American Public Transportation Association

Funding the Public Transportation Needs of an Aging Population

March 2010

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Acknowledgements

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Executive Summary

Rapid growth in the number of older people in the United States during the coming decades will lead to greatly increased needs for expanded and enhanced public transportation services. This report: a) identifies the range of actions that will be needed to expand mobility options for older people, including accessible public transportation services; b) quantifies the demand for these public transportation services; and c) estimates the funding that will be needed to provide them.

Needed Actions

Needed actions have been identified by means of a review of the extensive literature on this subject. The actions needed to expand mobility options for older people include:

- **Enhancements to fixed-route public transportation operations and planning** such as additional bus operator training, incorporating travel needs of older people in route planning and stop placement, and coordination with other agencies and transportation providers

- **Enhancements to public transportation vehicles** such as low-floor buses, kneeling buses, improved interior circulation, additional stanchions and grab bars, ergonomic seating designed for older riders, and accessibility features either required or encouraged by ADA like lifts and ramps, larger letters on head signs, and stop announcements

- **Actions to help older people take advantage of existing services**, like presenting information in ways that are easy to read and as clear as possible, information and assistance programs to connect older people with appropriate services, and outreach and training programs

- **Expansion of supplementary services** including flexible route and community transportation services, ADA complementary paratransit, non-ADA demand-responsive services, taxi subsidy programs, and volunteer driver programs

- **Application of universal design strategies** at transit facilities, bus stops, and on streets and sidewalks in the immediate vicinity of transit facilities and stops

These are the actions of greatest concern to public transportation agencies, but they are not the only actions needed. Other important actions include assuring supportive services to caregivers who provide transportation, encouraging further development of unsubsidized private transportation services, increasing the availability of accessible taxicabs, coordinating with non-emergency medical transportation provided under Medicaid and Medicare, and supporting modifications to automobiles and roadways to increase the safety of older drivers.

The analysis only estimates funding needs for those actions involving public transportation services, and only for those actions for which a portion of the cost can be clearly connected with growth in the older population. These actions and services are: ADA complementary paratransit, non-ADA dial-a-ride services, taxi subsidies, volunteer driver programs, community bus services, outreach and training, information and assistance, and bus operator training. Only the portion of cost due to increasing numbers of older people has been estimated. No distinction has been made regarding whether the needed services would be provided by public transit operators, cities, counties, or community organizations.

Expected Growth of the Older Population in the United States

The aging of the Baby Boom generation (people born between 1946 and 1964) is expected to produce a 79% increase in the number of people over the age of 65 in the next 20 years. For the next ten years, most of the growth will be in the 65 – 74 age group, which will grow 51% by 2020. People in this age range typically have relatively few mobility limitations but still have unique travel needs. In the decade after 2020, there will be continued growth in the 65 – 74 age group but there will be especially rapid growth in the number of people age 75 - 84, whose numbers are expected to increase by 55%. People in this age range commonly have many more mobility limitations.

Projected Population Increase of Subgroups of Older People
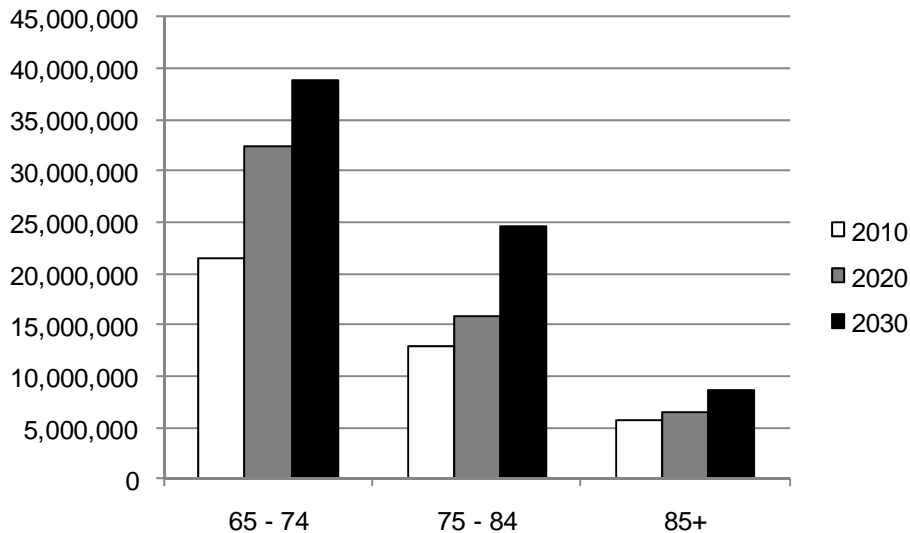
Since older people in different stages of life commonly have different travel needs and often have different limitations, this uneven growth in the older population needs to be considered in estimating the need for various mobility options.

Methodology

Demand for the variety of needed public transportation services has been quantified using the experience of 27 programs that were identified as "model programs" because they provide a notably high level of service and were able to provide the type of data needed. The 27 programs are identified and described at the back of the report. There is no guarantee that these programs are truly meeting all current mobility needs, but they provide as close a measure of these needs as can be quantified.

In order to take account of uneven growth in the older population, and to reflect the different needs of people in each age group, data was requested from the model programs about the ages of their riders, and this data was used to calculate trip rates for each subgroup of older people for each type of service. These trip rates were then applied nationwide to obtain national estimates of needed trips for each age group in 2010. A similar process was applied to numbers of information and assistance requests and outreach and training events. Average costs per unit of service were then applied to arrive at funding needed in 2010. The 2010 demand and funding

needs for each age group were then increased by the expected population growth in each group to arrive at 2020 and 2030 demand and funding need.

Ideally, the analysis would take account of expected numbers of older people with various levels of mobility limitation, since this rather than age itself is what determines the mobility options that are needed. Since there are no accepted projections of future levels of mobility limitation, age was used as the best available substitute. Data does demonstrate increased incidence of chronic disease as people age, especially after the age of seventy-five, and there is a direct correlation between increased chronic conditions and mobility limitations.

In addition, the process distinguished among different types of service areas, especially differences between urban and rural areas. The analysis tool developed for the research also distinguishes among large, medium, and small urbanized areas. Insufficient data was found to distinguish among urbanized areas with respect to trip rate, but differences in cost per unit of service were identified and applied.

The analysis tool used for the demand and funding estimates is available for download on the website of the American Public Transportation Association at www.apta.com. It can be used to make projections with different assumptions than were applied for this report, or to make projections for a single metropolitan area, region, or state.

Funding Needed to Provide Public Transportation for Older People

The analysis estimates that in 2010 $4.2 billion dollars would be needed to operate a desirable level of public transportation services for older people in the United States. In addition, $616 million in capital costs would be needed. By 2020 annual operating costs would grow by $1.2 billion and annual capital costs would grow by another $254 million. By 2030 total required annual funding would grow by $3.3 billion for operating and $598 million for capital. All costs are in 2010 dollars, with no adjustment for inflation. A summary table is provided on the next page.

The action with the highest cost would be expanding non-ADA dial-a-ride services provided by transit agencies as a supplement to ADA services, by local governments and community organizations, and in rural areas where no ADA paratransit is required. This is followed closely by the cost of providing that portion of ADA paratransit service which represents trips taken by older people.

The operating and capital costs are based on projections that indicate that demand for ADA paratransit, non-ADA dial-a-ride service, subsidized taxis, volunteer drivers, and community bus service will grow from 217 million trips in 2010 to 282 million trips in 2020 and 393 million trips in 2030 (see figure on the next page). Note that the demand for non-ADA dial-a-ride service, is about 85% higher than the demand for ADA paratransit, but the funding needed for non-ADA dial-a-ride is only 10% greater. The cost per trip for non-ADA dial-a-ride is about $18 compared to about $31 for ADA paratransit. Note that conventional fixed-route public transportation currently carries 386 million trips per year by people age 65 and older according to transit system surveys.

The analysis did not determine what portion of the services needed in 2010 are currently being provided. To provide a rough notion of how current services compare to needs, an analysis was conducted of data from the National Transit Database, the Administration on Aging, and the National Household Travel Survey, as well as transportation service inventories from five regions conducted for planning and coordination studies. This separate analysis suggests that current services provide trips amounting to about one-half to two-thirds of the estimated need.

Funding Needs Summary
(Millions of 2010 Dollars per Year)

Mode and Cost Type	Total Funding Need			Increase over 2010	
	2010	2020	2030	10 years	20 years
Operating Cost					
ADA Paratransit	$1,661.7	$2,190.5	$2,923.4	$528.7	$1,261.6
Dial-a-Ride	$1,822.0	$2,285.6	$3,228.2	$463.6	$1,406.1
Taxi Subsidy	$176.3	$234.4	$317.7	$58.1	$141.4
Volunteer Drivers	$192.0	$260.7	$341.4	$68.6	$149.4
Community Buses	$261.1	$351.8	$535.3	$90.7	$274.3
Outreach and Training	$24.1	$32.9	$43.3	$8.7	$19.1
Information and Assistance	$13.3	$18.1	$23.8	$4.8	$10.5
Bus Operator Training	$6.1	$6.6	$7.3	$0.6	$1.2
Total	$4,156.6	$5,380.6	$7,420.3	$1,223.9	$3,263.6
Capital Cost					
ADA Paratransit	$179.2	$236.1	$315.1	$57.0	$136.0
Dial-a-Ride	$332.2	$416.9	$588.5	$84.7	$256.3
Community Transit	$92.9	$125.2	$190.6	$32.3	$97.6
Volunteer Drivers	$11.9	$91.9	$120.2	$80.0	$108.3
Total	$616.2	$870.1	$1,214.5	$254.0	$598.3

Demand for Public Transportation by Older People
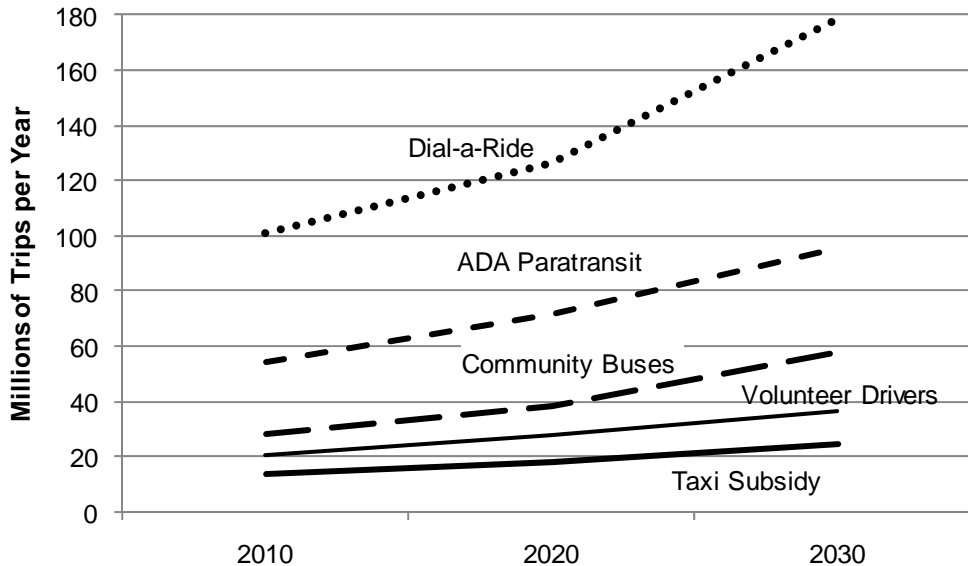
Future Research

This research only begins to define and quantify the public transportation needs of older people. To carry the research to a new level it would be desirable to quantify how older people decide what means of travel to use, and how the availability of various services changes their ability and decisions to engage in activities outside the home. This type of research could lead to a more precise understanding of what should reasonably be considered a "need." It would also help to understand how the various types of service interact, that is the extent to which the various modes analyzed here can substitute for each other or are needed to meet a variety of different travel needs. For example it could determine the extent to which taxi subsidy programs that supplement ADA paratransit reduce demand for ADA paratransit or simply add another desirable travel option.

Aside from research about travel behavior, it would also help to have better data about the services that currently exist. Since these services obtain their funding from a wide variety of sources, no one mandatory reporting system is likely to be practical. However, several methods of improved data gathering may be possible, such as:

- A program of obtaining consistent data from recipients of funding

- Establishing a basic set of required data items to be included in transportation inventories conducted for coordinated public transit-human services transportation plans

- Creating a voluntary system of reporting under an initiative such as the National Center on Senior Transportation. To be useful and to achieve sufficient participation, such a reporting system would need to use a limited number of carefully defined and chosen data categories.