr. William Hudelson, Director, Prince Georges County Division of Services and Programs for the Aging 12-1-70.

for older persons—and indeed, many are considered unsafe, even for children. 23

But Prince George's County, Maryland, seems to have overcome these obstacles by renovating a fleet of six 24 former school buses to transport elderly residents of the 484 square miles which make up this largely suburban County, to and from Senior Citizens clubs, senior centers, shopping centers, and special outings. The program is funded in part by a title III Older Americans Act grant from the Maryland Commission on Aging.²⁵

Each rider pays a nominal fee for the round-trip depending upon distance, length of stay, and other activities included in transportation

service (such as luncheons and admission fees).

This is another program that provides transportation by appointment. Senior Citizens groups arrange for the service by phoning the Transportation Project office, and designating date of trip, destination, type of activity and number of passengers.

The retirees employed by the project as drivers, receive special instruction and orientation courses. Not only in driving techniques (many have never driven a bus), but also to help them deal with the

unique needs of their elderly passengers.

Although this program was designed to meet one need, it is also being utilized to make another program for the elderly more effective. Participants in the County's Foster Grandparent program have experienced difficulties in getting to sites, due to lack of adequate public transportation. The Transportation Project now included specific scheduling for "Foster Grandparents" who need transportation assistance. They will be picked up at their homes, delivered to the Foster Grandparent sites, and returned to their residences in the evening.

At present, the program serves only groups of seniors, transporting them to specific destinations. As the project progresses, however, more direct routing will be arranged so that individual elders may make

use of the service.

From the beginning, an agreement was reached with the County Commissioners that if the Bus Transportation project proves to be a success after the three-year demonstration period, the County will

continue to fund the program.

The "People's Bus". 26—In rural Raleigh County, West Virginia, almost all services and activities are located in Beckley, the County seat. Thus, a transportation service in this area must necessarily differ from those provided in suburban areas—even though elders' transportation problems may be much the same. Here, public transportation is also inadequate, and most elderly residents do not drive.

But, Raleigh County is located in the heart of Appalachia, and most of the county is characterized by widespread poverty and unem-

ployment.

Abstracted from paper cited in footnote 15.
 Arrangements have been made to expand the fleet to an additional five buses by

²⁴ Arrangements nave been made to expand the first to 1971.

²⁵ Federal Share (Title III grant) of the project is \$13,000; and the County contributed \$15,000 for a total cost of \$28,000.

²⁶ Material abstracted from paper presented by John Burkhardt. Research Analyst, Resource Management Corp., at workshop cited in footnote 15. And, from article in Appalachia entitled "Transportation Needs of the Rural Poor," October 1970, based on study by Resource Management Corporation for the Department of Transportation.

The lack of transportation here not only keeps the elderly from receiving health care, proper nutrition and social contacts, it also prevents younger persons from seeking and finding employment (along with those elders who are capable and desirous of working).27

Thus, in September 1967, through a grant from the Office of Economic Opportunity,28 a free bus service was inaugurated in Raleigh County. Although this program was not designed specifically for the elderly, the bulk of the passengers consisted of older rural Americans.

The free buses—nine 8-passenger Chevrolet Carry-alls—served 18 routes in the County.29 They provided round-trips from all the settled areas in the County, from one to five times a week to Beckley, where most hospitals, industries, personal and professional services and almost all governmental programs, are located.

Passengers were picked up at their homes, and the buses returned

when all inbound passengers were back in the vehicles.

The average trip took 1½ hours one way—a round-trip distance was usually 45 miles. This is an important consideration when planning transportation programs and purchasing vehicles that must move over the rough, mountainous terrain of these Appalachian counties.

The demand for the service became so great that, by the end of the project, the buses were operating at over 110 percent of capacity.³⁰

A study of this project by the Resource Management Corporation,³¹ revealed that many residents of the area derived major benefits as a result of the free bus, including:

—Savings in transportation, and shopping to the riders of the bus (60 percent of whom had incomes of less than \$150 a month from all sources).

-Additional participation in food stamp, welfare or social security

programs.

- -Many riders received health care for the first time because of the free service.
- -Additional income for drivers and other employees of the project, many of whom were not previously employed.

-Additional income to Beckley merchants.

But there were losses, too:

-One of the three bus lines offering (Inadequate) transportation in the county, went out of business during the life of the project. According to the study, however, this was not due to the free bus service. The other two bus lines lost a minimal amount in profits, as they served such a small area of the County.

Neighbors and friends, who had charged a fee to transport persons to town or to the store previous to the inception of the free

bus, were hardest hit by the service.

Abstracted from paper presented by John Burkhardt, Research Analyst Resource Management Corporation at workshop cited in footnote 15.

The project was funded for \$150,000 over a period of 19 months from September 1967 to May 1969.

In order to permit longer funding, the number of buses were cut back to five after several months. Only two of the routes had daily service thereafter, and the rest were reduced to once or twice a week.

A survey of the free bus riders indicates that the service was used primarily for grocery shopping, other household and personal shopping; medical visits; attendance at CAP meetings; food stamp purchases; and for visiting friends and relatives (from study cited in footnote 26. "Transportation Needs of Rural Poor").

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The second of the second of Resource Management Corporation study findings cited in footnote 26.

—Rural shopkeepers also lost—almost as much as the Beckley merchants gained.

From these findings, it would appear that there are major questions about this type of project. Does a free bus ride actually benefit rural communities with high incidence of poverty and unemployment if it takes business out of the community? Would another type of service, utilizing local resources such as private transportation providers, and local merchants, be more effective? Is "free" transportation a necessity, or would riders be willing to pay a token fee to the providers of such a service, thereby eliminating the stigma of "charity" from the program?

After experiencing the benefits of adequate transportation, the Raleigh County residents proved that they were indeed, willing to pay

a fee.

When the OEO grant was terminated, the riders of the free bus were unwilling to give up the service and ran the buses for another 13 months on their own (with minimal assistance from the CAP agency). Retired or disabled miners volunteered as drivers and were paid small sums from the donations riders felt they could afford to pay for each ride. It was of course, necessary to run the buses on a reduced basis, with less frequent coverage of the area.

Operation of the buses was terminated on October 1, 1970, but the county residents and Community Action Association are still trying

to find ways to continue this needed service.32

Although the director of the Community Action Agency and the indigenous workers who ran the "people's bus" (as it came to be called when the people were running the service themselves), voiced opposing viewpoints as to the management of such a service,33 a common theme runs through both views. It is imperative to the well-being of these isolated mountain people that this program, or a similar venture, be reinstated in the near future.

POW: Progress on Wheels 34

All rural areas are not alike. The terrain, life-style of the people, and economic considerations change from region to region. Flexibility and continuity are the keynotes in developing transportation to meet the needs of rural people.

A rural transportation program which illustrates both continuity and flexibility is POW: Progress on Wheels, which serves three rural

counties in Northwest New Jersey.

Originally, the program was an outgrowth of Project FIND,35 which provided the transportation in three counties covering an area of approximately 50 by 125 miles.

A government surplus vehicle was obtained through the Community Action Agency, because there were no funds to operate the program.

³³ See Appendix 7 for study discussion of "Alternatives to the Free Bus System, and Implications for Other Rural Areas."

³⁵ Statement by Mr. Simeon Warren, Executive Director, Raleigh County Community Action Agency and Mrs. Chester Workman, Shady Springs, West Virginia, at hearings of the U.S. Senate Special Committee on Aging on "Older Americans in Rural Areas—Transportation," Part 11, Charleston, West Virginia, October 27, 1970.

³⁴ Material abstracted from a technical assistance monograph entitled "Developing Transportation Services for Older People," prepared by NCOA for the Office of Economic Opportunity, May 1970.

³⁵ A National Council on the Aging/Office of Economic Opportunity demonstration research service program for the aging, May 1970.

A trading stamp drive was organized, and the stamps were redeemed for cash, which paid for the maintenance of the vehicle. Volunteer drivers were recruited and the service began transporting elderly people to shopping areas, churches, medical services and other destinations.

As a result of the success of this effort, the Community Action Council received a grant of \$40,000 from the Office of Economic Opportunity to operate a transportation program for elders for one year (1969-1970).

Two 9-passenger vehicles were purchased; supplemented by eight sedans and three station wagons, some of which are owned by the drivers. POW employs 32 persons, all of whom are elderly, except the director and administrative assistant.

The service is available to all older persons in the area who come within the CAA definition of poverty. Thus, the program does not

compete with existing transportation services—taxis.

The part-time drivers may earn up to \$35 a week, and they keep below the Social Security maximum earnings limitation of \$1,680 a year. Other drivers are paid depending on ownership of the vehicle,

mileage, time and other considerations.

Regular routing schedules would have placed the service under State transportation regulations. Therefore, the service operates on a modified Dial-a-bus concept. The elderly telephone requests for service to schedulers at the POW central office. The schedulers obtain drivers and arrange all trips. Referrals for transportation also come from the Welfare department, physicians, and other agencies and organizations.

Both the Free Bus and POW are rural programs, but they differ widely. POW can utilize many different methods to transport riders, because the Northwest New Jersey terrain is not as mountainous as is Raleigh County, West Virginia; the program is designed specifically for elders; and the elderly poor are employed by the project.

Although the transportation programs that have been discussed here have proven their worth many times over,³⁶ all but one—the Prince George's County project—have the threat of termination hanging over them, or have been discontinued after the Federal demonstration grants were completed. The frustration, disappointment and bitterness engendered by the termination of the services—desperately needed by the elderly recipients—may not dissipate easily. There is a need to consider the social implications of demonstration programs that are terminated after changing the lives of the participants.

III. TRANSIT SYSTEMS: EXPERIMENTS IN REDESIGN

An elderly gentleman was encountered on a bus, carrying a small wooden box. When queried as to what the box was for, he replied, "Well, I have problems getting on and off the bus, so I made myself a little step." He would put his little box down, get on the first step of the bus, reach down and pick it up, and this procedure would be repeated whenever he had to take a bus.

¹⁰⁶ See Appendix 6 for brief description of other transportation programs for the elderly, from monograph cited in footnote 34.

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This story, cited by Mr. Henry Perry, Director of the Multiservice Transportation Project in Kansas City, Missouri,³⁷ is one illustration of the difficulties older people experience when traveling on outmoded public transit systems.

Steps are too high on buses; doors close too quickly and are difficult to manage; hand-holds are too high and placed too close together; acceleration and deceleration are often abrupt, creating a danger of

being pushed or falling.

Perhaps this elderly gentleman is luckier than most older travelers. At age 79, he has the ability and ingenuity to make himself a "little step" in order to use the public transportation available to him.

These physical barriers—and many others—affect not only the elderly or handicapped passenger, but all those who must use public transportation. Even the heartiest younger person encounters diffi-culties in getting in and out of public transit vehicles while carrying packages and bundles, or rushing through gates and turnstiles to catch a subway.

Unfortunately, this Nation has barely tapped its technology in improving or designing public transit systems that will be available,

accessible and comfortable for all who need to use them.

But one new rapid transit system now nearing completion has used technology to design facilities for the handicapped and the elderly. While these facilities have been designed to meet the needs of a special group of passengers, they may well make travel on public transit a more pleasant and comfortable experience for the general population as well.

SAN FRANCISCO BAY AREA RAPID TRANSIT SYSTEM—BART 38

When this subway system is in operation in 1972, it will extend into three counties with seventy-five miles of track and thirty-nine station stops. The facilities for the elderly and handicapped, according to one expert, "Will surpass those of any other mass transportation system in the world, providing for 100 percent ridership within its

service area." 39

However, when BART was authorized by a public bond issue in 1962, there were no considerations for the elderly and handicapped in the system plan. It was only after years of intensive effort, led by the Architectural Barrier Committee of the Easter Seal Society for the Crippled Children and Adults of Alameda and Contra Costra Counties (San Fransico Bay Area), supported by elderly and handicapped residents of the area, senior citizens clubs and organizations devoted to the well-being of older Americans, that the BART included plans for facilities which would accommodate the elderly and handicapped passenger.

In 1964, BART incorporated the "American Standards Specifications for Making Buildings and Facilities Accessible to, and Usable by, the Physically Handicapped" into all design elements of the system

plan.

From Paper presented at Workshop cited in footnote 15.
 Material abstracted from paper by Mr. Harold Wilson, Senior Economic Analyst.
 Kaiser Foundation Medical Care Program, presented at Workshop cited in footnote 15,
 In paper cited in footnote 38.

But an additional \$10 million was required in order to install such special facilities. The State Legislature was informed that the BART district was willing to make design changes if additional funds were provided from sources outside the BART district. In 1968, the California State Legislature voted to fund the additional \$10 million needed to complete BART's special facilities for the elderly and handicapped.⁴⁰

What BART Will Provide

—Elevators to help non-ambulatory or feeble persons move vertically from street to train platform, equipped with telephone and controls within easy reach of wheelchair occupants.

-Restrooms with special design features for elderly and handi-

capped, including doors wide enough for wheelchairs.

—Stairways in stations with handrails on both sides extending 18 inches beyond top and bottom steps.

-Special parking facilities for handicapped will have especially

wide stalls that are located close to stations.

—A wheelchair occupant will be able to ride easily over the gap between train platform and the BART car floor, pass through the door and move from one end of the car to another. This extra width will undoubtedly be helpful to older ambulatory persons during crowded rush hours.

—A loudspeaker system as well as highly visible signs will assist

those with impaired sight or hearing.

-Special service gates and fare collection machines will be installed

in stations.

—Closed circuit television communication systems, special directional signs and low placement of public telephones and elevator buttons will also provide special assistance to the elderly and handicapped passenger.

The design concepts in the BART system are not new. Most have been on the drawing board for many years, waiting for implementation. What is new is the fact that the electorate, the State legislature and a transit authority were willing to expend the additional time and funds necessary to put these special facilities to work.

After the system is completed, a study might be helpful, to determine whether there is substantial increase in ridership because of the special facilities for the elderly and handicapped. BART could become a model which would encourage other communities to improve their existing public transit systems for the benefit of elderly and handicapped passengers.

Some experts have voiced the opinion that re-designing transit systems specifically for certain groups would be inordinately expensive—certainly beyond the reach of most commercial transit systems

⁴⁰ On June 6, 1968, the California State Legislature passed Bill No. 7, Chapter 261, which provided that any buildings and facilities constructed by use of State, county or municipal funds, or funds of any political subdivision of the State, adhere to the American Standards Association Specification for "making buildings and facilities accessible to, and usable by, the physically handicapped." While this law is not directed specifically at public transit systems, it may have paved the way for the Legislature's decision to fund BART's special facilities for the elderly and handicapped.

in this country today. Even if systems were re-designed for the general public, it would still be costly and the changes needed would necessarily evolve over a considerable amount of time. Bus fleets are replaced gradually, over a period of time. According to Mr. Henry Bruck, Director of the Program of Urban Transportation at the Massachusetts Institute of Technology, "[I]t would take ten years in the normal process of replacement, or more, to come to these new designs." Indeed, he concluded, "[A]t the present time we still have a situation in which the new buses that are being bought have not been redesigned in any very significant way." 41

Not only the Federal Government must be willing to expend the funds necessary for research in the area of public transit, city transit directors, too, must also be open to new ideas and the reality of providing service to all who need to use the systems.

IV. TRANSPORTATION AND HEALTH NEEDS

Health problems among the elderly are often intensified by inadequate transportation. When care is needed, it is often too far, or too inconvenient, to reach. Already depressed by pain or weariness, many elderly persons may give up all hope of cure or relief and settle deeper into illness.

"These people," said the Chairman of a State Commission on Aging, "because of a lack of transportation, become isolated, and this isolation, in my judgment, results in depression and increases the problems

resulting from partial senility." 42

The direct relationship between transportation inadequacy and health problems of the elderly may be seen further in these two "case studies", taken from an Ohio study: 43

—Mr. and Mrs. I. were unable to use the bus since they were both disabled and could not walk as far as the nearest bus stop. Taxis were used only for trips to the doctor's office and for essentials such as groceries, drugs and other medicines. Mr. I. was recommended by his physician to take treatment for his lung condition at the local hospital outpatient facility, but was unable to do so because of lack of transportation. He was, however, picked up and taken to the hospital for x-rays at six month intervals by

an arrangement with hospital staff.

—Mrs. J. had long history of poor health. She suffered from emphysema and had been unable to get to the hospital outpatient clinic for treatments recommended by her physician. Limited vision in one eye and blindness in the other, caused her to fall frequently. She therefore, had difficulty walking. These problems were further accentuated by inadequate income from social security and old age assistance. She allowed herself a \$1.50 monthly budget for transportation. Health condition, coupled with inadequate income, made it impossible for her to use bus service.

⁴¹ At workshop cited in footnote 15. ⁴² In testimony by Honorable Robert D. Blue; Chairman, Iowa Commission on Aging, at hearing cited in footnote 33, Part 1, Des Moines, Iowa, September S, 1969, p. 10. ⁴³ "Transportation and the Older Person in Richland County, Ohio," study prepared by Mr. Jerome Kaplan, Adjunct Associate Professor of Sociology, Ohio State University, and others.

In rural areas, the problems may be especially severe, and the question becomes: should the health services be brought to the patient, or should, somehow, the patient be brought to the services? Two projects, described at the West Virginia hearing, deal with that problem, and they are discussed at some length here because of possible applicability elsewhere:

A. THE FAMILY HEALTH SERVICE 44

This project, began operation in May 1970, partially funded by a grant from the Department of Health, Education and Welfare. Two 12-passenger vans, which bring people to services, travel through Randolph County and large sections of two other West Virginia counties one or more times each week. A schedule is available to registrants showing specific days, departure times and stops along each route. Any person who is registered with the Family Health Service may ride in the health van when medical attention is needed. Rides are also available for visits to social service agencies. Emergency service, including ambulances to hospitals for acute care, are provided through the Family Health Service Health Fund. Fees are based on ability to pay.

In the first five months of operation, more than 15,000 rural residents of all ages registered with the project, out of a total population of approximately 30,000. Although the aging population of the registrants from the areas covered is 11 percent, 75 percent of the caseload

of the Family Health Service are persons 65 and over.

The second component of this project provides home health care. The family Health Service includes a Home Health Department staffed by four full-time registered nurses, four part-time physical therapists, a dietitian, a speech therapist, and 21 family health workers (or home health aides). The Service recruits and trains the home health workers from remote rural areas and requires them to remain, serving in their own communities after training. This is an important aspect of the program because it is not only the person seeking health care who has transportation problems in rural areas, but also the providers of such care.

B. MOBILE SERVICES—BY RAIL 45

This demonstration project, still in the planning stage, was developed by the Human Resources Development Foundation Inc. (a non-profit corporation established by the West Virginia, American Federation of Labor-Congress of Industrial Organizations).

Converted Army ambulance railroad cars will serve as mobile clinics and offices, which will travel through a 4-county area in—Wyoming. Mercer, McDowell, and Mingo—delivering health, education and employment services to rural residents.

⁴⁴ Material abstracted from testimony by Mr. Neal Bowden, Director, Family Health Service. Elkins. West Virginia, at hearing cited in footnote 33, Part 12, Clarksburg, West Virginia, October 28, 1970.

45 Material abstracted from synopsis of "Mobile Community Services Project" prepared by the Human Resource Development Foundation Inc., Charleston, West Virginia.

The 4- to 5-car train will stop at approximately eight pre-determined locations, for one week at each station, thereby reaching

each community once every two months.

Several possibilities are now being developed for the provision of transportation from remote "hollows" to the railroad station stops, including:

-The utilization of auxiliary mobile units for outreach;

-An arrangement with local school systems for the use of school

buses when not in operation;

-A cooperative effort with local established service organizations who would assume the responsibility for transporting persons to and from the railroad station during the week's stop.46

The mobile Community Services Project will also include a system of referral and liaison with established hospital, medical facilities and public service agencies in the area.47

The project is expected to begin operation within 12 to 15 months.

Intensive research and analysis have gone into the development of this project.48 The fruition of such complete groundwork may well produce a model concept of the delivery of vital services to people who-largely due to transportation problems-have been denied such services.

46 Abstracted from testimony by Miles C. Stanley, President, Human Resource Development Foundation Inc., at hearing cited in footnote 33.

47 Additional services such as remedial education, Job Corps recruitment, and vocational rehabilitation counseling will be explored and, if feasible, added to the program as part of the development process

renabilitation counseling will be explored and, it reasine, added to the program as part of the development process.

Separation for the Dept. of Transportation, respectively. A more recent grant has been funded by office of Economic Opportunity Regional Administrator Region III, with the objective of obtaining funding and beginning actual operations.

PART THREE

WHAT MORE SHOULD BE DONE: RECOMMENDATIONS

"To meet the needs of older persons more adequately, and to give the elderly a greater opportunity to contribute to society, the Task Force believes that government should act with and on behalf of the elderly much more vigorously than it currently does. At the same time, the Task Force recognizes that government action alone is not enough. More of the energies of voluntary organizations, of volunteers, of unions, and of business must also be devoted to this undertaking."

—Toward A Brighter Future for the Elderly, the Report of the President's Task Force on the Aging, April 1970

What the President's Task Force requested on behalf of aged Ameri-

cans in general is especially true of the transportation issue.

There is no doubt that the problems discussed thus far in this report cannot be dealt with adequately—and that the promising experiments described in Part II could die sudden or lingering deaths—unless a serious, coordinated, and far-ranging effort is made by many levels of government and by private resources.

Fortunately, there is reason to believe that this report is issued at a

propitious moment:

—For one thing, the Interdisciplinary Workshop on Transportation and the Aging (see app. 1, p. 65 for details) has set a precedent for multiagency action. That precedent should lead to even broader joint action by the federal departments and agency invloved, as well as by other units of government and by private organizations.

well as by other units of government and by private organizations.

—In addition, passage of the Urban Mass Transportation Assistance Act of 1970 has provided powerful new expression of a national commitment to deal with the crisis in public transportation. Several features of this bill can be used directly to help the elderly.

—Public outcry over the mobility problems of the elderly—and supporting data yielded by pioneering, but limited research—have provided a clear mandate for the Administration on Aging to take

action on a scale far greater than it already has.

—Medicare, enacted into law five years ago, is showing the need for additional actions needed to improve medical care resources. Now, in a period of re-evaluation and improvement of Medicare, the time for considering the relationship of transportation to health problems has arrived, and several potential actions are possible at relatively little cost.

—The Architectural Barriers Act of 1968 has already been of some assistance in making today's environment more hospitable to handicapped Americans. With such legislation already on the books, the way is open for legislative requirements to further increase mobility of the elderly (if by mobility we include access to structures and free movement within them).

-Finally, the forthcoming White House Conference on Aging (November 1971) should provide a splendid forge for hammering out action strategies that will make use of what is already known

while identifying areas in which more facts are needed.

(One of the functions of the White House Conference is to involve private organizations in its planning and execution. Those organizations can be helpful in all efforts to implement White House Conference recommendations including those on transportation.)

Specific proposals for making full use of the opportunities described

above are offered on the following pages.

This report concludes with a discussion of the ways in which all age groups will be served if this nation deals with mobility problems of the elderly.

I. OPPORTUNITIES FOR MULTI-AGENCY ACTION

The Interdisciplinary Workshop on Transportation and the Elderly, as mentioned earlier, was the first of its kind; and its objectives necessarily were limited. Some clues as to the next logical steps are provided in a statement made at the Twenty-Third Annual Conference on Aging at the University of Michigan in August 1970:

At this moment, the financial commitments to the field of transportation and aging, on the part of any of these agencies, [AoA, DOT, HUD] is not great. This is disturbing since we have reached a time of readiness for major development and demonstration projects in this field; and such demonstrations are likely to be quite expensive.¹

As will be seen later, this Committee believes that the Administration on Aging should be given the wherewithal needed for specific research and demonstration programs within the AoA itself, but meanwhile the following proposals are made for multi-agency actions that can prepare the way for broader actions later on:

RECOMMENDATION ONE

The Administration on Aging, the Department of Transportation, and the Department of Housing and Urban Development should at earliest possible date present a comprehensive and coordinated plan for research and demonstration projects which will develop, in logical progression, the knowledge and experience required to deal with the most pressing transportation problems of

^{1 &}quot;Mobility, Transportation, and Aging," AoA position paper by Marvin J. Taves, Ph. D., Director, Research and Development Grants Division, and Miss June L. Shmelzer, Specialist in Aging, Research and Development Grants Division, Administration on Aging, Social and Rehabilitation Service, Department of Health, Education, and Welfare.

older Americans on a larger scale. This plan should provide alternatives and cost estimates for each. Consultation with the Office of Economic Opportunity should take place in appropriate areas.

RECOMMENDATION TWO

At the same time, the departments and agencies should present a plan for assuring that present dearth of research knowledge will no longer stand as a barrier to action.

Discussion: Participants at the Interdisciplinary Workshop gave strong expression to their dissatisfaction with the extent and depth of present research. Fundamental questions remain unanswered. For example, what are the most common reasons for travel by the elderly? Is "latent demand" for transportation by the elderly really understood? Should more attention be given to "latent need?" Just how are the elderly using existing transportation systems? (See Appendix 1 for a full listing of research needs as seen by workshop participants.) Multi-agency research will yield important dividends on matters closely related to public policy. Without such research, costly mistakes will be made, or vitally-needed actions will be delayed.

RECOMMENDATION THREE

The Department of Housing and Urban Development should, for its major role in this joint enterprise, prepare a report showing the relationships between regional transportation planning and overall regional planning, in terms of meeting mobility needs of the elderly.

Discussion: HUD has been given several legislative mandates directing that department to provide incentives and assistance for overall regional planning related to land use, housing, economic development, etc. To make full use of HUD resources, as well as new planning responsibilities imposed upon the Department of Transportation, (See Recommendation 4) HUD should take immediate steps to analyze the relationships between the two departments in fulfilling their responsibilities, and should report accordingly.

II. IMPLEMENTATION OF THE URBAN MASS TRANSPORTATION ACT

With passage of this law in October 1970, its chief sponsor, Senator Harrison A. Williams, said:

Now for the first time, we have the law which will allow the Federal Government to make long-term commitments for transit construction. Cities, states, and municipalities will at long last be able to plan major renovations in existing systems with a firm guarantee that Federal funds will be forthcoming.

My bill provides for \$3.1 billion in Federal assistance for urban mass transportation over the next five years. Grants will be made on a two-thirds Federal one-third local matching basis. In this manner the long-term Federal commitment which is vital to the development of new and improved mass transportation facilities will become a reality.

Senator Williams acknowledged that the amounts authorized fall far short of the estimated \$17 billion needed for rapid transit during this decade (see p. 19 of this report), but he called the legislation "an important start in the right direction." (For Summary major features of the Act, see app. 10, p. 111.)

As signed into law, the legislation incorporated two potentially far-reaching provisions which serve as the basis of the following

recommendations:

RECOMMENDATION FOUR

Action should be taken by the Department of Transportation to assure early and responsive implementation of a provision of the Urban Mass Transit Assistance Act which requires adequate consideration of provisions designed to protect social and environmental interests of residents who may be affected by any transportation project.

Discussion: Section 14 of Public Law 91-453 requires the Secretary to assure—before approval of any transportation development grant—that "adequate opportunity was (is) afforded for the presentation of views by all parties with a significant economic, social, or environ-

mental interest in the consequences of the project."

Senator Williams has interpreted this provision as having special meaning for the elderly. In a speech presented at the Interdisciplinary Workshop, he said: "Under that requirement, certainly it would be mandatory that the needs of the elderly should receive special attention. It is no secret that the central urban areas of this nation have exceptionally high concentrations of aged and aging Americans. If a transportation system does not serve them, it is not serving a large population with desperate need of special attention."

RECOMMENDATION FIVE

The Department of Transportation should report to appropriate Congressional units, by July 1, 1971, on its progress in complying with another provision of the Urban Mass Transportation Assistance Act which gives the Secretary discretion to channel approximately 46.5 million in funds into special-purpose projects of direct helpfulness to the elderly.

Discussion: An amendment—sponsored by Representative Mario Biaggi and adopted during House discussion of the mass transportation bill—was prompted by complaints that present designs of mass transit systems prevent many elderly or handicapped persons from using them. Some estimates of Americans thus precluded range as high as 44 million; one analysis indicates that more than one-half of all handicapped passengers are unable to maintain their balance when a moving vehicle starts, stops, or negotiates a sharp turn. Fear or embarrassment in large crowds caused 61 percent of the handicapped to avoid public transportation; and steps for buses and trains present

difficulties for 30 percent.2 (See pp. 26-27 for additional discussions of

barriers to mobility.)

The Biaggi amendment declared, for the first time: "It is hereby declared to be the national policy that elderly and handicapped persons have the same right as other persons to utilize mass transportation facilities and services; that special efforts shall be made in planning and design of mass transportation facilities and services so that the availability to elderly and handicapped persons of mass transportation which they can effectively utilize will be assured; and that all Federal programs offering assistance in the field of mass transportation (including the programs under this act) should contain provisions implementing this policy."

In addition, the amendment earmarked funding up to \$46.5 million to be used for loans and grants so that existing mass transit systems can be modified to meet the special needs of the elderly and handicapped. A floor amendment offered by Congressman William Widnall, however, gave the Secretary of Transportation discretionary

authority to set aside this amount.

If the Department of Transportation utilizes the authority thus provided—especially if it acts in conjunction with other agencies for purposes described in Recommendations One and Two—its Secretary can advance the prospects of greater accessibility to transportation for millions of Americans denied, in de facto fashion, a right now guaranteed to them by law.

III. ACTIONS BY THE ADMINISTRATION ON AGING

Established five years ago by the Older Americans Act, the Administration on Aging conducts several grant programs which have a direct relationship to the mobility of the elderly. Title IV of the Older Americans Act, dealing with research and development projects, could be of direct help in providing badly-needed research data and practical experience sought by Workshop participants and others.

As of June 1970, 8 transportation research and demonstration proj-

ects had been funded under Title IV.

For fiscal 1971, the AoA plans to spend \$2.8 million for research and demonstration. However, this relatively small amount must cover the entire field of aging, including nutrition, retirement planning, recreation and many others. Only five transportation research and demonstration projects are now funded under Title IV, representing about 3 percent of the total amount expended.

In recognition of the urgent need for additional funding for expanded transportation services for the aged, S. 4246—The Older

^{2 &}quot;Travel Barriers: Transportation Needs of the Handicapped," prepared for the Department of Transportation by Abt Associates, Inc., August 1969, pp. 6-7.

Americans Transportation Services Development Act—which was introduced with widespread bipartisan (Harrison A. Williams, Jr., D-N.J.; Frank Church, D-Idaho; Thomas F. Eagleton, D-Mo.; Hiram L. Fong, R-Hawaii; Jack Miller, R-Iowa; Walter F. Mondale, D-Minnesota; Frank E. Moss, D-Utah; Edmund S. Muskie, D-Maine; Winston L. Prouty, R-Vermont; Jennings Randolph, D-W. Va.; and Stephen M. Young, D-Ohio) support on August 14, 1970. This bill would amend the Older Americans Act to authorize a special emphasis transportation research and demonstration program for the elderly to be under the direction of the Administration on Aging. Funding in the amount of \$3 million would be authorized over a 2-year period.

Specifically, S. 4246 would concentrate on economic and service aspects of transportation for older persons in both urban and rural

areas. The bill would authorize:

-Feasibility studies on special transportation services in areas where large numbers of elderly persons live;

-Research and demonstration on portal-to-portal service;

—Additional studies on fare structures and their impact on the elderly's ridership, well-being and morale; and

—Demonstration projects to provide better coordinated transportation services rendered by social service agencies.

RECOMMENDATION SIX

The committee strongly urges prompt and favorable action in the next Congress on legislation to authorize a special emphasis transportation services research and demonstration program for older Americans.

Discussion.—Results from the eight AoA transportation pilot projects have been impressive. However, existing research and demonstration efforts are too limited if AoA, HUD and DOT are to develop the body of knowledge to provide a coordinated approach to deal with the most pressing transportation difficulties of older Americans on a large scale.

Additional funding will be needed for AoA to move forward in providing a clearinghouse of information about mobility needs of the aged and to serve as a coordinating force for an intergovernmental

response to the problem.

RECOMMENDATION SEVEN

The Administration on Aging should, at the earliest possible date, issue technical guidelines for its Retired Senior Volunteer Service Program with special emphasis on the very significant role that could be played by volunteers in alleviating mobility problems of the elderly.

Discussion.—The Retired Senior Volunteer Program, Title VI of the Older Americans Act, was enacted in order to provide incentives for voluntary service by the elderly on behalf of the elderly and others. It authorizes AoA to pay for out-of-pocket expenses of participants and some administrative costs. Authorized in 1969, the program was without funding until a last-ditch, bipartisan Congressional effort succeeded in winning a \$500,000 appropriation for Fiscal

year 1971.

To judge by statements made at the Interdisciplinary Workshop, RSVP could be an ideal vehicle for encouraging local sponsors to design "transportation aide" programs for volunteers. More than one participant at the workshop said that many elderly persons are reluctant to use public transportation because of difficulties encountered in climbing bus steps, carrying bundles while attempting to step through as subway doors close, or simply because they are frightened about walking to transit stops. Transportation "aides" or "companions" at strategically-located sites, it was felt, could perform many helpful functions. In communities where there is no public transportation, such "aides" could be recruited from among those who own automobiles, who would drive elders to and from shopping centers or health facilities, and who would receive training on sources of services needed by the elderly.

IV. TRANSPORTATION COVERAGE UNDER MEDICARE

RECOMMENDATION EIGHT

Many older Americans are now denied desperately needed health care because of inadequate or inaccessible transportation. Ambulance service—as now covered under Medicare—is limited to emergency situations. Other means and other practices may be more effective and less costly. Therefore the committee recommends that the Social Security Administration issue a report on the cost of broadening Medicare coverage to include additional modes of transportation services for Medicare beneficiaries. The results of research and demonstration projects previously recommended should be useful to the Social Security Administration in making this report.

Discussion.—As persons grow older, they tend to have more and longer hospital stays, increased doctor visits, additional days of some degree of disability, and a much greater likelihood of suffering from a chronic condition. Consequently, getting to and from health care facilities—whether it is a doctor's office, hospital or other health clinic—becomes a crucial health problem, especially for persons living on limited, fixed incomes. The strong inter-relationship between transportation and competent health care is even more apparent now, since house calls by physicians are almost nonexistent for patients today.

Quite frequently the cost of transportation precludes or inhibits an elderly person from seeking the necessary care he urgently needs. This is particularly true for low-income patients who must rely on taxi service because of the unavailability or inaccessibility of bus

services.

Under Part B (Supplementary Medical Insurance) of Medicare, only ambulance transportation services are now covered. Medical in-

surance will help pay for ambulance transportation by an approved ambulance service to a hospital or skilled nursing home only when:

-The ambulance, its equipment and personnel meet Medicare requirements:

Transportation by other means could endanger the patient's

health; and

-The patient is taken to a facility serving the locality, or the nearest facility that is equipped to take care of him.

In discussing this gap in Medicare coverage, Dr. Leslie Libow, Chief of Geriatric Medicine at Mount Sinai Hospital in Elmhurst, New York, forcefully pointed out:

... the only part of transportation Medicare pays for is an ambulance, so if you have to use a taxi or even an ambulette, which is a sort of checkered cab, in which you put a wheelchair to go to a health facility, Medicare will not pay for this. This costs about \$10 or \$15. Often a physician is somewhat forced to require an ambulance, so that the older individual will not have to pay \$15 out of their own pockets, so it costs the Government \$50. I do not know how many people know about things like this, but this is an extraordinary waste of money, and the health transportation system is nonexistent.³

V. BROADENING THE EFFECTS OF THE ARCHITECTURAL BARRIERS ACT

RECOMMENDATION NINE

The committee renews its recommendation that the potentially far-reaching provisions in Public Law 90-480 be effectively enforced and implemented. It is further recommended that the Administrator of General Services submit progress reports to the committee concerning action taken to enforce the act. Moreover, it is urged that the Administrator of General Services, in consultation with appropriate Federal and State officials, draft model State legislation to require that State and local buildings constructed with public funds meet accessibility standards for the aged and handicapped.

Discussion.—Travel from one point to another is only one aspect of the aged's overall mobility problem. In practically every community, there are many public buildings and facilities which have features operating as insurmountable architectural barriers for large numbers of the aged and handicapped.

About one out of every ten Americans is in some way physically handicapped. Included in this disadvantaged group are millions of older Americans with impairments because of advancing age or other

physical infirmities.

^{3 &}quot;Transportation and the Aging", Interdisciplinary Research Utilization Workshop on Transportation and the Aging, Washington, D.C., May 25-26, 1970.

An exhaustive report in 1968 by the National Commission on Architectural Barriers to Rehabilitation by the Handicapped stressed that the elderly constitute a sizable portion of Americans whose accessibility to public buildings is restricted because of physical incapacity. This report helped lead to the adoption of Public Law 90–480, which was signed into law on August 12, 1968. This measure authorized the Administrator of General Services to prescribe standards for the design, construction and alteration of buildings to insure that physically handicapped persons would have ready access. Buildings covered under the Act include those:

-Constructed or altered by or on behalf of the United States;

-Leased in whole or in part by the United States; and

—Financed in whole or in part by a grant or a loan made by the United States, if the building or facility is subject to standards for design, construction or alteration issued under authority of the law authorizing the grant or loan.

In the next 30 years, more buildings will be constructed in the United States than during the past 200 years. In meeting this urgent task, efforts must be taken to assure that the special needs of the elderly and handicapped are not overlooked. With relatively little additional cost and no loss of functional utility, most of these new buildings—as well as existing facilities—can be made usable by the aged or handicapped.

VI. THE WHITE HOUSE CONFERENCE AS A CATALYST

The 1971 White House Conference on Aging is projected as a serious and difficult undertaking. The principal task... is to arrive at a carefully weighed, comprehensive system of national policies which will give direction to action on behalf of older people at national, State and community levels.

—Technical Guide for Community and State White House Conferences on Aging, published by Administration on Aging November 1970.

Administration on Aging Directives have described the ultimate purpose of the White House Conference on Aging as the shaping of a national policy for aging, derived from informed discussion of alternative approaches and thoughtful evaluations of practicality or feasibility.

The timetable:

1. Week of September 1970: Local forums for direct com-

mentary by the elderly were conducted.

2. February-March 1971: "Community White House Conferences on Aging" are to be attended by the elderly, providers of services, specialists and policy makers for the purpose of making an input of recommendations related to the fourteen "need areas" and five "needs meeting areas" already determined by conference planners.

3. May 1971: "State White House Conferences on Aging" are to consider the recommendations made on individual issues and develop policy proposals which will be forwarded to the Washington

Conference headquarters during June 1971.

4. November-December 1971: Conferees will meet in Washington to adopt policy proposals intended to comprise a national policy on aging.

5. January-June 1972: Post-Conference action will be taken to analyze policy proposals and arrive at program recommenda-

tions for specific actions to implement policy.

Great emphasis has been placed upon limiting the number of recommendations. The November –December (1970) Aging Magazine (published by the Administration on Aging) reports that the Planning Board for the White House Conference has recommended "That the total number of issues presented to community and State conferences, and to national organization task forces, be restricted to between 50 and a maximum of 100, and that State conferences and national organizations submit policy proposals or recommendations within these numerical limits."

The article added:

Participants in discussion agreed that these numbers were not mandatory but intended as a guide to hold down the total number of recommendations to those of major substance and priority.

In view of the clear desire to keep the number of recommendations within manageable numbers, it is all the more important that actions be taken on the recommendations made earlier in this report. Actions of the kind proposed on a multi-agency basis, and by the AoA individually, would help technical task forces and conference participants to see more clearly that (a) transportation, already designated as a major "need" area, is even more pervasive as a problem than is generally recognized, and that (b) the means to deal with the consequences of mobility problems among the elderly may already be at hand and require only additional refinements and greater levels of funding.

Moreover, the White House Conference planners can also take other helpful actions, which serve as the basis of the following

recommendations:

RECOMMENDATION TEN

Representatives of the Administration on Aging, Department of Housing and Urban Development, Department of Transportation and—where appropriate—the Office of Economic Opportunity should establish technical assistance teams capable of helping participants in State conferences to recognize the magnitude of whatever transportation problems may affect the elderly within the individual states.

RECOMMENDATION ELEVEN

That Multi-Agency cooperation of the kind suggested in Recommendations One and Two result in the publication of a paper which is designed specifically for participants in the White House Conference in November-December 1971.

Discussion.—A "Technical Paper" now under preparation for use at next year's Community and State White House Conferences is in-

tended primarily as a summary of national goals that have already been expressed, the present situation, and major issues. The multiagency paper, however, could perform an entirely different function. It could suggest areas for public policy decisions that would encourage joint action by federal units which have responsibilities in programs related to aging and transportation.

RECOMMENDATION TWELVE

During the "implementation phase" beginning in early 1972, another Interdisciplinary Workshop (see page V for details) should be conducted. Unlike the exploratory workshop of May 1970, the 1972 workshop should be concerned primarily with specific action proposals which, as one program, will fulfill goals of a coherent national policy on transportation and the elderly.

PART FOUR CONCLUSION

"NOT A MINORITY . . . A MAJORITY."

Every effort has been made in this report to resist the concept that entirely separate transportation systems should be designed and put

into operation for the elderly and the handicapped.

This stance was taken despite the firm recommendation made 11/2 years ago by a consulting firm which—after a study 1 of transportation needs of the 6 million Americans classified as "chronically handicapped"-that "economically viable" specialized transportation networks could be designed and put into use for the elderly and the handicapped in cities with populations of 100,000 and more.

Instead, the Committee believes that the most feasible form of assistance to the elderly will be that which is also of assistance to all other

Americans.

It is true that, under certain circumstances, limited-service systems should be offered to meet specific, local needs. The importance of specialized transportation services for health purposes has already been described; the value of other projects described in Part II of this report cannot be easily disputed.

But it is possible to conceive of such pilot projects as forerunners of transportation-service components that will ultimately fit into more

generalized networks.

At least, that is the ideal.

In the meantime, several points should be made about the benefits that would result from dealing more adequately in the very near future with mobility needs of the elderly:

I. THE "GLUE" FOR SOCIAL SERVICES

Fragmented social services are more the rule than the exception for older Americans.2 It has become commonplace for authorities on aging to refer to the problem as almost, but not quite, hopeless.

At the Interdisciplinary Workshop 3 which serves as the basis for much of this report, for example a conferee 4 from Chicago said:

^{1 &}quot;Travel Barriers—Transportation Needs of the Handicapped," prepared for the U.S. Department of Transportation by Abt Associates, August 1969. For additional discussion, see pp. 98-99, "Developments in Aging: 1969," A Report of the Special Committee on Aging, U.S. Senate, May 15, 1970; and Part I of this report.

2 For additional discussion of social service inadequacies among older Americans, see Chapter VII (pp. 103-110) of "Developments in Aging—1967" and Chapter VIII (pp. 77-83) of "Developments in Aging—1968," annual reports issued by the U.S. Senate Special Committee on Aging.

3 "Interdisciplinary Workshop on Transportation and the Aging," funded by the Administration on Aging, Urban Mass Transportation Administration, and Department of Housing and Urban Development, May 24-26, 1970.

4 Mr. John H. Bell, Director, Senior Citizens Mobile Service, YMCA of Metropolitan Chicago, at workshop cited in footnote 3.

We need to find ways to link up transportation systems with housing development, health and social welfare agencies, and to coordinate and to improve the delivery of services to the elderly. We must have involved something like 40 social agencies in this city, trying to decide how we could plan comprehensively, how we could pull out our efforts in bringing this about, and I must admit until now, we have not been successful in doing it.

In Kansas City, the situation was this:5

... in order that we may establish some type of program, it is required that the staff go to organizations whose primary function is to take care of the senior citizens. There are some thirty organizations within the Kansas City area just for this purpose ... (Emphasis added.) Each organization [of the few that replied to a recent questionnaire] has stated that transportation is a problem.

New York City—it was reported 6—"is divided, for administrative purposes, in several ways and two are particularly germane to our analysis—approximately 300 health areas and the 26 designated

poverty areas."

Despite the multiplicity of governmental units, as well as private service agencies, communication and coordination may be possible, even in New York City. The same workshop participant who described the large number of administrative districts in the city later spoke about the lessons being learned from the reduced-fare program with which she is associated:

... I feel that reduced-fare programs are not a thing unto themselves. I think we have been concentrating on transportation here, but we in New York feel it is an opening wedge to tie into other things. (Emphasis added.)

Clinic hours are being changed; the City Center is offering programs; city action groups that wanted to bring groups of the elderly down for social action began to use the reduced

fare.

I think really the value of it is partly with some other agencies in the community who are perhaps dedicated to the welfare of older people, picking it up and making it kind of a continuing thing. It is not enough to just offer a transportation method or reduced fare and say, "We will automatically in the long run cure social isolation." I think they have to be webbed into each other, webbed into other services.

As a "wedge" or a force for the "webbing" of services, improved transportation for the elderly can also provide impetus for improved services to other age groups. The "multiplier" effect mentioned earlier could well spill over to help the younger people of today.

⁵ Mr. Henry Perry, Project Director, Multiservice Transportation Project, Kansas City, Missouri, at workshop cited in footnote 3.

⁶ Mrs. Marjorie H. Cantor, Director of Research, New York City Office for the Aging, at workshop cited in footnote 3.

II. Redesign of Facilities

Accessibility to public transportation vehicles and structures have already been discussed, almost solely in terms of the need to serve the elderly.

Architectural and transit barriers, however, are of concern to other

age groups as well.

Arguing that "consideration for the problems of older people will lead to better public transit service for other persons as well", one Workshop participant is said:

To some extent, the special needs of retired people mirror those of other stay-at-home and physically non-dominant groups, which include pregnant women, mothers with young children, and even the strongest men when they have bulky packages, as well as those ordinarily termed "the handicapped". All would welcome the shallow steps, less threatening doors, more comfortable waiting facilities, more frequent or firm schedules which would shorten the waiting and reduce the crowding.

Actually, as a research assistant on this project commented: "Who wouldn't?" She is 22, blonde, beautiful, strong and agile—and refuses to use public transit unless her car will not run. Some of the improvements of public transit equipment and service designed to better meet the needs of retired people may serve also to make it more attractive to, and increase its use by students, workers and housewives who are not in any way handicapped. Such improvements in equipment and service might well reveal significant economic "latent demand" and personal "latent need" for public transit among the relatively immobile and, as well, among those who presently go by automobile, in all age groups.

Much the same point was made in the study of architectural barriers mentioned earlier: 8

Every person in the United States, at some point in his lifetime, will be handicapped. Although he may not be one of the Nation's over 8 million people who in 1985 will be limited in mobility as a result of a long-term medical condition or impairment, he will most certainly be handicapped as a result of age, unusual size or weight, fatigue, a broken limb, pregnancy, or just parcels and packages. Although the handicaps suffered by most people will be no more serious than an encounter with mass transportation while carrying an armload of bulky groceries, a heavy briefcase, or a child, the public's willingness to use mass transportation on a regular basis is undoubtedly influenced by such trying experiences. Clearly, many of the design and operating changes which might be made to a transportation system for accommodating the chronically handicapped would also improve the quality of transportation for the rest of the population. (Emphasis added.)

⁷ Frances M. Carp, Ph. D., p. 19 of her paper, "Public Transit and Retired People".
⁸ Report cited in footnote 1.

In spite of the potentially rich dividends that would be derived from redesign features which would serve others while they serve the elderly, there is little evidence at this point of any great desire to do so, other than in the San Francisco BART program. (See Part II of this

Substance for this conclusion was provided by a Workshop participant 9 from Nashville, Tennessee. That city is an "urban observatory." one of ten municipalities selected for intensive, broad-guaged analysis of the many forces which shape a metropolitan environment. Of twelve sub-units in the Nashville urban observatory, one was on transportation. Its biweekly meetings are attended by the traffic engineer of the city, executive secretary of the Traffic Commission, several engineers, sociologists, and anthropologists.

The question I raised to them, said the workshop participant, was: did they ever think explicitly and deliberately of older persons in any of their planning in the city? The traffic engineer, not merely humble but an honest man said no. that they had never explicitly and deliberately thought of older persons in any of their planning: that they were lost in other categories of passenger, pedestrian, driver, what-have-you, but never explicitly as an older person who happened to be one of these. (Emphasis added.)

III. A MATTER OF "SELF-INTEREST" FOR ALL

It can be argued, as one workshop participant 10 did, that "the retired should have special consideration because they comprise an important population subgroup which is represented by no institution to 'lobby' for them."

Lack of understanding of the needs of the elderly is certainly one of the major causes of today's problems among our aged population. But other conferees argued that younger Americans have a "self-interest" in seeing to it that transportation problems of the elderly are resolved.

This view was emphatically expressed by Louis Gelwicks of the

University of Southern California, Gerontology Center: 11

The statistics regarding the magnitude or proportion of our population, either currently or in the future, which can be considered as elderly are redundant. Such statistics may also be somewhat irrelevant. We have for some time realized that special consideration is often warranted for minority or disadvantaged groups in society if we are to improve the well-being of the entire population. This realization in itself should justify special considerations for the elderly, but the physical mobility of an aged population is not a minority problem. It is a majority problem. Although there are only 20 million people who can be classified as elderly at this point in time, 71 percent of our total population born in the years

Carroll J. Bourg, Ph. D., Department of Sociology and Anthropology, Fisk University, Nashville, Tennessee, at workshop cited in footnote 3.
 Dr. Carp, in paper cited in footnote 7. p. 20.
 "Transportation and Its Influence Upon the Quality of the Older Person's Relation With the Environment," p. 10.

1959-61 can be expected to live past the age of 60 and spend many years as "elderly" citizens. Over 86 percent of the white female population born in the same years will live past 60. If there are particular needs, desires, and goals inherent within, or triggered by, the individual's process of aging (and the majority of our population will undergo this process) it would appear incumbent upon society to focus a greater portion of its efforts toward improving the quality of life for this majority.

Another participant, Joseph S. Revis of the Institute for Public Administration, described a group of "captive riders" who—because they have interests in common with the elderly—could mobilize opinion and buying power to achieve common goals:

Transportation needs of the aged should not be considered in isolation of the needs of other minority groups. If the population over 65 cannot serve as a sufficient market base to exclusively support a transport system, except in the narrow uses I have already mentioned, then it is essential to find ways to develop a larger market by combining the elderly population's transport demands with other groups in the population that have similar transport needs. This is not as far-fetched as it may sound for there are a number of groups whose transport demands are quite similar to the elderly. For example, we know that the aged are largely reliant on public transit and are part of the group referred to, in the jargon of transportation, as "captive riders." This group of "captive riders" includes the very young (under 21), housewives, and the younger physically handicapped population. When aggregated, they make a more sizable market base capable of supporting more transport services than would be true if each is considered as a separate group. Furthermore, there is evidence that these groups often have the same time demands (off-peak), and even origin-destination demands, and it is clearly worth a careful look at origin-destination data (present and any that might be generated in the future) in terms of identifying potential for aggregating markets. A closely related possibility is to "piggy-back" transportation for the aged onto the existing systems. This would involve identification of the areas in which, for relatively little cost, added services might be provided.

Finally, in seeking to identify the transportation needs of the aged, one must be very careful not to focus on a single

need.

There is no single transportation need for the aged. The needs of the rural elderly are not the same as those in the urban areas. Similarly, the transportation needs of the aged with good incomes are not the same as the poor. Even within urban areas there are differences between large and small cities, and inter-city transportation demands are not the same as those within our urban areas or even between urban and

rural areas. It is important for research to help understand these differences and thereby more effectively direct public policy.¹²

The Committee on Aging, concerned primarily with the problems of men and women who are now—or soon will be—aged, must also look to the future and anticipate trends which will have direct effects upon the well-being and security of tomorrow's elderly. In the matter of transportation and mobility of older Americans, the linkage between present and future is even more direct: Well-conceived action during the next few years can help this Nation arrive more quickly at goals of direct importance to every American, young or old, urban or rural.

At a time of preparation for a White House Conference on Aging, during a period of re-evaluation of our urban redevelopment goals and techniques: and during a year in which the Urban Mass Transportation Act of 1970 will be implemented, the time for such action is here.

^{12 &}quot;Transportation for the Aged," pp. 7-8.

APPENDIXES

Appendix 1

INTERDISCIPLINARY WORKSHOP ON TRANSPORTATION AND THE AGING, WASHINGTON, D.C.

SUMMARY OF RECOMMENDATIONS *

Conducted by the Division of Transportation planning, Polytechnic Institute of Brooklyn

Sponsored by the Administration on Aging; Department of Health, Education, and Welfare; Urban Mass Transportation Administration; Department of Transportation; and Department of Housing and Urban Development, May 25-26, 1970.

Introductory Note

This summary of the immediate results of the Conference on Transportation and the Aging, held in Washington, D.C., is meant to convey the essence of the meeting, and is not intended as an exhaustive compilation of recommendations. The Summary will serve to indicate the tenor of the Workshop; these recommendations were, on the one hand (Part I) produced by officially constituted committees of the Workshop, and on the other (Part II) were extracted from the papers, and the discussions produced by those papers. This Summary, then, will provide some insight into the attitudes of the participants, and some intermediate guidelines to needed activity, until publication of the Proceedings of the Conference.

I. RECOMMENDATIONS FROM THE CONFERENCE WORKSHOP COMMITTEES

A. KNOWLEDGE GAPS AND RESEARCH NEEDS

- 1. Information about the elderly (and non-aged handicapped) as a group:
- a. Characteristics of the elderly

Their spacial (demographic) distribution.

Their use of time.

Their potential use of time in relation to latent demand for transportation.

Their walking trips: length, frequency, purpose.

Their behavior as pedestrians.

^{*}Reprint of complete text.

b. Problems of the elderly as a group

Those problems they share with other groups (the poor, the handicapped).

Those unique to the elderly.

Similarities and differences with respect to the problems of younger people.

Cultural and generational differences, differences in needs and ex-

pectations of-

-the aged of today. -the aged of the past, —the aged of the future.

c. Needs and requirements of the elderly

Needs of the elderly as a function of changing life styles; changes in activity centers.

Travel requirements and latent demand for travel.

Relationships between latent demand and transportation mode. Current usage of transportation systems by the elderly, by extent

and purpose.

2. Definition of aging for various research purposes: a. Defining "the aged" by chronological age or by mobility limitation.

b. Defining mobility limitations by degree and aspect, e.g., walking speed to include 50%, or 95% of the aged.

c. Norms for design purposes applicable to the elderly as a group.

3. Application and utilization of knowledge for practitioners: a. Improving urban design to fit the needs of the aged and the handicapped, including land use, transportation planning, and their relationships.

b. Transferring information about a transportation system to older users of the system, including signs, timetables, awareness of situ-

ations.

c. Quantification of behavior of various types so that it may be taken into account in the planning of transportation facilities.

B. PROGRAM NEEDS

1. Services to the elderly individual:

a. An intra-city travel bureau, or transportation referral service, available to answer older people's questions, to get better use by the elderly of available transit systems in a given community.

b. An escort service, or transportation aides to accompany an elderly

person who is making trips within a city.

2. Improvements in overall systems:

a. Coordination of all forms of transportation in a given area. A program to bring together under one agency, the availability of vehicles and transit capacity from all sources; public and private, authorized and unauthorized, state and federal agency vehicles, postal carriers, private clubs, school busses, etc. The purpose being to utilize available capacity during non-regular periods, thereby improving both the mobility of the aged and the economics of operation.

b. The education and training of transit personnel and police in regard to dealing with the elderly, in extending consideration for their limitations, and in communicating directions and other information.

C. SYSTEM AND DESIGN REQUIREMENTS

1. Systems:

a. New transportation systems, highly varied in character, to serve

long-run needs.

b. Modifications of existing systems to suit the transportation needs of the elderly, to serve short-term needs. An orderly and planned conversion should be developed for the near future.

c. Alternatives or adjuncts to mass transit for the elderly such as

buses, taxis, or minibuses.

d. An additional new adjunct system of smaller vehicles to serve needs of the elderly for door-to-bus, bus-to-door, or door-to-door transportation.

2. Design standards:

a. Government design standards for the elderly and the handi-

capped for vehicles and facilities, all modes.

b. Improved technical standards of urban designs, street and pedestrian designs, traffic control measures (signs, signals, markings), and lighting.

D. ECONOMICS AND PRICING

1. Costs to the elderly:

a. Expansion of Social Security or Medicare to cover costs of trans-

portation for the elderly; and/or

b. Institution of a new insurance plan (Transicare) to provide for costs of travel in later years, to be operated along the lines of Social Security.

c. Reduced fare programs to satisfy short-term needs of the elderly.

2. Cost of improvement/construction:

a. Local, state, or federal funding for transportation systems for the elderly and handicapped in rural areas.

b. Local, state, or federal funding for the conversion of existing

physical plants.

c. Local, state, or federal funding for innovative systems to fill the gaps in present transportation systems with respect to the needs of the elderly and handicapped.

d. Improving existing systems before designing and building new

systems.

E. LEGISLATIVE NEEDS

1. Federal:

a. Support for the Urban Mass Transportation Act amendments of 1970.

b. A law similar to Public Law 94-80, August 12, 1968, (pertaining to buildings) to make it mandatory for all newly-built mass transist vehicles and related facilities to be able to accommodate the elderly and the handicapped, including the non-ambulatory.

c. Legislation for expansion of existing plans (Social Security, Medicare) or the creation of a new one ("Transicare") to provide

funds directly to the elderly for transportation costs.

d. Funding for the conversion of existing physical plants.

e. Funds for new systems.

f. Design standards applicable to interstate carriers.

g. Funds for transportation systems of the elderly and handicapped in rural areas.

2. State:

a. The use of school buses for the elderly when these buses are idle.

II. RECOMMENDATIONS, SUGGESTIONS, AND QUESTIONS FROM INDIVIDUAL CONFERENCE PARTICIPANTS

A. KNOWLEDGE GAPS AND RESEARCH NEEDS

1. Information about the elderly as a group:

a. Characteristics of the elderly

What are the differing "life spaces" of the elderly at different economic levels?"

How far does one travel for health services?

How many of the aged do not have Social Security?

Why do the majority (of persons studied) go into the downtown

section at about 11 o'clock and return at about 3 o'clock?

Why does the proportion of male registrants in the half-fare program (in New York) increase as age increases, while the proportion of female participants decreases (as age increases)?

What have been the changes in overall trends in ridership over the

period of time in which data is taken?

What, if any, are the environmental factors that can and do influence ridership?

Why are the needs of the aged interrelated but services are

scattered?

Origin and destination patterns of the aged are not well understood.

b. Problems of the elderly as a group

Is the older person in a situation of growing powerlessness?

We need to know what their aspirations or felt needs are.

The difference between what they think they need and what in fact they are getting must be determined.

We must study the psychological effects of the burden of crowds on

the elderly.

We should interview the aged pedestrian involved in accidents, and correlate design defects to accidents.

c. Needs and requirements of the elderly

What are the consistent determinants of system usage?

What exogenous factors have to be accounted for to determine system usage?

How frequently should buses run for the elderly?

How does public transportation meet the needs of retired people? How do they use the transportation? How do they find it, good or bad?

Why does one shop in a particular store?

Why do people shop in a specific chain rather than another?

d. Study methodology

What magnitude of sampling is needed in order to obtain an estimate of ridership to any given degree of accuracy and reliability?

How long should the intervals be separated between a before and an after survey? Should they be comparable a year later, or should they be taken a very short time from the time of starting to the time of taking the after data?

How does one determine the representativeness of the sample?

Are the effects different in sampling by routes, by rail rapid transit and bus, by day of the week and by time of day?

What are the transportation requirements of dense development for

the elderly as part of the overall residential location model?

Is latent demand to be found by equating the low-income elderly trip rate to that of the high-income elderly?

In focussing on the needs of the aged one must be very careful not

to focus on a single need.

Intercity transportation demands should be studied also.

We must not consider the needs of the aged in isolation of other

groups in the population.

We need to develop a better long-range and continuing program of data acquisition and analyses on transit usage, both for planning and for evaluation usage.

3. Application and utilization of knowledge for practitioners:

Transferring information

Clarity of maps of transit systems must be improved to suit the elderly.

Specific maps for specific trips and routes should be made available. Knowledge of services available for the aged must be increased among the aged.

We should educate the elderly about how to use Red Caps.

We should advise the elderly to arrive several hours in advance of an air trip.

We must make transit systems more comprehensible and predict-

able.

Improved signs and visual devices are needed. Improvements in color, size of letters, frequency of signs and use of lighting.

B. PROGRAM NEEDS

1. Services to the elderly individual:

The development of a young corps of drivers who might be enlisted to do driving for the elderly, either at low cost or maybe through VISTA, or a kind of domestic Peace Corps, which would include that kind of service.

The need for someone to help the aged; someone to help them get on and get off; someone to check and be sure their destination was coming up, since the aged are often afraid of getting off at the wrong stop.

2. Improvements in overall systems:

Establish a (central) place to which the researchers may send the material that is analyzed. This would be in addition to sending ma-

terial to Washington and to other media nationally. This would be a cooperative body where each would understand the other's language.

The Administration on Aging should act as a spokesman and as an agent for presenting research programs to other federal agencies. Registered nurses should be aboard all commercial airlines.

C. SYSTEM AND DESIGN REQUIREMENTS

1. Systems:

Can transit actually be supplied, even if there were a tremendous need?

We need locally run transportation systems.

Lady traffic police at crossings for the aged (like school crossings). More effort must be put into increasing off-peak services for the

aged and others, with respect to schedules, fares, and routes.

We must re-route buses and coordinate bus stops and pedestrian facilities. There is no reason why bus routes cannot be altered during the off-peak periods to take into account different origin and destination patterns.

We must bring the opportunities closer to the elderly person through the provision of high residential density development com-

munities.

A possibility: piggy-back transportation for the aged on existing transportation systems. This involves identification of the areas in which, for little cost, added services might be provided.

Experimentation and more imaginative effort in cooperative or

rental car leasing arrangements or joint ownership.

Why do we design out social interaction in most of our transporta-

tion modes?

Transportation services need to be door-to-door, continuous networks having a high degree of connectivity and flexibility compatible with existing facilities. They should evolve out of the automobile, but should be automated.

We must add peripheral or lateral connections to existing systems, then introduce dual-mode or multi-mode vehicles. Then take steps increasingly automating movement in the high-density channels of

movement.

2. Design standards:

Doors that close too quickly. The aged are terribly afraid of them. Additional doors on vehicles so that it would be possible to get a seat more quickly.

Doors that are easier to open (on buses).

Bus steps are too steep. They could be redesigned to have three shallower steps rather than two steep ones.

Special step lights on buses.

Preferential seating for the elderly and the handicapped, or mothers

with children, or people with baggage.

The use of more than one sensory modality should be designed into transportation systems: sound and vision, for instance. Different kinds of tactile simulation; special pathways of different materials to guide the traveler. A sound pulse along a corridor could indicate when

a person is on the correct route by its tone, and the speed of the pulse might indicate how soon the vehicle would be waiting and available for him to get on.

We should change the intervals of traffic lights to accommodate the

elderly. We might consider changing the color of traffic lights.

Special crowd-free crossings might be considered for the elderly, with an absence of steep curbs.

We must segregate pedestrians from traffic: close off shopping areas,

elevate sidewalks, etc.

More rest and social areas are needed along the streets: parks, coffee shops, etc.

There should be special walking lanes for slower travelers. There is a need for increased illumination along the streets.

Shelters and change machines and benches are needed at bus stops. A queuing system at bus stops would eliminate pushing and shoving.

Acceleration-deceleration characteristics must be improved. Warning signals could identify when acceleration is about to take place. Lateral acceleration should also receive attention.

Improved hand-holds in buses are needed, within reach of all

travelers.

Public toilets should be more readily accessible in stores, parks and cities in general.

D. ECONOMICS AND PRICING

1. Costs to the elderly:

There is a need to put a dollar social cost on *not* spending money on transportation for the aging.

We must strengthen Medicare to include transportation to health

services eyeglasses, and hearing aids.

There should be a variable fare structure, with respect to distance and time.

Transfer privileges should be extended.

Transportation to the aged on a free basis through the use of a universal pass for intra-city transport.

2. Cost of improvement/construction:

If Federal financial assistance is to be obtained under the Urban Mass Transportation Act, for any of the changes that must be made to meet the requirements of the elderly, provisions must be included in a comprehensive plan. If Federal capital assistance is to be provided for bus shelters or for modifications to rolling stock, or to buy additional rolling stock to service the crosstown commuter routes, to service hospitals, medical centers, etc., all these provisions must be reflected in a comprehensive officially coordinated transportation plan for the area.

Some system of funding should be made available for a planned, orderly conversion period from the present bus system to newly equipped buses (for the elderly and physically handicapped).

A program of designed grants and incentives ought to be developed to encourage design considerations for the aged among designers and

builders.

E. LEGISLATIVE NEEDS

A Federal law is needed making it mandatory after a certain date, as soon as possible, that all new buses be redesigned to be usable by those that are non-ambulatory, both elderly and physically handicapped.

Transportation should be a public service.

Investigation is needed of the extent to which existing laws preclude trying things that might otherwise be helpful.

The question of auto licenses for the aged must be re-examined.

Appendix 2

JEWISH WAR VETERANS PROJECT WILL AID JEWS IN INNER CITY

[From "The Jewish Week and The American Examiner" (Washington, D.C.), Dec. 10, 1970]

The establishment of a synagogue corps to provide security for Jews who live in the inner cities of major urban areas has been announced by the Jewish War Veterans. Slated to get underway by the first of the year, the program, according to Albert Schlossberg, national commander, was prompted by "the increasing number of attacks on Jews and synagogue properties in those areas of the inner city where there are no longer young and middle class Jewish families."

Schlossberg pointed out that "in most inner cities with large urban areas, all that is left of the Jewish community are aged Orthodox Jews whose life revolves around their synagogue and who have neither the funds nor the inclination to leave lifetime homes. These people are often subjected to brutal attacks by hoodlums who prey on their weakness. Often, their synagogues are vandalized and their homes terrorized."

The program, which will begin in New York, Boston and Philadelphia according to Felix M. Putterman, national executive director of the JWV, will be undertaken by individual posts. JWV will urge each Post to adopt a synagogue and set up a duty roster for its members. Part of the responsibilities of the Corps will be to attend Saturday and holiday services with the worshippers and "by their presence afford a feeling of security to the older people who make up these congregations," Schlossberg said. In addition, members of JWV posts will be prepared to assist in any manner that "will contribute to the well being and security of the people in the inner city."

Appendix 3

TABLES FROM: DEPARTMENT OF TRANSPORTATION—AUTOMOBILE INSURANCE AND COMPENSATION STUDY: MOTOR VEHICLE ASSIGNED RISK PLANS

TABLE III-2.-AGE OF MALE ASSIGNED RISK APPLICANTS

										-							
		-	٠.	•-	·			Age	_								
State	0 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and older	Total
alifornia:																	
Number Percent	296 12, 46	570 24.00	332 13. 98	226 9. 52	174 7. 33	174 7. 33	137 5. 77	105 4. 42	85 3. 58	63 2. 65	48 2. 02	60 2. 53	52 2, 19	42 1. 77	. 38	. 08	2, 375 100, 00
ew York:					•	•									. 30	. 00	100.00
Number Percent	190 11.69	250 15, 38	265	214	164	123 7. 56	115 7. 07	83 5. 10	72 4, 43	43 2.64	30 1. 85	35 2. 15	24 1. 48	14 . 86	. 12	.2	1,626
orth Carolina:	11.09	15. 36	16. 30	13.16	10.09	7. 56	7.07	5. 10	4, 43	2. 64	1.85	2. 15	1.48	. 86	. 12	. 12	100.00
Number	150	610	386	227 9. 42	202	200 8. 30	180 7. 47	142 5. 89	102 4. 23	73 3. 03	54 2. 24	41 1. 70	32 1. 33	7	4	0	2, 410
Percentio:	6. 22	25. 31	16.02	9. 42	8. 38	8. 30	7.47	5. 89	4. 23	3.03	2.24	1.70	1. 33	. 29	. 17	0	100.0
Number	36	90	65	41	47	44	58	43	31	30	35	75	116	85	30	2	82
Percent	4. 34	10.86	65 7. 84	41 4. 95	5. 67	5. 31	58 7. 00	5. 19	3.74	30 3. 62	35 4. 22	75 9. 05	13.99	10, 25	3. 62	. 36	100.0
nnsylvania: Number	114	153	112	. 80	. 00	00	1110	or	01	70	02	104		22	1.4		4 00
Percent	8, 60	11.54	8. 45	6.03	82 6. 18	98 7. 39	'118 8.90	6, 49	81 6. 11	78 5. 88	83 6. 26	104 7. 84	89 6. 71	33 2. 49	14 1, 06	. 08	1, 32 100, 0
uth Carolina:																	
NumberPercent	59 3. 53	190 11. 36	295 17. 63	173 10. 34	170 10. 16	153 9. 15	180 10. 76	134 8. 01	105 6. 28	66 3. 95	57 3. 41	35 2. 09	32 1. 91	. 72	. 54	. 18	1,67; 100,0
exas:	3. 33	-11. 30	17.00	10.34	10. 10	3. 13	10.70	6. UI	. 0. 20	3. 33	3.41	2. 03	1. 51	. / 2	. 34	. 10	100.0
Number	167	407	278	181	142	176 7. 27	158 6. 53	120	110 4. 54	76 3. 14	121	173	198	93	15	6	2,42
Percentisconsin:	6. 90	16. 81	11.48	7.48	5. 87	7.27	6. 53	4.96	4. 54	3. 14	5. 00	7. 15	8. 18	3. 84	. 62	. 25	100. 0
Number	37	85	54	37	38	45	40	42	37	34	57	100	125	79	22	4	83
Percent	4.43	10. 17	6.46	4.43	4. 55	5. 38	4.78	5. 02	37 4. 43	4. 07	6. 82	11.96	14.95	9. 45	2.63	. 48	100.0
Total:																<u></u>	
Number	1,049	2,355	1,787	1,179	1,019	1,013	986	755	623	463	485	623	668	365	105	21	13 .49
Percent	7.77	17.45	13. 24	8.73	7.55	7.51	7.31	5. 59	4:62	3.43	3. 59	4.62	4.95	2.70	. 78	. 16	100.0

Source: Survey of 1968-69 private passenger assigned risk applicants.

TABLE III-3.--AGE OF FEMALE ASSIGNED RISK APPLICANTS

								Age	•								
State	0 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and older	Total
lifornja:																	
Number	46	87	77	55	42	48	51	39	29	20	17	19	25	8	1	٨	564
Percent	8. 16	15.43	77 13. 6 5	55 9. 75	42 7. 45	48 8. 51	51 9. 04	39 6. 91	29 5. 14	20 3. 55	17 3. 01	19 3. 37	25 4. 43	1. 42	. 18	ň	100.00
w York:							•••		•. • .	0.00	0.01	0.07	11. 10			•	200.00
Number	69	148	87	68	65	69	57	39	21	14	8	8	7	5	0	0	665
Percent	10. 38	22. 26	13.08	68 10. 23	65 9. 77	69 10. 38	57 8. 57	39 5. 86	21 3. 16	2. 11	8 1. 20	1. 20	1.05	. 75	Ō	Ō	100.00
rth Carolina:																	
Number	49	138	88	63 9. 24	77	79 11. 58	65 9. 53	48 7. 04	30 4. 40	17 2. 49	7	8 1. 17	10 1. 47	1	. 29	0	68
Percent	7. 18	20. 23	12.90	9. 24	11. 29	11.58	9. 53	7.04	4.40	2. 49	1. 03	1. 17	1.47	. 15	. 29	0	100.0
0;					_												
Number	- 4	11	. 6	. 4	_ 5	11 6. 67	11 6. 67	16 9. 70	5 3. 03	4	16 9. 70	21 12. 73	28 16. 97	17 10. 30	5	_1	16
Percent	2. 42	6. 67	3. 64	2. 42	3.03	6.67	6.67	9.70	3. 03	2.42	9.70	12.73	16.97	10. 30	3. 03	. 61	100.0
nnsylvania:	10	70			0.5	40						-00					
Number Percent	18 4. 21	70 16. 39	27 6. 32	31 7. 26	25 5. 85	42 9. 84	50 11. 71	41 9.60	36 8. 43	15 3. 51	19 4. 45	26 6. 09	18 4. 22	1.64	. 47	0	10042
th Carolina:	4. 21	10. 33	6. 32	7.20	3. 83	9. 54	11. /1	9. 60	8.43	3. 31	4. 43	6. 09	4. 22	1. 64	. 4/	U	100. 0
Number	20	00	0.0	e E		70	67	41	20	1.0			10				E0
Percent	28 4. 68	89 14. 88	86 14. 38	65 10. 87	55 9. 20	73 : 12. 21	67 11. 20	41 6. 86	30 5. 02	14 2. 34	21 3.51	8 1. 34	16 2.68	. 67	. 17	0	59 100. 0
(as:	4.00	14.00	14. 30	10.07	3. 20	. 14. 41	11.20	0. 00	J. 02	2. 34	3. 31	1. 34	2.00	.07	. 17	U	100.0
Number	40	71	41	30	32	12	43	32	22	22	AA	97	59	24	7	2	61
Percent	6.48	11. 51	6.65	39 6. 32	32 5. 19	42 6. 81	43 6. 97	32 5. 19	23 3. 73	22 3. 57	. 44 7. 13	87 14. 10	58 9. 40	34 5. 51	1, 13	. 32	100.0
sconsin:	0. 10		0.00	0. 02	0	0.01	0.0.	00	0.70	0.0.		24. 20	0. 40	0.01			200.0
Number	16	35	21	10	14	13	18	17	9	5	15	19	31	18	0	1	24
Percent	6.61	14, 46	8.68	10 4. 13	5. 79	5. 37	7. 44	7. 02	3.72	2, 07	6. 20	7. 85	12. 81	7. 44	ŏ	. 41	100.0
-												.,,			<u>_</u>		
Total:																	
Number	270	649	433	335	315	,377	362	273	183	111	147	196	193	94	18	4	3,96
Percent	6. 82	16. 39	10.94	8. 46	7. 95	9. 52	9. 14	6. 89	4.62	2.80	3.71	4. 95	4.87	2. 38	. 46	. 10	100.0

Source: Survey of 1968-69 private passenger assigned risk applicants.

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TABLE III-8.—ASSIGNED RISK APPLICANTS FINANCING PREMIUMS

		Premiu	ıms	
State	Financed	Not financed	Unknown	Total
California :				
Number	1, 244	1, 684	33	2.961
Percent	42.01	56. 87	1. 11	100.00
New York:				
Number	896	1, 243	165	2, 304
Percent	38. 89	53.95	7. 16	100.00
forth Carolina:	*****	••••	7	
Number	1,400	1.690	3	3, 093
Percent	45, 26	54, 64	. 10	100.00
Ohio:		•• .		
Number	3	991	7	1,001
Percent	. 30	99.00	.70	100.00
Pennsylvania:	-			
Number	163	1, 563	49	1,775
Percent	9. 18	88. 06	2.76	100, 00
South Carolina:				
Number	1, 297	708	272	2, 277
Percent	56.96	31. 09	11.95	100.00
fexas:				
Number	1, 041	1, 981	30	3, 052
Percent	34.11	64. 91	.98	100.00

TABLE IV-4.—ASSIGNED RISK APPLICANTS AND OTHER OPERATORS CLASSIFIED BY AGE, ACCIDENTS, AND CONVICTIONS 1

			Applicants ur	ider 25					Applicants 65	and over		
	No accide or convicti		No acciden convictions in other opera	cluding	No accide conviction surcharges ir other oper	s, or cluding	No accid or convic		No accide convictions i other ope	ncluding	No accid conviction surcharges in other ope	ns, or ncluding
State	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percen
California New York North Carolina Dhio Pennsylvania South Carolina Texas	165 441 537 63 170 251 217 67	16. 47 66. 92 56. 70 44. 68 47. 89 68. 39 31. 68 38. 73	156 421 514 58 161 240 208 67	15. 57 63. 84 54. 28 41. 13 45. 35 65. 40 30. 36 38. 73	154 402 514 35 71 223 196 50	15. 37 61. 00 54. 28 24. 82 20. 00 60. 76 28. 61 28. 90	103 91 106 269 248 157 541 348	36. 40 66. 92 63. 86 61. 98 62. 16 78. 89 64. 48 73. 86	96 84 103 261 242 152 518 342	33. 92 61. 76 62. 05 60. 14 60. 65 76. 38 61. 74 72. 61	96 77 103 252 337 137 514 322	33. 92 56. 62 62. 03 58. 06 59. 40 68. 84 61. 26 68. 37

 $[\]ensuremath{^{t}}$ The accident and conviction records of the applicants and other operators are for 36 months.

Source: Survey of 1968-69 private assigned risk applicants.

TABLE I.—PERCENT OF HOUSEHOLDS OWNING CARS, BY AGE OF HEAD, HOUSEHOLD INCOME, AND NUMBER OF CARS, JANUARY 1960 AND JULY 1970

	Any ca	ars	1 ca	г	2 or more	cars		3 or more
Age of head and — household income	1960	1970	1960	1970	1960	1970	2 cars 1970	cars 1970
Total	75. 0	79.6	58. 6	50.3	16.4	29.3	24.6	4. 7
Under 25	79. 1	80.7	73.6	50.3 64.0	5.5	16.7	15.0	ī. 7
25 to 34	83.9	88. 0	69.9	58.7		29.3	27. 2	2. 1
35 to 44	85.0	88.4	63.7	47.0	21.3	41.4	35.0	6.
45 to 54	79.8	86. 4	56.4	43.5	23. 4	42.9	33.4	9.
55 to 64	71.5	80. 3	54.3	52. 4		27.9		5.
55 to 64					17. 2		22.4	
65 and over	49.6	55. 1	42. 5	46. 3	7. 1	8.8	8.0	. 8
Under \$5,000 \$5,000 to \$9,999	41.0	45.4	37.8	41.2	3. 2	4.2	3.9	1. 4
\$5,000 to \$9,999		76. 1		61.6 _		14.5	13. 1	1.4
\$10,000 to \$14,999		87.9		58.1		29.8	29. 0	. 8
\$15,000 and over		94.6		52.2		42.4	34.2	8. 2
Under \$5,000 :								
Under 25	75.0	68. 8	71.0	58.0	4.0	10.8	10.6	. 2
25 to 34	71.9	65. 9		56.0	7.6	9.9	9.9	
35 to 44	70.6	62. 1	60.6	45.7	10.0	16.4	14.9	1.5
45 to 54	65. 3	61 4	55.5	45.3	9.8	16. ĭ	12. 9	3. 2
55 to 64	57. 6			49.0	7.7	8.0	5.6	2. 4
55 to 64	41.0	57.0 45.4	37.8	49.0	3. 2	4.2	3.9	2.9
5,000 to \$9,999:	41.0	45.4	3/.8	41. 2	3. 2	4. 2	3.9	
10-1 05 10-1 05								
Under 25	91.6	86. 8	82.0	69.3	9.6	17.5	. 15.8	1. 7
25 to 34	94.7	90.7	77. 1	66.0	17.6	24.7	22.8	1.9
35 to 44	95.0	90.8	69. 7	56.9	25. 3	33.9	29.3	4. (
45 to 54	92. 5	97. 6	62. 5	60.2	30.0	37.4	30.8	6. 6
55 to 64	78.4	90.4	55. 2	63.9	23. 2	26. 5	22.7	3.8
65 and over		76.1		61.6		14.5	13. 1	1.4
\$10,000 to \$14,999:								
Under 25		93.6		66.3		27.3 .	21.0	6.3
25 to 34	95.3	96.6	62.5	54.4	32.8	42. 2	39.5	2, 7
35 to 44	96.6	97. 2	55.3	43. 1	41.3	54. 1	45.6	8. 5
45 to 54	95. 5	96.7	46.7	41.9	48. 8	54. 8	40.8	14. 0
EE +0 C4	94.6			46.1				8. 5
55 to 64		94.1	51.6		43.0	48.0	39.5	8. 5
65 and over		87.9		58.1 _		29.8	29.0	.8
15,000 and over:								
Under 25								
25 to 35		95.8		37.8 _		58.0	52. 4	5. 6
35 to 44	96. 6	96.0	39.6	28.8	57. 0	67. 2	54. 5	12, 7
45 to 54	91. 2	96. 8	27.3	29.8	63.9	67.0	51. 1	15. 9
55 to 64	96. 9	92. 7	34.4	35. 2	62. 5	62. 0	47.7	14. 3
65 and over		94.6		52. 2		42. 4	34. 2	8. 2

Source: Bureau of the Census, prepared by Administration on Aging.

TABLE II.—PERCENT OF HOUSEHOLDS OWNING CARS, BY AGE OF HEAD, HOUSEHOLD INCOME, AND MODEL YEAR OF LATEST CAR PURCHASED, JULY 1970

Age of head and household income	1969-70 model	196768 model	1966 or earlier model
otal	21, 2	21. 0	37.0
Under 25	24.3	22. 1	33. 9
25 to 34	23.7	24. 3	39.8
35 to 44	24.3	24.7	39.0
45 to 54	27. 2	24. 3	34. 5
55 to 64	20.7	21.3	38. 1
65 and over	9.2	10.3	35. 2
Under \$5,000	4.9	6.6	33.7
\$5,000 to \$9,999	15. 4	18.6	42.0
\$10,000 to \$14,999	20. 5	24.9	38. 4
\$15,000 and over	42.4	27.1	23. 8

Source: Bureau of the Census.

Appendix 4

INSURANCE CRISIS—MANY MOTORISTS FIND AUTO POLICIES CANCELED FOR NO APPARENT REASON

[From the Wall Street Journal, Oct. 6, 1970]

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FIRMS, IN A FINANCIAL BIND, ARBITRARILY CUTTING BACK; LITTLE RECOURSE FOR VICTIM—SOME COMPANIES BOW OUT

(By Priscilla S. Meyer, Staff Reporter of the Wall Street Journal)

Frank Buryta is a mild-mannered, 37-year-old auto repairman. He owns a safe, well-maintained 1965 Ford station wagon, rarely drives more than 40 miles an hour in his sleepy hometown of North Tonawanda, N.Y., and hasn't had an accident in some 15 years of driving.

Last month his insurance was canceled.

The only "wrong" that Mr. Buryta committed "was his decision to continue living in the state of New York. His insurer, Grain Dealers Mutual Insurance Co. of Indianapolis, has decided that it can't afford to insure people who live in New York, New Jersey, Connecticut and Rhode Island, and so it simply has stopped selling and renewing auto policies in those four states.

The action is extreme, but not unique. In fact, arbitrary refusals to renew auto insurance policies are becoming commonplace. Thousands of drivers who have been paying their premiums on time and avoiding accidents are suddenly finding themselves without insurance. Some companies are getting out of the business altogether—College-University Insurance Co. of Indianapolis is dropping all 6,000 of its auto policies—and others are dropping everyone in certain categories, such as all people over 65 or all people in New York.

"A CRITICAL SITUATION"

Big and small companies alike are acting. Nationwide Mutual Group, the nation's fifth largest auto insurer, last week decided to stop all sales of new policies on personal cars, though it will continue to renew its old policies. Liberty Mutual Insurance Co., another large insurer, has fired 25% of its auto-policy sales force and has clamped tight restrictions on sales of new policies everywhere. Three Texas auto insurance firms, which used to write auto insurance with \$12 million in premiums each year, have gone into receivership.

"The situation could scarcely be more critical—barring a complete collapse of the private insurance industry," says Robert Coburn, president of the Independent Mutual Insurance Agents Association, a 2,000-member agent group. In an emergency action to protect motor-

ists, New Jersey has temporarily forbidden the cancellation of any

auto policy.

The insurance companies say they're as sorry about the cancellations as the policyholders are, but the firms insist they have no choice. They are losing so much money on auto insurance that they simply can't afford to insure some groups of people, the companies assert. They contend that states won't let them raise their rates nearly fast enough to cover the huge increases in payouts on claims. They say that rates generally have risen about 50% over the past decade but that total payouts have increased far more.

Many insurers say that their auto operations have been losing money for some time but that until recently the losses were offset by money earned from investment of premiums. But the declining stock market has cut into these profits of late, some insurance companies say, forcing

them to take a harder look at the auto business.

Over the past 10 years, the industry has paid out \$2 billion more in claims than it has taken in in premiums, according to a spokesman for the Insurance Information Institute. Losses have been increasing each year, he says.

SOME SOLUTIONS

Many solutions have been proposed but few are acceptable to both insurers and motorists. Union leaders in New Jersey, where hundreds of policies were canceled before the state imposed its freeze, have urged the state to take over the auto insurance business. Several states are considering adopting "no-fault" insurance plans similar to the one scheduled to take effect in Massachusetts on Jan. 1; under that plan each driver's insurance company must immediately cover accident claims of up to \$2,000 regardless of who is at fault. The Massachusetts plan is coupled with a 15% cut in rates. Sen. Philip Hart (D., Mich.) last month introduced legislation to set up such a plan on a national level.

When policies are canceled, the motorist often doesn't know where to turn. Some, like Mr. Buryta, the auto repairman, can find another company willing to insure them. Some, like Joe Corcoran, a retired 67-year-old businessman from Beverly, N.J., go to the state for help. Mr. Corcoran, whose policy was canceled for no apparent reason, asked the state insurance department to investigate, and it discovered that the policy was canceled simply because Mr. Corcoran was over 65. The state then pressured the company to reinsure the motorist.

"CAN'T HELP EVERYONE"

"But we can't go to bat for everyone," sighs Walter Davis, one of the harried New Jersey insurance officials who handles such matters. Mr. Davis adds that's one reason the state banned all cancelations as of June 26.

Many policyholders have no choice but to sign up for so-called assigned risk policies. These are plans set up by all auto insurers in a state to take care of people who can't buy policies directly from a company. Policies are assigned by dealing them out in proportion to each company's share of the voluntary market.

They typically cost more—up to 200% above a normal policy depending on the driving record—because the group includes all the accident-prone and otherwise undesirable drivers in the state. But besides cost, the policies have other disadvantages. In all but a few states, the plans offer only limited liability coverage (up to \$20,000) on the other driver and his auto. And in all but four states the insured can't purchase any collision, fire or theft coverage for his own car—at any price.

In Texas, a state generally considered to have a low auto-accident rate, the swing to assigned risk policies has been staggering in recent months, Herman O. Bergeman, manager of the Texas Insurance Plan, which handles assigned risks, says applications are now running at

the rate of nearly 17,000 a month, double the pace of last year.

One recent applicant was Herman Stetler, a foreign exchange student from Germany who's at the University of Texas. He knows English well enough to have passed the Texas driving exam with flying colors. And he has never had an accident. But he was denied coverage by all companies to which he applied. "I guess they were afraid he couldn't read the stop signs or something," says Bill Gammon, an agent familiar with the case.

But the move to assigned risk policies by motorists who have no other choice merely intensifies the crisis, insurers say. Since the assigned risk pool is generally made up of drivers who are bad risks, there tend to be more claims and higher losses by the companies. Surcharges cover only part of the increase, insurers say. And in states like New York, where assigned risks now make up about 10% of all auto insurance written, the burden on smaller companies is considerable.

"We just couldn't afford to write business in New York any longer," says James O. Steinbarger, vice president of Grain Dealers. "Assigned

risk was killing us."

Regarded as particularly serious is the situation in Massachusetts, where Aetna Life & Casualty Co., Kemper Insurance Group, Allstate Insurance Co. and several other major insurers are considering getting out of the auto business if an across-the-board 15% rate cut goes into effect Jan. 1.

The companies don't object to the rate cut for the no-fault collision coverage on the driver's own vehicle. But they're incensed that it's also supposed to apply to other coverage—fire, theft and medical. Insurers contend such policies will cost far more than premiums will bring in.

A massive pullout by these firms, which write over \$200 million in premiums each year, or about 43% of the state-wide volume, would dump an incredible load on the remaining companies—which say they can't afford to write any new insurance in Massachusetts now anyway.

"The snowball effect would be inescapable," says a State Farm Mutual Co. official. "It could lead to little else than a total collapse of private auto insurance facilities in the state." Whether the planned rate cut goes into effect hangs on the outcome of a recent lawsuit filed by over 100 companies contesting the proposals.

Appendix 5

RESOLUTION PASSED AT THE FIRST ANNUAL CONVEN-TION OF THE 17 AFFILIATED CLUBS OF THE NATIONAL COUNCIL OF SENIOR CITIZENS IN THE STATE OF VERMONT, MONTPELIER, VERMONT, OCTOBER 9, 1970

Transportation

Whereas many senior citizens are unable to own automobiles because of their financial situation or their inability to drive and because there is limited or no bus service, in most Vermont communities, resulting in many of the elderly having no means of transportation to senior citizen centers, church, shopping, visiting family and friends, etc.

Whereas a pilot program of transportation has been funded by the Champlain Valley OEO, and although this program has proven the need for a transportation service for the aged and the OEO should be commended for its initiative, many of the elderly have found the cost to be prohibitive. So therefore be it

Resolved, that the State provide for a Transportation Department to investigate the possibility of providing the needed transportation at a cost senior citizens can afford to pay, and be it further

Resolved, Whereas the United States Senate Special Committee on Aging is preparing a report intended to focus national attention upon the transportation needs—both urban and rural—of older Americans, be it therefore resolved that the committee be urged to issue a report of sufficient breadth and impact to energize all federal agencies which should contribute to the solutions so desperately needed by the immobile elderly. Among the agencies which should be called upon are: the Administration on Aging, the office of Economic Opportunity, the U.S. Department of Transportation, the U.S. Department of Housing and Urban Development, and—for consultation on rural needs—the Department of Agriculture, and be it further

Resolved, That a copy of this resolution be sent to the Governor of Vermont and the State Legislature, and the United States Senators

and Congressman from Vermont.

Appendix 6

SURVEY OF PROGRAMS OFFERING REDUCED FARES OR SPECIALIZED SERVICES TO THE ELDERLY

The National Council on the Aging, in May 1970, released Senior Opportunities and Services Technical Assistance Monograph, "Developing Transportation Services for the Older Poor," under its contract with the Office of Economic Opportunity. The monograph provides useful information on actions that can be taken to improve transportation resources for the entire older population of a municipality or region, including those living below poverty levels.

Excerpted from the monograph for this appendix are the following reports from governmental officials and others who responded to an

NCOA questionnaire.

. I. Cost Savings to Consumers

(Reduced Fare Plans)

FREE BUS SERVICE TO RESIDENTS OF URBAN RENEWAL AREA

John F. O'Connell, Brightwood Project Director, Springfield Redevelopment Authority, 73 State Street, Springfield, Mass. 01103

Leased buses offer shopping convenience to residents of an isolated area in Springfield, Mass., during the reconstruction of a blighted neighborhood. Neighborhood groups, together with staff of the Redevelopment Authority, planned to bus schedule to two distant shopping centers at no fare charge.

There are four pick-up points in the neighborhood with a five minute stop at each point. Passengers have about one hour to shop at a center before the return trip when they are taken to corners close to their

homes

Two trips to each shopping center are made on Thursday and Friday evenings and on Saturday morning.

WOULD YOU BELIEVE A BUS RIDE FOR FIVE CENTS?

Bernard F. Schussel, Director, Office of Aging, Office of The Mayor, San Francisco, California

During non-rush hours senior citizens in San Francisco may ride city buses and cable cars for a 5 cent fare. Tied in with reduced fare are special low cost meals, offered by restaurants, primarily during the same hours reduced fares are available.

The two projects are sponsored by the Mayor's Office of the Aging, which reports that attendance at downtown senior centers has increased by 30% to 50%.

Riders present Medicare cards or other proof of age when board-

ing vehicles.

MONEY SAVERS

Greater Portland Area Senior Citizens, Centers System, 142 Free Street, Portland, Maine

The Greater Portland Area Senior Citizens Center has actively been seeking reduced consumer costs for its members. Two gas stations agreed to a penny-per-gallon discount on gas, and one offers a 10% reduction on repairs. Arrangements were also made for free admission to state parks for groups of older persons.

REDUCED FARE ENHANCES PUBLIC RELATIONS

Richard Gido, Director, Franchise Bus Council of Nassau County, 4250 Hempstead Turnpike, Bethpage, New York 11714

Half fare passes have been issued since 1965 to older riders of the Jerusalem Avenue Bus Line, a twelve mile major artery in Hempstead, New York. Originally, the special rate was offered to attract consumers to stores along the route. However, continuing pressure by Older Americans for Action, a local social action organization, has helped to maintain the discount on a permanent basis.

Special bus passes are issued to applicants by the county home for the aging, senior citizen groups, and public housing authorities. Riders show the pass when boarding, and deposit half the regular

fare during off-peak hours.

Although the company claims that it sustains a loss on this public service, even with increased ridership, senior groups frequently charter buses from the same company for special trips.

AIR TRAVEL RATE REDUCTIONS

Only three airlines offer substantially reduced fares to senior citizens. There may be others but those that we were able to uncover serve

the Hawaiian Islands, five midwestern states, and Canada.

Aloha Airlines and Hawaii Airlines provide inter-island service on a standby basis at 40% fare reduction to persons over 65. Advance reservations are not accepted. However, if space is available after full fare passengers are accommodated senior citizens will be ticketed. A "Retired Reduced Fare Identification Card" must be purchased in advance for \$5. The card can be obtained by mail. Persons purchasing the card are required to prove their age.

Air Canada has a similar arrangement with a 50% reduction. Their "Club 65 Identification Card" is good for all flights in Canada. To obtain the card, the traveler needs to show proof of age, must be capable of boarding unaided and require no special assistance while on the plane. This special fare is available only on a standby basis.

Commuter Airlines, which flies short trips in the states of Iowa, Illinois, Wisconsin, Michigan, and Indiana has a similar half-fare rate for persons over 65. Their 50% reduction applies to any flight which is not fully booked.

ENTERTAINMENT AND CULTURAL DISCOUNTS FOR SENIOR CITIZENS

In New York City:

—reduced admission rates are offered by the following theatre chains: Loew's, RKO, Skouras, Century, Interboro and Walter Reade.

—the Museum of Natural History reduced ticket cost from \$1.00

to 35¢ for the special "Can Man Survive" exhibit.

—Lincoln Center for the Performing Arts reduces its guided tour to 85¢ instead of the general admission of \$1.85.

The City Center conducts special programs in the "Arts for

Senior Citizens".

To reach these attractions and any other places they wish to travel senior citizens pay half-fare on all public transportation.

REDUCED FARE PROGRAM FOR SENIOR CITIZENS IN NEW YORK CITY*

Alice M. Brophy, Director, Office for the Aging, Office of the Mayor, 250 Broadway, New York, N.Y. 10007

Reduced fares on subways and buses for elderly New Yorkers, a top priority program of the New York City Office for the Aging, went into effect July 1, 1969. A year later more than 600,000 people had used the program.

Several factors contributed to its success:

—It is not a charity or welfare program, so the aging do not hesitate to enroll in it and carry identification cards.

-Registration was convenient for the elderly; they could sign

up at local banks and senior centers.

—The program was supported by the Mayor and promoted for many years by groups such as the Congress of Senior Citizens.

Following is a description of the program published by the Office for the Aging:

Transit Authority Operations

The Reduced Fare Program entitles New York City residents 65 years and older, who are not employed full time, to ride city-operated subways, buses and seven private bus lines at one-half the authorized fare, daily from 10 A.M. to 4 P.M., 7 P.M. to midnight and all day

Saturday, Sunday and holidays.

The system on buses is simple: during specified hours, the elderly show their reduced fare card to the driver and drop 15¢ in the fare box. On subways, they show their reduced fare card to the token seller, pay 30¢ for a token and a return trip coupon. They drop the token in the turnstile for the initial trip. On the return trip, which must be taken on the same day in the specified hours, they turn in their coupon and enter the gates free.

Although New York City is primarily served by New York City Transit Authority facilities, it was necessary to defray the cost of this program through reimbursement of the Authority with tax levy funds. The city entered into a six months contract with the New York

^{*}See Part II of this report for additional discussion.

City Transit Authority starting July 1, 1969. The City agreed to pay the Transit Authority \$5,000,000 plus administrative expenses to defray the cost of the program. It also agreed to pay a total of \$275,000 to seven private bus lines for the same purpose.

This represents a \$10 subsidy per elderly for six months if 500,000

use the system.

Registration of the Elderly

The New York City Office for the Aging was allocated \$315,000 of City Tax levy funds for registration and issuing Reduced Fare Passes to Senior Citizens. It was estimated there were 1,000,000 residents 65 and over of whom 900,000 have Medicare Cards issued under the Social Security System. Since the program is limited to New York City residents only, and Medicare Cards do not have addresses, it was necessary to issue a New York City Reduced Fare Card. With a program of such magnitude a decentralized operation with registration sites

throughout the city was necessary.

Dicussions were initiated with major city banks that are members of the New York Clearing House. These include Chase Manhattan, Manufacturers Hanover Trust, First National City, Banker's Trust, etc. These banks provide over 700 branches throughout the city. The Office for the Aging also met with the Savings Bank Association of New York State which has 48 member banks with 143 branches in the city. The Savings & Loan Association and a number of newer banks located in ghetto communities who are not members of the above associations were also contacted. All banks and saving and loan associations agreed to participate. The city reimburses the banks 10¢ for each completed registration.

The New York City Office for the Aging designed the registration form and the reduced fare card and set a quota for each bank by dividing the estimated number of elderly by the number of banks in each postal zone. This estimate was calculated as 70% of the number of Social Security checks mailed in each postal zone. Cards were distributed directly to main offices of the large banks and redistributed to their branches. Direct deliveries to about 250 banks and savings and

loan associations were also made.

Since banks agreed to register only those elderly with a Medicare card, the Office arranged with the Department of Social Services, which operates 53 Day Centers, to register those elderly who do not have Medicare Cards. Little City Halls, the Mayor's Task Force Offices, Neighborhood Conservation Bureaus and selected Union Health Offices also registered senior citizens. About 35,000 elderly without Medicare Cards have received cards through these outlets.

The registration procedure was simple. The elderly filled out an

The registration procedure was simple. The elderly filled out an IBM card, presented it to a teller with their Medicare Card as official proof of age. The teller stamped the reverse side of the Medicare Card and issued the Reduced Fare Card. The elderly fill in the reduced fare card themselves. The teller recorded the number of the

Reduced Fare Card on the registration card.

Banks returned the registration cards to the New York City Office for the Aging.

Public Information Program

Perhaps the largest challenge facing the office was to inform the 1,000,000 older residents about the program. With a budget of \$20,000, the Office mounted a public information campaign which included 7,000 posters in buses and subways and 400 posters on the outside of buses. Mayor Lindsay announced the program at the opening of the first Neighborhood office for Older Persons. News stories were created weekly which received television and newspaper coverage. Mrs. Lindsay crowned a 75 year old "Half-Fare Transit Queen" at Gracie Mansion and a Senior Citizen Jazz combo played on many occasions. Television and radio stations carried spot announcements describing the program. The "Mets" even put it on their scoreboard for their home game. Stores and theatres were supplied with mats for use in public service ads.

NEW YORK CITY EVALUATES REDUCED FARE PROGRAM

The following report from the Mayor's Office for the Aging in New York City reviewed the impact of reduced fares on senior riders. A comprehensive report on the total program is in process as this monogaph goes to press.

Preliminary Findings New York City Reduced Fare Program

This program has proven to be one of the most successful undertakings of this or any other Administration. More than 600,000 persons 65 and over have gone to their local banks or Day Centers and

obtained their Half-Fare Transit Pass.

The importance of the program was underscored in preliminary findings of a "before and after" study of the Half-Fare Program conducted jointly by the New York City Office for the Aging and the Transportation Division of the Polytechnic Institute of Brooklyn. Experts in the field of the aging have hypothesized that the cost and availability of public transportation are key factors in the social mobility of older persons. Reduced fares are seen not only as a means of stretching meager incomes of Senior Citizens but as a vital stimulus to older persons to break the walls of isolation and become more involved in the world around them.

To document the impact of mobility of older people a "before and after" survey of ridership was conducted on 35 Transit Authority and MABSTOA bus routes in all five boroughs. Routes were selected which passed through zones of the city where the elderly are most heavily concentrated. In all, 75% of these "elderly zones" were covered in the

survey.

Forty Urban Corps college students in pairs rode buses on the sample routes for a week prior to inception of the Half-Fare Program (July 1st) and again six weeks after the program was in effect. The hours and weather conditions were similar in both the "before and after" survey. A record was kept of the number of elderly persons riding buses and as many as possible were interviewed. The interview covered the purposes of the trip, the number of such trips made during the past week, when the elderly person last rode on a bus or sub-

way (to determine whether they were steady or occasional riders, and whether or not they had registered for the Half-Fare Program). In all, approximately 4,500 persons were involved during the course of

the study.

Introduction of Half-Fare rates had a definite impact on ridership. The results of the two surveys indicate that, on an average for the entire City of New York, bus ridership of citizens 65 and older increased by 26.7% for the average weekday, between the hours of 10:00 A.M. and 4:00 P.M.

The study also showed that elderly ridership is 37.6% greater on routes selected to pass through zones of high density elderly population, than elderly ridership routes selected purely at random through-

out the city.

An expansion to a city-wide total for 202 bus routes estimates that approximately 147,000 elderly people ride the buses between 10:00 A.M. and 4:00 P.M. on the average weekday, or about 17.1% of the

total ridership (all ages) in that six hour period.

Data showed small variations in ridership by day of the week, both Before and After the start of the Reduced Fare Program. Hourly variations showed that the largest increase in riders occurred between the hours of 12:00 noon and 2:00 P.M., indicating that the increase in riders from the first to the second survey is most likely a real increase and not a shift from the non-prescribed reduced-fare hours of before 10:00 A.M. and 4:00 P.M. to 7:00 P.M.

Registration for Reduced Fare went from 62% to 91% of elderly

people interviewed, from Before to After, on a city-wide basis.

The average number of trips per week per person was approximately 6.0, with about 70% taking 4 or more trips per week, and with most riders having taken their last previous transit ride one or two days before the survey.

New York City Reduced Fare Program One Year Later

The New York City Office for the Aging announced that it was studying, with the Transit Authority, possible changes in the city's reduced senior fare program.

In its publication Reporter, the city office noted that travel by the

elderly under the half-fare plan had increased by over 27%.

The Reporter also noted that a study (funded by the Administration on Aging under title IV of the Older Americans Act) showed the following about elderly reduced fare travel in the city:

One of every four trips was taken for health care—

Three out of ten trips were for visiting and recreation-

About 11/4 million half-fare rides are taken weekly, 200,000 of them on weekdays.

Among suggestions for improvement, the most frequent is for

lengthening half-fare hours.

Some seniors complained such hours put a "curfew" on their travel. Reduced fares are not in effect between midnight and 10:00 A.M. weekdays.

Some senior subway riders would like to end the return trip coupon plan under which a senior pays full fare outbound and gets what amounts to a pass for his return. Changing subway turnstiles to accept exact fare for each ride would entail considerable expense, which is one of the problems being discussed with the Transit Authority.

REDUCED FARES ACROSS THE NATION

The American Transit Association of Washington, D.C., reports that twenty-six communities have made fare concessions to seniors. The fares, applicable during non-rush periods, are as follows:

4		centsl
и	111	Centsi

City	Regular fare	Senio far
os Angeles, Calif	30	2
an Diego, Calif	30	í
an Francisco, Calif	20	
fartford, Conn	30	2
Meridian Conn	25	
Meridian, Conn.		1
lew Haven, Conn	30	2
tamford, Conn hicage, III	30	2
		(1 1
edar Rapids, Iowa	25	1
Davenport, Iowa	25	2
ves mornes, rowa	35	2
oston, mass	25	1
octort mich	25	1
int, micn	35	2
rand Rapids, Mich	30	2
IDuquerque, M. Mex	30	2
iew folk city, N.Y.	30	1
lorth Merick, N.Y		Ċ
ieveland, Unio	30	î
lyria, Ohio	30	_
orain, Unio	30	
oledo, Ohio	35	1
ittsburgh, Pa	25	i
awtucket, R.I.	30	2
eattle, Wash	25	7
acoma, Wash	25	S:

¹ One-half regular fare.
2 \$2 for monthly pass.

New information since this listing, indicates that reduced transit fare plans for senior citizens are now available in at least 50 cities. Additional communities with reduced fare include: Santa Barbara, California; Worcester, Massachusetts; Ann Arbor, Michigan; Binghamton, New York; Euclid, Ohio; Philadelphia, Pennsylvania; and Salt Lake City, Utah.

Free bus service is offered in Commerce, California, according to the Los Angeles County Department of Senior Citizens Affairs and efforts are being made to seek extension to more bus lines in the area.

Mrs. Alex Van Frank, President of the East Bay Council of Senior Citizens Groups, Oakland, California, reports that an estimated 130,000 older citizens in 14 communities are benefiting from a one-year experiment in which they get bus rides in non-peak hours for 10¢ instead of 25¢. These communities are: El Sobrante, San Pablo, Richmond, El Cerrito, Kensington in Contra Costa County and Albany, Berkeley, Oakland, Emeryville, Alameda, San Leandro, San Lorenzo, Hayward and Castro Valley in Alameda County.

Selden G. Hill of the Florida Federation of Senior Clubs, Inc. re-

Selden G. Hill of the Florida Federation of Senior Clubs, Inc. reports that reduced senior fares have not been obtained in Orlando, but merchants are paying for free bus rides to and from a shopping center during non-rush hours for three days early in each month.

Rochester, New York, on March 15, 1970, started a three-month experiment offering Medicaid card holders 15¢ rides, half the regular fare. Asheville, North Carolina, has a plan giving senior citizens a 25¢ ride for 15¢.

MORE IDEAS FOR SAVING OLDER RIDERS MONEY

1. Request special group rates for older persons traveling together by taxi.

2. Use Neighborhood Youth Corps enrollees to deliver older per-

sons' grocery orders.

3. Ask the commander of a nearby military installation to provide voluntary drivers under the Domestic Action Program of the Department of Defense.

4. Negotiate special travel allowances for older persons receiving

Old Age Assistance from the Department of Welfare.

5. Ask ministers to have their parishioners organize car pools to

pick up the elderly for church functions.

6. Use your organization's transportation service for income-producing purposes (such as package delivery) to reduce operating costs.

II. SPECIAL PURPOSE TRANSPORTATION

BOARD OF TRANSPORTATION SHOWS CONCERN FOR SENIOR CITIZENS

Frank E. Tilley, Executive Director, Bergen County Board of Transportation, 29 Linden Street, Hackensack, New Jersey 07601

Attempts by the Board of Transportation in the community to develop a reduced-fare system on buses for senior citizens was unsuccessful. However, to show continued concern for older persons in the community, the Executive Director of the Board developed a special summer transportation program which has demonstrated the needs of older persons for low-cost public transportation for

recreation and companionship.

Operating under an Older Americans Act Title III one-time grant, in addition to a special appropriation by the Bergen County Board of Chosen Freeholders, two long bus routes were established during the summer of 1969. These routes ran through numerous communities where there are high concentrations of older people. The destination of both routes, each starting in a different community, was a county park, inaccessible except by private automobile. Two buses made one daily round trip, and carried a total of approximately 75 persons.

The buses meet at one point along the route (about half-way) to transfer passengers if necessary. On occasions when one bus was overloaded standees were transferred to the other bus for the comfort of

the elderly passengers.

The bus trips were widely advertised in newspapers, and on bus posters, the space for which was provided without charge by the bus company. Senior citizen clubs and centers were told about the program by direct mail and occasionally the Executive Director of the Board of Transportation made personal appearances to announce the service.

The routes and time schedules were widely publicized, and senior citizens could be picked up at any point along the route on signal.

Additionally, the Executive Director operated a transportation information service on the bus service.

Senior clubs and centers developed programs for the members at

the park.

The fare varied according to the zone in which the person was picked up. In no case was the fare more than 40¢ one way, which

covered the longest possible distance of 32 miles.

The transportation program was developed in conjunction with the County Park Director and the Director of the County Office on Aging. The cost for the program included leasing of the bus with a driver, plus administrative expenses of the project director and his secretary, as well as expenses for advertising.

STRIDE'S CHILD

John Swartzfager, Stride Project Supervisor, Warren-Forest County, 225 Pennsylvania Avenue, Warren, Pennsylvania

Warren State Hospital, a facility for the mentally ill, is located in the same community where the STRIDE program operates (see description under Program Methods Section). The hospital operates a program through its Industrial Therapy Department for patients who are recovered to a degree that they may return to productive employment. However, the patients still reside in the hospital while working elsewhere in the community.

Transportation to work by bus was not possible because the buses schedules did not coincide with the hours of employment. Travel by

taxi was too expensive.

Operating on the principle of idle vehicle time, on which the STRIDE program is based, the hospital arranged to lease a bus and driver from the Age Center, a senior citizen's center. The hospital pays \$8.00 daily for the bus and driver to make two round trips to town and to the hospital. These roundtrips are scheduled at a time which does not interfere with the Center's activities. The first trip is early in the morning, and the second trip in the late afternoon. The Age Center is able to make a slight profit on this arrangement, although the Community Action Agency, at the present time, still has to subsidize the initial losses. Each one of the employees from the hospital pays \$1.00 a day for the round trip and eight riders daily are necessary for the costs to break even. However, at the present time, because of illness and other factors, there is not always a full bus load.

The project was operating for six weeks when this report was written, and the CAA anticipates an increase in ridership soon because more patients are being placed in employment. As in STRIDE, it is anticipated that the program will eventually become self-supporting,

and will not need subsidy from the CAA.

CENTER BUS USED FOR MANY PURPOSES

Mrs. Isabel M. Parker, Executive Director, Pittsfield Council on Aging, 258 North Street, Pittsfield, Massachusetts

The basic use for a mini-bus in this program is the delivery of approximately 300-350 hot lunches to the elderly and to a Headstart fol-

low-through program for youngsters. The Center participates in a State-wide school lunch program for the elderly, which is subsidized by the state government.

The program is supported by Title III funds from the Administration on Aging. Included in the budget were funds for the purchase of

a bus and the salary of a driver.

The bus picks up food prepared in a central location and distributes it to three schools in the city. Additionally, approximately 70 lunches are distributed individually to the homes of elderly persons and other under-privileged individuals who need this service. To facilitate the delivery of the 70 meals, volunteers accompany the bus on its trip, and partially unpack the food so it can be consumed immediately. Thus the person who is handicapped does not have a problem opening packages. This method speeds movement from one home to another.

The bus is shared with another organization concerned with handicapped persons, many of whom were aged. The Center does not charge

the other agency for use of the bus or driver.

The bus is also used for transporting patients to and from hospitals and appointments with physicians and dentists. Occasionally, senior citizens are transported to special meetings and other activities.

A volunteer from the Commonwealth Service Corps (Massachusetts equivalent of VISTA) now serves as a bus driver. Other volunteers assist in initial packing of the lunches.

For elderly persons entitled to surplus commodity foods, the bus is employed to pick up and deliver these heavy loads on a regular basis.

Meals in this program cost the user 50¢ each. A deficit of 16½¢ per meal is assumed by the State of Massachusetts. The users are primarily indigent older persons and many are receiving public assistance. The cost is considered to be reasonable, and no one has yet refused to participate in the program because they cannot pay the charge.

TRANSPORTATION MAKES DAY CENTER POSSIBLE

Eunice Anderson, Director, Bethany Home Day Center for the Aged, 1901 South Holly, Sioux Falls, South Dakota

While this home for the aged primarily cares for elderly people living there, it also has a Day Center program to help maintain the elderly to remain in their own homes. The Day Center, provides a hot meal, snacks, and a variety of programs including occupational

and physical therapy and limited medical care.

South Dakota is a state in which distances between homes and between the urban centers are very great. The director advises that the program of the Day Center depends for its success on its being able to provide transportation. Otherwise, the handicapped and those without any other transportation facilities could never come there. The most important part of the transportation is the accessibility provided to persons in the outlying areas to dentists, lawyers, shopping, etc. While entertainment is included, the basic program attends to the more important and immediate basic needs of the individual.

The Day Center program, is receiving an AoA Title III grant through the State Planning Agency, which supports it. Part of the driver and vehicle costs are borne by the home, since the vehicle is used for purposes not related to the Day Center program. The van was purchased for \$1000 from an individual gift to the Center. Some of the users of the service contribute towards cost of the transportation provided.

PICK-UP SYSTEM VARIES ACCORDING TO INDIVIDUAL NEEDS

Lester C. Keller, Superintendent of Recreation Project, Hutchinson Recreation Commission, 101 South Walnut Street, Hutchinson, Kansas 67501

The Senior Center maintains a bus which makes two regular runs in the morning and two in the afternoon to pick-up and return ambulatory persons participating in the activities of the center. Pick-up vans also go from door to door for infirm and handicapped older persons.

All of the persons using the service are members of the center, which is funded by a Title III Older Americans Act grant, administered by

the State's Division of Service for the Aging.

The service enables persons who would not ordinarily be able to come to the center to get out of their homes and enjoy social and other activities.

TO WORK AND BACK

Vernon Dahlheimer, Supervisor, Foster Grandparent Project, 1726 7th Avenue South, St. Cloud, Minn. 56301

This Foster Grandparent program made special transportation arrangements to take elderly employees to work at a center for disturbed adolescents. Two methods were used:

1. Car pools, using vehicles owned by employees. The project budget included funds for reimbursement of the driver, and additional insurance was paid for by the sponsoring agency.

2. A shuttle van, transports the youth to community schools and

picks up and returns some of the grandparents to their homes.

TRANSPORTATION PROJECT BROADENS MENTAL HOSPITAL PATIENTS' WORLD

Mrs. Corinne S. Brown, Executive Director, Mid-Carolina Mental Health Association, 1845 Assembly Street, Columbia, South Carolina

On the suggestion of the State Commissioner on Aging, the Mental Health Association developed this project utilizing AoA Title III funds, in conjunction with a large state hospital, which houses 1,700–1,800 geriatric patients. About 1,500 of these patients over the past two years have been brought into the community for a variety of activities, mainly tours to interesting places but for other activities as well. Tours included the airport, farmers' market, plays, public parks, and involvement in senior citizens' center activities. Four regular weekly trips are made, using a small 12-passenger station wagon. Volunteers also provide their own vehicle.

The project has reached almost all persons in the hospital, and the staff reports that improvement in patients' behavior have been a direct

result of these tours and outings. The project has been so successful that after federal support is discontinued, funds will be forthcoming from the United Community Services to maintain the program. The

Mental Health Association will also contribute funds.

A half-time staff member spends most of his time scheduling and supervising the transportation. Much of his work relates to recruiting volunteers from churches and civic groups as drivers. Although the project is reported to be relatively successful, the use of volunteers present a problem because of continuous turnover and the necessity to attract more volunteer drivers.

MOBILE LIBRARY SERVICES UNAPPEALING TO AGING READERS

Mrs. Robert G. Delph, Library Services for Older Americans, Public Library, 212 West Aspen Avenue, Flagstaff, Arizona 86001

The public library in this urban community attempted to extend library services to more elderly people, by delivering books requested to their homes. This is done by a paid staff member using a regular library car. Some of the books are especially designed for people with

limited eyesight.

A variety of methods was used to develop community interest in the program through radio and newspaper publicity and brochures distributed to a variety of interested groups. However, the library believes that the program is not successful. It has not attracted many additional users, and the elderly have expressed sensitivity about being picked out as a special group for services which they generally do not need. They prefer to find their own transportation to the library and choose their own books.

"HANDI-CABS"

Spencer L. David, Regional Director, Easter Seal Society for Crippled Children and Adults, 3011 Broadway, N.E., Knoxville, Tennessee 37917

Half of the people are elderly who use the transportation service of this agency. Approximately sixty-five older persons per month in this new and growing program are provided special transportation because of their inability to use regular public or private means. It is part of a larger program to provide a variety of services to handicapped children, adults, and the elderly, in sixteen counties.

The main criterion for an older person to use this service is that he has a disability which causes hardship when he uses regular forms of transportation. The equipment used is a station wagon modified with a special ramp to accommodate wheel chairs. Transportation is provided mainly for medical purposes, appointments with physicians,

dentists, and clinics.

Included in the funding sources is a Title III Older Americans Act grant from the Tennessee Commission on the Aging. This project employs a Director on a quarter-time basis, a Transportation Coordinator full-time, a Bookkeeper and Secretary quarter-time, and two drivers, each on half time. Two station wagon "Handi-Cabs" are used.

Drivers are off-duty city firemen, who have been trained in first aid and in assisting handicapped children and adults. The total budget for the first year of operation is \$39,000, which includes the purchase of the vehicles, their operational costs, as well as staff salaries.

Rides are provided on the basis of referrals from recognized agencies serving the elderly. Interest was developed in this program through presentations to social service groups, public health nurses, service clubs, etc. Information is channeled particularly to social workers in social welfare agencies, to make them aware of the availability of such transportation, and to encourage its use by the elderly.

Expansion of the service is planned through installation of two-way

radio, to improve routing and dispatching.

One of the problems encountered in this program was the anxiety of the older persons to be at their appointments on time. Frequently, the person beginning to use the service becomes uneasy if he is not picked up about an hour prior to the appointments. In some cases, he calls a taxi or arranges for other transportation. The director advises that continued experience with the program is necessary for the elderly to build confidence in the service to know that the commitment to pick them up will be met and that they will be able to keep appointments on time.

BUS FOR DISTURBED ADOLESCENTS TAKES FOSTER GRANDPARENTS TO WORK

Vernon Dahlheimer, Supervisor, Foster Grandparents Project, 1726 7th Avenue South, St. Cloud, Minnesota 56301

Thirty-three foster grandparents work in the St. Cloud Children's Home, providing tender loving care to children who need it. Six of the foster grandparents have no means of transporting themselves to work every morning. The others come to work mainly by car pool. The bus, owned by the St. Cloud Children's Home, picks up and returns these grandparents. Occasionally, grandparents are picked up for special staff meetings.

The use of the bus has obvious advantages to both the grandparents and the institution. Without the service, some grandparents

would have no way of getting to work.

VOLUNTEERS PROVIDE ACCESS TO TRAINING

Mrs. Paul C. Hartman, Chairman, Board of Governors, Over-Sixty Counseling and Employment Service, Montgomery County Federation of Women's Clubs, Inc., 4700 Norwood Drive, Chevy Chase, Maryland 20015

Each Spring and Fall a "good neighbor" family aid training course is held on four consecutive days. This program prepares older people for guaranteed employment as companions to other elderly persons or as mother substitutes in homes where there are youngsters. Both training and transportation are offered free to trainees.

Arrangements are made in advance between volunteers and enrollees to meet at a definite time and at a definite place for pick-up and return.

Volunteers use their own automobiles, and usually pick up the elderly

enrollees at a central point, such as a bus depot.

This free transportation service makes it possible for many older persons to take advantage of the training program, who would otherwise not be able to attend. Peripheral benefits include opportunities for older persons to extend their friendships, for volunteer drivers to learn a little bit more about older people and other individuals they serve and provides an area for the person who wishes to volunteer on a time-limited basis.

Appendix 7

TRANSPORTATION NEEDS OF THE RURAL POOR

ALTERNATIVES TO THE FREE BUS SYSTEM

[From study cited in the Journal of the Appalachian Regional Commission—"Appalachia"—October 1970]

The study considered alternative strategies to the free bus system and evaluated them in comparison with the free bus. The following is a fairly complete list of other methods which could be used to meet the transportation needs for the rural poor:

—improvements of the bus system as operated by the Community Action Association, involving larger vehicles and restructuring of routes;

-Jitneys, taxis, or station wagons;

—Used cars purchased by the Government but maintained by families;

—School buses or mail vehicles;

-Surplus army vehicles;

—Special collection-distribution systems whereby passengers were collected at their homes and brought to public bus lines;

-Taking services to the rural poor;

-Relocation of the poor in more accessible areas; and

—Cash payments or transportation stamps.

Eliminated from consideration were rail services, which are not available in this particular area, and scooters or bicycles, which would be inappropriate for old or infirm travelers and not feasible in inclement weather.

THE TRANSPORTATION ALTERNATIVES

In evaluating the alternative transportation systems listed above, the study made the assumption that the first six could produce the same benefits for the same groups as the free bus. Given this assumption, cost and suitability for the service desired therefore became the determining factors in ranking the alternatives. When they were ranked on the basis of cost per passenger mile for a 45-mile round trip (the average distance from Beckley to the rural homes in Raleigh

County) and ability to perform three different services, the most desirable systems for each service proved to be:

(A. For the nonwork trip needs served by the free bus:

Average total cost per passenger mile for 45-mile round trip

1. 5	School busesMail vehicles	\$0.020 .029
2. 1	Mail venicles	0313
3.]	Improved CAA bus	. 0319

For purposes of comparison, the cost of the CAA bus actually used in the project was \$0.036.

B. For serving a journey-to-work purpose, to Beckley:

1. Mail vehicles.

2. Jitneys.

3. Used cars.

The school buses would again be the least expensive but were eliminated from consideration because State legislation prohibits the staggering of school hours, which would be necessary if school buses were to be used.

C. For long journeys to work to the nearest metropolitan area:

Jitneys.
 Used cars.

3. Jitney collection of passengers with subsequent distribution

to public bus line.

The total round-trip time for long journeys to work makes utilization of either mail vehicles or school buses inappropriate; almost no imaginable scheduling could avoid serious conflict with the performance of their normal functions. The improved CAA but was ruled out because filling a large vehicle would mean very long travel times for those picked up first.

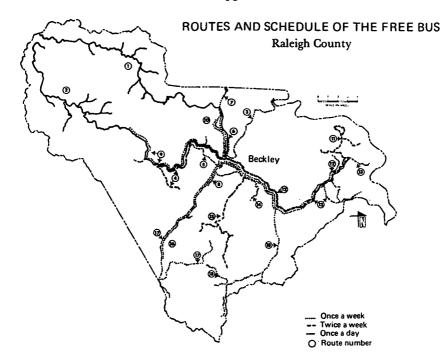
NONTRANSPORTATION ALTERNATIVES

The last three alternatives in the list were also considered. Bringing services to the rural poor is so costly as to be ruled out for most types of services; only health services are likely to have potential benefits for the whole community large enough to justify the expense. The relocation strategy has obvious political and administrative difficulties, even in cases of very low population density.

Cash payments in place of offering transportation facilities would almost certainly mean that not all of the cash paid out would actually be spent for transportation. The multiplier effects of the cash payments system would not be so great as in transportation systems. The study estimated that the ratio of benefits to cost would be only 1.17 to 1. The intangible benefits (increased use of public programs) would

not occur.

There are certain other difficulties involved in a cash payment program. The first is the problem of deciding how much cash to allot to whom. If those living farthest from public transportation were given most, this would in effect amount to subsidizing living in inefficient locations. Second, in a free enterprise economy suppliers of transportation might be expected to increase their charges if the clients they



served were able to pay more. Third, the public attaches a certain

amount of stigma to the distribution of cash.

The transportation stamp program would have many of the same effects as the free bus system. If consumers were given stamps with which they could pay for whatever transportation they chose, they would be likely to shift most of their purchases to Beckley. There would be no adverse effect on the present suppliers of transportation, informal or commercial, as there was under the free bus system. The ratio of benefits to cost would therefore be higher than for the free bus system, or about 2.14 to 1. The economic choice between a free bus system and a transportation stamp program lies in determining whom the program is designed to benefit. If the focus is on the poor, the free bus system is more effective, since members of the poor are likely to be hired to supply the transportation (i.e., drive and maintain the buses). If the focus is on the county as a whole, the transportation stamp system, which offers a better benefit-to-cost ratio, is superior.

The transportation stamp system would, however, not be likely to increase participation in governmental programs to the extent the free bus system—or other transportation alternatives—would. Only in areas where there is plenty of transportation for the poor but the problem of how to finance it exists, would the same amount of money result in

the same intangible benefits under the two systems.

IMPLICATIONS FOR OTHER RURAL AREAS

In many ways Raleigh County is not typical of poor rural counties, the study found by examining 354 of the poorest rural counties in the Nation. Raleigh County is more densely populated, has a higher rate of unemployment and a much higher median family income and shows more dispersed employment than most poor rural counties. Only in percentage of car owners is it typical. These factors generally indicate that many rural counties probably have even greater needs for increased transportation than Raleigh County. Because the average county has a more dispersed population than Raleigh County, the transportation alternatives of jitneys and used cars are likely to prove even more satisfactory in the average county.

It is not likely that any free transportation system, even one designed specifically for the journey-to-work need, would increase employability in Raleigh County because the county simply does not have enough available job openings. This may not be typical of other

counties.

The study suggested that three types of further research could greatly help to arrive at the best answers to the problem of transportation for the rural poor:

Cataloging the existing under-utilized public transportation facilities in rural areas;

Surveying the informal arrangements which supplement public

transportation in rural areas; and

Identifying the factors that create the needs for increased transportation in rural America.

Appendix 8

SPECIFIC CONSIDERATIONS GIVEN TO THE ELDERLY AND HANDICAPPED ON THE SAN FRANCISCO BAY AREA RAPID TRANSIT SYSTEM

(By Harold L. Wilson, Senior Economic Analyst, Kaiser Foundation Medical Care Program)

When the San Francisco Bay Area Rapid Transit System is completed in 1972, its service area will extend into three counties with 75 miles of track and 39 stations. The facilities for the elderly and handicapped will surpass those of any other mass transportation system in the world providing for 100 percent ridership within its service area. These facilities were acquired primarily due to the efforts of the Architectural Barrier Committee of the Easter Seal Society for the Crippled Children and Adults of Alameda and Contra Costa Counties.

Shortly after the inception of BART, it was noted that the BART system plan, as authorized by a public bond issue in 1962, excluded facilities for the elderly and handicapped with severe mobility limitations. Whereby, I as a member of the Architectural Barrier Committee, initiated a project to secure facilities for the elderly and handicapped which would be easily accessible to, and usable by, these individuals including nonambulatory persons. This was undertaken as an extracurricular activity on my part.

The project objectives were fourfold as follows:

1. Obtain endorsements and support for the project from the elderly and handicapped individuals and organizations devoted to the welfare

of the elderly and handicapped.

2. Inform, educate and convince the BART board of directors and staff that the authorized plan would prevent access for approximately 4 percent of the population who are elderly and handicapped with severe mobility limitations.

3. Secure BART board of directors policy to insure that the system would be constructed whereby the facilities for the elderly and handicapped could be easily added at a later date, and to secure estimated

cost of adding the facilities.

4. Since BART was not authorized nor funded by the electorate to provide for the elderly and handicapped, obtain authority and funds through the State legislature.

OBTAIN ENDORSEMENTS AND SUPPORT

Due to the many interest facets and enormous number of individuals and organizations involved, various methods and procedures were employed to obtain endorsement and support for the project.

Since the elderly and handicapped population would be directly effected by the success or failure of the project, it was imperative that the strongest endorsement and support should be obtained from the organizations representing and/or devoted to the welfare of the elderly and handicapped. Therefore, throughout the past 8 years, many meetings with representatives of these organizations were convened to discuss problems and strategy and to trigger timely letter campaigns directed at BART and the State legislature. These meetings and letter campaigns were not only beneficial, they supplied the backbone support for the project.

On the other hand, it was evident that our project required the endorsement and support from the nonelderly and nonhandicapped citizens. Therefore, many of my evenings, especially in the early years of the project, were devoted to speaking engagements at serv-

ice, church, and professional groups.

Rather than through the use of public demonstrations and news media publicity, the accomplishments of this project are primarily attributable to individual salesmanship with respect for the individuals involved. As a result of this salesmanship and presentation of the facts involved, I have gained the confidence and a professional attitude from everyone contacted.

In my opinion, only a coordinated campaign in which each participant organization agrees in principle and strategy could succeed in this accomplishment of which BART and I are proud to report at

this conference.

INFORM, EDUCATE, AND CONVINCE BART

I have been a volunteer consultant to the San Francisco Bay Area Rapid Transit district board of directors and staff since early in 1963 urging them to provide facilities in the initial construction which will be easily accessible to all the public including the elderly

and handicapped in wheelchairs.

Since every existing public transportation system, through design, presents insurmountable barriers to the elderly and handicapped with severe mobility limitations, a number of the BART officials and personnel understandably had difficulty in comprehending the necessity of special facilities to accommodate the "relative few" elderly and handicapped with severe mobility limitations. Nonetheless, the project objectives to inform, educate, and convince BART were accomplished.

SECURE BART BOARD OF DIRECTOR POLICY

Since BART was not authorized nor funded by the electorate to provide facilities for the elderly and handicapped, it was necessary to secure a BART board of director policy that the system would be constructed whereby the facilities for the elderly and handicapped

could be easily added at a later date, and to secure estimated cost of

adding the facilities.

Since 1964, BART has incorporated the American standards specification for making buildings and facilities accessible to, and usable by, the physically handicapped into all design criteria wherever possible. However, elevators were not considered because elevators were not authorized by the electorate.

Then in 1965, the BART board of directors adopted a construction policy whereby it would be possible to easily add elevator facilities in

the future, if funds were provided.

Later on February 29, 1968, the BART board of directors adopted the policy that they would inform all concerned that the facilities for the elderly and handicapped will require an additional \$5 million to \$7 million (later revised to \$10 million) and that the State legislature be notified that the BART district is willing to install these elevators if the additional money is provided from sources other than the BART district.

OBTAIN AUTHORITY AND FUNDS

Once BART was convinced, construction policy was obtained, and BART provided the estimated cost, our final objective was to secure authority and funds for the elderly and handicapped facilities from the State legislature. This authority was accomplished through the enactment of the assembly bill No. 7 chapter 261, which was approved by Governor Reagan on June 6, 1968. The basic provision of the law is as follows:

It is the purpose of this chapter to insure that buildings and facilities, constructed in the State by use of State, county, or municipal funds, or funds of any political subdivision of the State, adhere to the American Standards Association Specifications A 117.1–1961 for making buildings and facilities accessible to, and usable by, the physically handicapped.

This law was not directed specifically at BART but rather for all public buildings. The passage of this law required a massive statewide effort by many elderly and handicapped groups and individuals with the Easter Seal Society in the thick of the effort.

A few months later the State legislature resolved BART's funds-to-complete shortage problem and added \$10 million for the elderly

and handicapped facilities.

ACCOMPLISHMENTS

Elevators will move the nonambulatory or semiambulatory person vertically from street to train platform. All elevators will be equipped with telephone for calling the station agent, and will have controls within easy reach of a wheelchair occupant.

Toilet facilities also have been designed for use by the elderly and handicapped. Door widths are wide enough for persons in wheelchairs to pass through, and restrooms will have one stall that can

accommodate a wheelchair occupant.

Stairs at stations will have handrails on both sides that will extend 18 inches beyond the top and bottom steps. Special parking facilities

will be provided for the handicapped, with wider-than-usual stalls located close to the station and to the elevators reserved for the

elderly and handicapped with severe mobility limitations.

The BART car was also designed with handicapped persons in mind. A wheelchair occupant can easily ride over the gap between the train platform and the car floor, can easily pass through the car door, and move from one end of the car to the other.

A combination of loudspeaker directions and easily read signs will aid the BART patron with impaired sight or hearing. Seeing-eye dogs will be permitted and, when necessary, the station attendant can

assist the blind.

Other facilities for the handicapped include special service gates and fare collection machinery in stations, a communication system that includes closed-circuit television, special directional signs, and the low placement of telephones and elevator buttons.

CONCLUSION AND RECOMMENDATIONS

This has been a very rewarding project for me and the elderly and handicapped of the San Francisco Bay area and will assist in the future planning of mass transportation systems throughout the world. BART is the mass transportation laboratory and will have the all important 100 percent ridership—a first.

As mentioned, a great deal of effort was expended on my part and from many individuals and groups including the BART board and staff personnel. However, maybe more importantly, this project demonstrated that individuals treating each other with respect and on a professional level can accomplish what appeared to be impossible.

Through the final months of construction, BART has requested that I continue to assist them in the area of inspection for they are proud of their system and their part in providing for the elderly and physical

cally handicapped.

As this project closes, the next transportation project is beginning to be formulated, and that is to provide access to the bus systems in the San Francisco Bay area. The major problem for wheelchair accessibility to the bus system is that one or two systems cannot afford to absorb the bus redesign and tooling costs. Furthermore, the bus systems cannot afford to scrap the existing buses to purchase redesign buses.

Therefore, I recommend that a Federal law be enacted making it mandatory for all newly built buses to be equipped to accommodate wheelchair and other elderly and handicapped passengers, and that Federal funds be made available to the bus systems for the purchase of minibuses, etc. during an orderly and planned conversion to newly equipped buses and complete service to all the public.

Appendix 9

HIGHLIGHTS FROM CASE HISTORIES OF FIVE ELDERLY PERSONS FROM: "TRANSPORTATION AND THE OLDER PERSON IN RICHLAND COUNTY, OHIO"*

MRS. K, AGE 74

Identifying Data and Family Relationships

Mrs. K, age 74, is a widow and lives in a small home with a mentally retarded son and her daughter, also a widow. The daughter was employed as a clerk, working 9 hours a day. Mrs. K did the housework and supervised the care of her severely retarded son who was unable to stay alone for anything but a brief period of time.

As a result, Mrs. K found it impossible to get out of the house very often and had no social activities or recreation for herself. She did not attend church except once in several months when a friend took her, with her daughter giving care to the son while Mrs. K was in church.

Health Situation

In addition to the condition of the son, health problems were experienced by Mrs. K herself. She suffered from arthritis and had considerable stiffness and pain most of the time. Her difficulties in walking were compounded by blindness in one eye which increasingly caused her to trip and fall frequently. Mrs. K needed new glasses since her other eye was giving trouble, but had been unable to procure these stating, "I can't leave my son to get them and besides, they cost too much." Mrs. K was unable to walk very far without assistance but managed around her home without too much difficulty.

Transportation Problems

In Mrs. K's own words, "Because of my living with my daughter, Welfare only gives me \$56.00 per month and \$51.00 for my son. This does not leave money for transportation."

Mr. K's health, the necessity for constant supervision of the retarded son, and low income restricted Mrs. K to only a few trips to the store and the doctor each month where she was driven by her daughter. Occasionally, Mrs. K took a taxi to her regular appointment with her physician.

^{*}A study made possible by: Ohio State University Research Foundation, Ohio Department of Mental Hygiene and Correction, Division of Administration on Aging, under Title III of the Older Americans Act.

Comment

An appropriate and low cost transportation system or an adequate welfare transportation allowance plus some supervisory services for the retarded son would open up many pleasant vistas for Mrs. K to have normal social and church activities and visiting with friends. She is otherwise confined to her home even though her daughter resides with her.

MR. J, AGE 76

Mr. J, came to Mansfield, Ohio, in 1930, accompanied by his wife and one female child. He was born and raised in Ferncreek, Kentucky. He went to the eleventh grade in school.

He is a widower, having lost his wife in 1959. He has worked quite regularly as a laborer all of his life until he retired from one of the

local plants at the age of 68.

His daughter resides in the same city and his three grandsons visit him regularly. Two of his grandsons have skilled jobs with local industry and the other works for the federal government also in a skilled,

well paying position.

He lives in an area that developed because of high paying jobs for both Southern blacks and whites during the 1930's. However, these homes are without the services of sewage, water, and appropriate public services. The house he lives in has seven rooms, of which four rooms are upstairs and three are downstairs.

Mr. J does not own his house and he lives there with friends. He pays for his room and board out of his social security and also receives three

hot meals a day.

His room is downstairs so as to make the bathroom more accessible to him. He eats with his friends at meal time which is apparently his largest single social outlet. His other activities are visiting with friends and relatives, usually when they come to see him and he attends church when his friends are able to take him. He sees his doctor about every five weeks, and if his friends are not available to take him, he tries to rely on bus service which is not frequent in his part of town, according to Mr. J.

He shops for groceries about once a week. Mr. J does not own a car and neither does he drive now. He says, "I was grounded April, 1969. My auto insurance was not OK'd and I got to have others take me

around."

He has some difficulty in walking and some difficulty seeing. He also

said, "I can hear right most of the time."

He feels that one way to improve the transportation situation is to "... keep our city buses operating, get more people to use the buses. This can be done. Maybe as a city service, the newspapers should keep on pushing the handiness of using buses. They should at least make a special rate for helping the bus service." He felt "... their advertising should show regularly and not a hit-and-miss schedule. Good bus service would solve lots of problems that we old folks have."

Conclusion: Mr. J has already been affected by the loss of his right to drive. He is, along with other citizens but especially the older citizen, threatened by the poor bus service that is offered. But even more threat-

ening is the total loss of this poor bus service.

MR. AND MRS. L. AGES 74 AND 73

Identifying Data and Family Relationships

Mr. L, age 74, and Mrs. L, age 73, lived in a small house in a village in the rural area of their county about ten (10) miles from the nearest physician and fifteen (15) miles from the nearest hospital. Mr. L was a retired farmer and when he could no longer maintain heavy farm duties, he and Mrs. L moved into town.

The L's had no children and no relatives living. They lived a quiet life of retirement, occasionally visiting friends nearby and going to

church only infrequently.

Health Situation

Mrs. L suffered from a severe cardiac condition which was progressive and disabling. Many times she was unable to be out of bed and Mr. L had to cook, do the laundry, and other work about the house. At other times Mrs. L was able to be up and about and fulfilled her usual household duties.

Mr. L had a severe hearing loss but was not able to afford a hearing aid. He also had prostate trouble and was being treated for this con-

dition as well as for a chronic kidney infection.

Transportation Problem

Mr. L described their transportation problem as follows:

"Our trouble is not having money to pay for transportation. There is no bus service here and we don't own a car now. Sometimes I need to go to a doctor but don't have money to pay to get to a doctor who will take my Medicare card. Sometimes my wife has to go, too, and she's got the same problem.

"I only draw \$85.00 Social Security and my wife gets \$55.00 a month Social Security. I pay \$35.00 a month rent, and what with groceries, gas and electric and water and sewer it don't leave me nothing to buy

clothing and do much going."

"Sometimes we go to the doctor and then we have to go without our medicine on account of not having the money to pay."

Comment

Public transportation service in rural areas and villages is apparently non-existent. Add to this lack a monthly income of \$145.00 per month for two elderly chronically ill persons without children and relatives and the situation is indeed one of great deprivation in terms of the necessities of health care, nutrition and general capacity to live a meaningful existence during retirement years.

MR. N, AGE 72

Identifying Data and Family Relationships

Mr. N, age 72, was a retired factory worker, who lived in a small house in a medium-sized city, about fifteen miles from a larger city. Mrs. N was in a nursing home, having been placed there following a severe stroke twelve months previously.

The N's had no children but many close friends who lived nearby. Mr. N occupied himself with keeping the household in order, as-

suming the tasks formerly done by his wife. Mr. N did not own a car and walked to the store, to church, and to visit friends. He spent some time each day at the nursing home visiting Mrs. N, although the nursing home was two miles from their home.

Health Situation

Mrs. N's health had been poor for several years before her stroke. She had high blood pressure and had complained of dizzy spells and severe headaches for some time. Following the stroke, she was paralyzed on the left side, had a serious speech involvement and had difficulty in swallowing. Mrs. N received no therapy in the hospital and was a bed patient at the nursing home where she received total care, including feeding and assistance in all areas of daily living. Mrs. N could not speak to Mr. N and appeared not to recognize him most of the time. Mr. N arranged to be at the nursing home at noon, so that he could feed his wife her lunch.

Mr. N's general health was fairly good, although he wore a hearing aid to assist his hearing loss in the left ear. Mr. N believed that the walking he did helped to keep him fit and in good condition. However, Mr. N found it difficult to get to the nursing home in bad weather and recently had been hospitalized briefly for a mild heart attack.

Transportation Problem

Mr. N began to realize that he would eventually be unable to continue the lengthy walking for all errands and for visits to his wife and did not know how he would manage the price of bus or taxi service.

"I have more retirement income than many of the fellows I know, about \$327.00 each month (Social Security plus a pension from the plant). But Martha's care at the nursing home costs me about \$295.00 a month, which leaves approximately \$32.00 a month for everything else. I've been using our savings up to now, but they will soon be done. How I'll manage then, I really don't know."

Comment

We see again the impact of health care expense, particularly long term care, on the income of retired persons, even when this retirement income is higher than average. The cost of transportation of any kind is then an added factor in limiting the dignity and management of life for older persons.

MR. E, AGE 79

Identifying Data and Family Relationships

Mr. E, age 79, is a widower of many years. He has no children, owns no property, and his only income is a small Social Security check of \$61.00 each month. Mr. E formerly had a one-room basement apartment in a large home. He did handyman and gardening work in return for his room and board but received no wages or cash from this work. Being a retired carpenter, Mr. E would occasionally do small carpentry jobs in the immediate neighborhood and receive compensation for his work.

Mr. E owned no car and since the bus service available did not come closer to his apartment than six blocks away, he preferred walking wherever he was going. Mr. E felt that this exercise kept him fit. He,

therefore, did all his errands and shopping on foot, even in severe winter weather.

Mr. E was a member of several golden age clubs and a senior center and attended a variety of senior citizens activities, participating in woodworking classes, hobby shows, outings and other special events. He appeared to have accepted his retirement without major problems

and his living arrangements seemed stable and safe.

In 1961, Mr. E applied for Meals on Wheels service from a local senior service agency. At that time, Mr. E reported that he might have to find other living arrangements since his landlord had sold the house and the new owner wanted to use the basement apartment where Mr. E lived for other purposes. In any case, Mr. E could not arrange for room and board with the new owner, so that Meals on Wheels service to Mr. E began in April, 1962 providing Mr. E with a large dinner delivered at noon each day. Mr. E was able to cook his own breakfast and supper on a small hot plate which the new landlord permitted on a temporary basis.

After several months, Mr. E moved to a small one-room apartment closer to downtown and to the Senior Citizens Center. At this time, Mr. E found it necessary to apply for state Old Age Assistance since his Social Security was not sufficient to cover all his expenses. Although the welfare check itself was minimal, through this program Mr. E became eligible for more assistance with his medical expenses—should be become ill—and for monthly surplus commodities to extend

his food allowance.

Health Situation

For five years, Mr. E continued his life in this fashion. He moved several times but continued his Meals on Wheels service, which appeared to maintain his nutritional needs on a stabilized basis. Mr. E complained at some length of his difficulties in transporting the surplus commodities, 15 lb. bags of cornmeal and the like, to his apartment. Finally, unable to work out any solution to the problem, Mr. E reported to the Meals on Wheels social worker that he didn't "bother anymore with surplus" and managed without them.

Hospital Experience

In July, 1967 Mr. E suffered a severe coronary attack and was hospitalized for a period of several months. When improved, he returned to his small apartment and resumed the Meals on Wheels service. He was confined to his room, however, under restricted activities and forbidden to undertake strenuous exercise, even walking for any distance.

Convalescence at Home & Transportation Problems

Mr. E found it impossible to do his errands, to shop for groceries, even to get to the bank to cash his monthly checks without assistance in transportation. He was unable to walk as far as the bus stop and unable to afford a taxi. Eventually some of his friends from the Senior Citizens Center learned of Mr. E's situation and began to offer him rides and to do various errands for him.

For a period of six months, Mr. E took up residence at the County Home, located out in a rural area of the county. Mr. E finally moved back to town and into a room near the downtown area, the drugstore, and not too far from his doctor's office. Mr. E again is on the Meals on Wheels service, saying he likes city living better, close to all the places he goes and near his friends from the Center. Mr. E has solved some of his transportation problems by frequent moves closer to the places he goes and through the help of his many friends.

Comment

Cost of transportation and health restrictions have created a dual type of transportation problem for Mr. E and one which has the effect of isolating and limiting a very active and independent older person.

Appendix 10

MAJOR FEATURES OF URBAN MASS TRANSPORTATION ASSISTANCE ACT OF 1970*

\$10 BILLION INTENT

The Act states a Federal intention to provide \$10 billion for urban mass transportation over the next 12 years.

AUTHORIZATION OF \$3.1 BILLION

The Act authorizes \$3.1 billion to finance projects of the Urban Mass Transportation Administration (UMTA) beginning in fiscal

year 1971.

UMTA capital assistance activities (capital grants and loans, technical studies and relocation assistance) may be financed by "contract authority," whereby the Secretary of Transportation is authorized to incur obligations on behalf of the United States, and the full faith and credit of the Congress is pledged to appropriate the funds required to liquidate such obligations.

The amount which may be appropriated annually for all UMTA activities is limited by a schedule contained in the Act. This schedule authorizes appropriations of \$80 million for fiscal year 1971 and rises at a graduated rate up to an aggregate amount of \$1.86 billion in

fiscal year 1975, and to \$3.1 billion thereafter.

In addition, beginning in 1972, the Secretary would be required to submit to Congress biennially requests for authority to obligate for changes in the schedule for appropriations to liquidate obligations.

This arrangement provides localities assurance that Federal financial assistance will be available on a continuing basis, while ensuring orderly development of mass transportation programs.

ADVANCE ACQUISITION OF REAL PROPERTY

The Act authorizes loans to local governments for the acquisition of real property expected to be required for urban mass transportation purposes within ten years. The real estate would be for rights-of-way, station sites, terminals, maintenance, and other buildings, parking lots, and access roads.

If it is subsequently determined that such acquired real property is not to be used for urban mass transportation purposes, the Federal government shall receive two-thirds of any increase in value over the cost of acquisition.

Such advance acquisition of real property is extremely important

as the cost of urban land is rising sharply.

^{*}From the Urban Mass Transportation Administration, Department of Transportation, Washington, D.C.

PUBLIC HEARINGS

Applicants for Federal assistance for capital projects which would substantially affect a community or its mass transportation service must hold (or provide the opportunity for) public hearings on the economic, social, and environmental impacts of the projects. (Where hearings have been held, a copy of the transcript must accompany the application.)

ENVIRONMENTAL PROTECTION

An applicant for capital assistance must carefully analyze environmental impacts of its proposed project and consider alternatives to the project to minimize environmental damage. The Secretary is required to consult with the heads of other Federal agencies with regard to projects affecting the environment and, before approving an application, must determine in writing that the hearing requirement has been fulfilled, that there is no feasible and prudent alternative to any adverse environmental effect which may result from the project, and that all reasonable steps have been taken to minimize the effect.

STATE LIMITATION

Capital grants received by any one state may not exceed 12½% of the aggregate amount of funds authorized to be obligated by the Act, with the proviso that an additional 15 percent of this aggregate may be used by the Secretary without regard to this basic limitation.

This provision allows the Secretary the flexibility necessary to adequately assist cities in states where the magnitude of urban transportation problems is unusually great.

STUDY OF OPERATING SUBSIDIES

The Act requires the Secretary to conduct a study of the desirability of providing Federal grants to assist local mass transportation systems in meeting their operating costs (as distinguished from capital costs), and to report his findings and recommendations to the Congress within one year.

SOURCE OF LOCAL SHARE

The Act removes restrictions which required that at least 50 percent of the local matching funds must be provided from public sources unless the applicant can demonstrate its fiscal inability to provide such funds.

COMMENTS OF GOVERNORS

The Act requires an applicant for capital assistance for a project located in a state which has statewide comprehensive transportation planning to submit a copy of its application to the Governor of the state. The Secretary is required to consider any comments submitted by the Governor before taking final action on the application.

SPECIAL CONSIDERATIONS

The Act contains a provision that special consideration be given to the needs of elderly and handicapped with regard to the planning, design, and operation of urban mass transportation services.

The Act also stipulates that special efforts be made to encourage industries hurt by cut-backs in other areas of Federal spending to

compete for contracts involving UMTA projects.

LEGISLATIVE HISTORY

The legislation was sent to the 91st Congress, 1st Session, from the White House on August 11, 1969, and introduced into the U.S. Senate that same day.

The Senate passed the Act by a vote of 84 to 4 on February 3, 1970, and the House of Representatives approved it by a vote of 327 to 16 on

September 29, 1970.

The legislation was forwarded to the White House for the President's signature on October 5, 1970.

Signed October 15, 1970.

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