

Ageing – towards a transport policy response

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1 Introduction

The question of how best to support older people who are giving up driving will increasingly demand the attention of policy makers and transport service providers alike in the years to come. The combined effects of people living longer, lower birth rates and the changing status of women, particularly in regard to driving, mean that there will be many more older drivers on our roads in the future. Whilst many may continue to drive for life, a significant number are likely to reach a point where they consciously limit the amount of driving that they do and/or cease driving altogether. Given that car travel, as driver or passenger, is the most favoured form of travel for older people, relinquishing driving will require major adjustments on the part of those concerned (and, often, family members close to them). Wide ranging problems may be faced by those who no longer drive, yet there is a general reluctance to plan for this possibility (or eventuality). As with responses to other unpleasant events (like epidemics or natural disasters), it falls to Governments to lead in anticipating and planning to reduce the consequences of people being unable to drive.

The authors have been conducting research on transport and social inclusion with a particular focus on older people who are no longer able to drive for all or some trips (a group we have termed “retired” drivers). Many factors exacerbate the difficulties associated with making the transition to non-driving, ranging from lack of appropriate infrastructure and services, to a lack of information and awareness. Inadequate information is especially acute for those people from Non-English Speaking Backgrounds (NESB).

Most of the literature surrounding transport and ageing focuses on driving cessation and transport disadvantage. There is relatively little research on interventions that might prove useful in the period leading up to and during the cessation of driving.

This paper provides background information intended to assist in the development of appropriate transport policy responses to address the mobility implications of an ageing society. The first sections of the paper focus on the main issues that older people face when making the transition from driving to non-driving, the access and mobility needs of older people and some important aspects of their travel behaviour. Discussion then considers the key elements of a mobility policy framework that could usefully respond to some of these issues.

The proposed transport policy response for older people is based on providing support for maintaining mobility, to enable older people to access activities and give them a sense of control and independence. In making the transition from driving to non-driving, older people need a combination of awareness about options, detailed information, and a supportive community environment.

Alternatives to car use include: walking, the use of scooters/electrified gophers, community transport, taxi services, public transport, cycling and the use of mobility substitutes (services such as internet banking, internet shopping, in-home services and home delivery). The use of these options will vary, depending on the characteristics of the individual (including personal health, residential location, strengths of relationships with family and friends, personal income, knowledge of services, and so on). In the longer term older people may make some adjustments in their lives which affect some of these

factors, as for example moving to residential accommodation better served by public transport and/or closer to activities.

2 Issues faced by older drivers

Driving underpins the way most suburban and regional communities are organised. For many older people a driver's licence is symbolic of independence, freedom and individuality, proof that the threshold to old age has not been crossed (Liddle, McKenna and Broome, 2004). Many life decisions, like where we will live, have been made on the assumption that we will always have access to a private motor vehicle (Dobbs and Dobbs, 2001).

Most suburbs have also been designed on the basis of mobility by car and this affects the mobility options of older people, the implications of which were highlighted in the 1998 NSW *Healthy Ageing Framework Report*:

“Without some change to current neighbourhood design and transport options, there is a risk that many older people may become isolated in their own homes or may move prematurely into supported or age segregated accommodation”
(NSW Department of Ageing and Disability, 2000).

The current generation of older people and the next cohort of older drivers are driving more than any previous generation. Greater use of automobiles by older drivers is the norm in Australia, Europe, and the USA (Alsnih and Hensher, 2003).

Measures can and are being taken to keep older drivers safely on the roads, including: training to improve driving behaviour and skills (such as driver refresher courses), regular eye tests, motor skills tests via doctors/health services, selection of safer vehicles, modifications to vehicle features, improvements to the driving environment such as larger text on signage, and simpler road layouts and traffic design. Technological advances (for example, power steering, automatic braking, reversing sensors etc) will make it possible to keep some people driving safely for longer. The road environment is also likely to be adapted to the needs of older people to improve their safety through larger signage with less non-crucial information; better road markings; better intersection design, and restricting billboards and other advertising that can obstruct view of traffic signs and signals (Hensher, 2006 and Rosenbloom, 2006). This paper however focuses on maintaining mobility for people who are stopping driving for all or some travel.

Although many people drive for most of their adult lives, others must stop or restrict their driving for a variety of reasons, including age related cognitive or physical disability. Many older drivers (particularly males) are reluctant to contemplate, let alone plan for driving cessation. Where high levels of car use reflect necessity rather than choice, this has severe ramifications once people can no longer drive or have no access to a car. Being unable to drive can lead to social isolation, damage to health and reduced wellbeing. For example, a US longitudinal study concluded that driving cessation was among the strongest predictors of increased depressive symptoms in older people (Marottoli, 2002).

At whatever time (and if) the transition from driving to non-driving is made, difficulties relating to personal mobility will arise for those who have previously been reliant on car travel. The declining physical capabilities that are associated with ageing can often have an impact on personal mobility in several ways, including difficulties with walking even modest distances and problems in using conventional public transport (Morris and Rosenbloom, 1997). When an older person ceases or restricts driving for reasons related to their physical health, public transport, if available in their area, may not be a viable option. Using public transport

involves more effort than driving, in walking to the bus stop or train station, standing and waiting, holding on while travelling, and getting on and off (Madachy, 2003).

Older drivers are not a homogenous group. As Harris (2002) has noted, they vary greatly just as older people's states of health vary significantly, from:

- those who need care and assistance and have significantly reduced or specialised travel needs
- those who are more independent but need some support; or
- those who are completely independent.

2.1 Needs

It is a myth that older people have fewer travel needs than the rest of the population. Rather, seniors (as they are sometimes called) often have additional unique transportation needs. They may require more trips to the doctor and for other forms of medical treatment as well as for social outings. The mobility needs of the elderly are at least as important as those of younger people and people of working age. As many cannot use conventional public transport, their needs call for special attention (Hensher, 2006).

The key points of our understanding of the mobility needs of older drivers are:

- Older people travel for a variety of reasons that, apart from work, change little as they age.
- Average measures for any chronological age **cannot** predict individual driving performance.
- Giving up driving can be forced on people at any age due to illness or injury, so improving mobility options for retired drivers will be of benefit to the general population (e.g. younger people who are temporarily unable to drive due to injury).
- Journeys are typically "trip chains" (Denmark, 2006), that involve several linking modes (eg. walk – bus – walk – train – walk – tram – walk); this emphasises the importance of the pedestrian environment, particularly for travel by public transport.
- Access and mobility difficulties faced by older people will depend on their living arrangements (independent living or in supported family or village arrangements) and where they live (availability of public transport, existence of hills, proximity of shops, etc) as well as the quality of their social networks – factors which tend to vary between major metropolitan, smaller urban or rural populations.
- Income constrains mobility options for many people. Elderly people living on a basic pension have to budget very carefully to meet the costs associated with participating in activities outside their homes beyond walking distance (Morris and Rosenbloom, 1997).
- Men and women differ significantly in their experiences of driving, and in their attitudes to, driving and driving cessation.
- The possibility and rate of onset of any disability or illness may effect people at different rates and/or at different times of their life. Some older people may require varying levels of care (from low to advanced) during their lifetimes, whilst others may not require any assistance during their later years.
- For some people, restricting their driving (e.g. not driving at night) and subsequently giving up driving is anticipated and planned for, but many older people prefer not to contemplate, let alone plan for this major life event.
- For others, relinquishing driving is a sudden and unexpected event, caused by illness or injury.
- The physical difficulties experienced by frail elderly people in using public transport are often greater than those posed by continuing to drive.
- Similar mobility issues are faced by those adults who have never driven. Loss of mobility can be particularly severe for people who have been dependent on a driver spouse who has had to give up driving.

- Giving up driving is a highly sensitive topic among older people; developing and communicating strategies designed to provide options must be approached with considerable care.

3 What the data from VATS and elsewhere indicates

A significant increase in the number of older drivers is expected in the future, reflecting the ageing of our population and increased rates of licence holding, especially for women. The number of retiring drivers is also likely to increase although the process and rates of doing so are not yet clear. The potential number of retired drivers underlines the importance of understanding the issues and developing viable travel options.

In 1971 8% of Australia's population was aged 65 years or over; in 2001 the figure was 13%; and by 2031 is forecast to increase to 22% by 2031 (ABS, 2000).

By 2030 all "baby boomers" will have reached 65 years of age. By 2011 the proportion of licensed drivers over 60 will have increased by about 70% (Monash University Accident Research Centre, 2002). Besides the ageing population, another factor which is expected to contribute to significant increases in future numbers of older drivers is the higher proportions of women (now in younger age brackets) holding drivers licences compared to those in the age brackets preceding them (Family and Community Development Committee, 1997). The majority of older people in the future will have been licensed car drivers for most of their adult lives (Rosenbloom and Morris, 1998).

3.1 VATS Data

A previous study of travel patterns in Melbourne by Morris, Wang and Berry (2002) established that the most popular modes of travel among older people were as follows:

- 1) car driving,
- 2) car passenger,
- 3) walking,
- 4) public transport.

Whilst generally true, this highly aggregate picture disguises quite marked, gender and age-related differences in travel behaviour. Among the current generation of older people, the travel patterns of men and women display significant differences. In particular, older men drive more often than older women, and older women travel more often as car passengers than older men. When driving is not an option for older men, walking appears to be their next best option (whether this is due to personal preference or lack of opportunity to receive lifts is not clear).

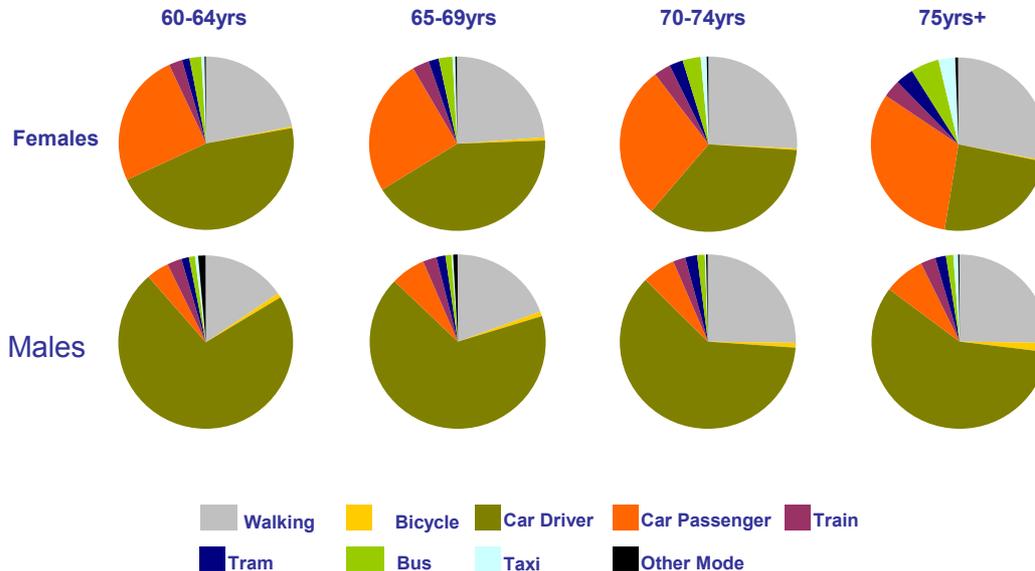
The relative importance of various travel modes also varies as older men and women reach more advanced age. In Victoria, men aged 65-69 years make 67% of average daily trips as car drivers, and only 6% as car passengers. This contrasts with women in the same age bracket, with only 42% of daily trips being made as drivers, and 25% taken as car passengers.

For men aged 75 years and over, car driving accounts for 58%, of daily travel with a further 7.5% taken as car passengers. For women in the same age bracket only 24% of daily trips are made through driving and 3% of daily trips made as car passengers (VATS, 1994 - 1999)

Figure 1.

Mode of Travel Analysis**Share of Average Daily Trips (Weekday) by Sex, Age & Mode of Travel**

(Source: Victorian Activity and Travel Survey, 1994 to 1999)



Older women (over 75 years of age) in particular are at risk of social isolation due to a lack of availability of suitable transport. Also, a large percentage of older women do not currently drive, either having relinquished driving or never having learnt to drive in the first place (Figure 1). Those who drive less tend to receive lifts more often and make slightly more trips by walking and public transport.

As Figure 1 illustrates, older men drive more often than their female partners. One problem for the female partner is that they may lose confidence, give up driving and are then unable to provide their own mobility when their partner dies or retires from driving (Rosenbloom, 2006).

Like younger people, older people travel for a variety of reasons, including shopping and to undertake social activities.

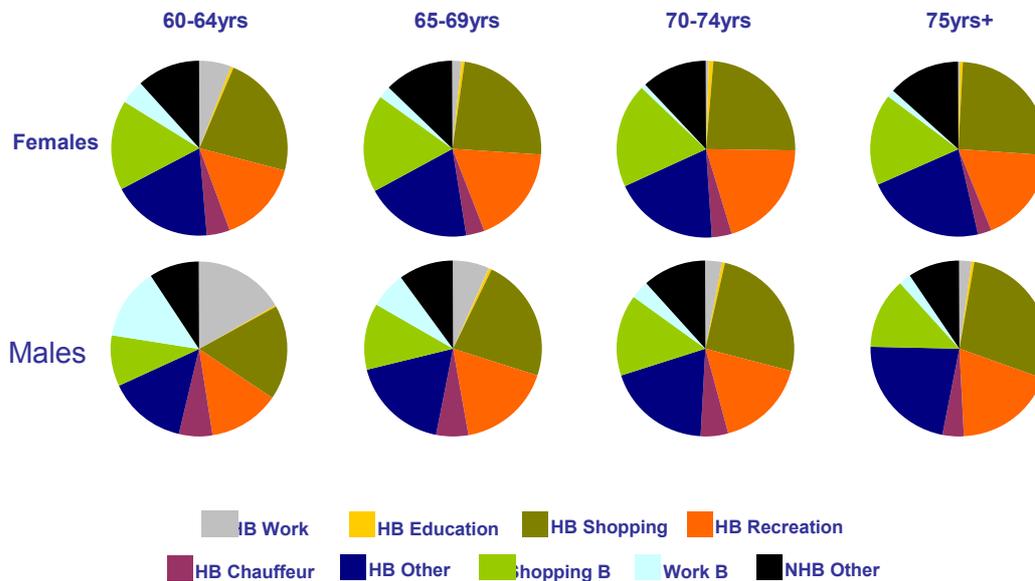
Both genders share similar reasons for taking trips, as Figure 2 indicates, but men make more work-related trips. Among Victorians in the 65-69 age bracket, almost 7% of men's daily trips are for work purposes, in contrast to only 1.6% for women. In the over 75 years and over age bracket, only 2.4% of trips are work-related for men and 0.8% for women. (VATS, 1994 - 1999).

Travelling as a car passenger is an important mode of transport for older people, particularly for women, and becomes more important with age, especially once people reach fifty years or more. While women with little or no driving experience may be familiar with public transport, other women who have relied on their husbands or others to drive them may be less familiar with other transport modes, and are thus more likely to experience isolation when their partner ceases driving.

Figure 2.

Type of Trip Analysis

Share of Average Daily Trips (Weekday) by Sex, Age & Type of Trip
 (Source: Victorian Activity and Travel Survey, , 1994 to 1999)



Choice of activities is a key to independence. For many people, particularly men, giving up driving represents loss of independence and tends to be the milestone marking old age.

Maintaining a full range of activities remains important when older people reach the stage of reducing or relinquishing driving. For some older people, however, the trip is even more important than the destination. The trip is sometimes a social experience to relieve boredom or to seek some time away from their homes and to see other people (Bishop, 2000).

For retired drivers, transport and activities need to be available locally. Local activities provide the opportunity for shorter trips that are practical in terms of time and cost. Longer trips that were previously undertaken by car may need to be relinquished, once driving is no longer an option.

4 A mobility policy framework

The authors contend that an appropriate transport policy response for older people is to support them to maintain their mobility to continue to access activities in a way that gives a sense of control and independence. In making the transition from driving to non-driving, older people need a combination of awareness about options, detailed information, and a supportive community environment.

The main alternatives to car use currently available for older people in Victoria include: walking, the use of scooters/electrified gophers, community transport, taxi services, public transport, and the use of mobility substitutes (services such as internet banking, internet shopping, in-home services and home delivery). The use of these options will vary, depending on the characteristics of the individual (including personal health, residential

location, strengths of relationships with family and friends, personal income, knowledge of services, and so on). Longer term adjustments may also be made, as for example moving place of residence to be better served by transport and/or closer to activities. All of these are key elements in developing a mobility policy framework.

4.1 Widening Mobility Options

For people without the use of a car, mobility is severely limited. An important influence on people's mobility options is concern over their personal safety. Fear is an important underlying factor influencing travel behaviour of many in the community. Travelling alone or at night, getting home (safely) from the bus stop or the train station, or coming home alone to an empty house (especially at night) can be a concern (Morris and Rosenbloom, 1997). Obviously the more these concerns are understood and addressed through the provision of better or more tailored services, the wider the set of mobility options becomes.

In many older European cities there are a broader range of practical options; these include walking, public transport and cycling. A program has been developed using a more "European" approach at Peppertree Hill Retirement Village Program (2004) in outer suburban Melbourne, by identifying and encouraging the use of all mobility options available to older people once they can no longer drive (Environment Victoria, 2004). Similarly, under support provided by the Department of Infrastructure, a pilot program is planned at a Collingwood Housing Estate to test ways of increasing the use of bicycles as a form of transport for older people in socially disadvantaged settings (Fishman, 2006).

4.2 Car Based Transport

When older people give up driving, private lifts and taxis are cited in research as the main forms of transport. A study undertaken by the RACV in inner and outer Melbourne of recently retired drivers found that 85% were relying on lifts from others and 82% were utilising taxi services (Harris, 2002). Other studies, however, note several problems with taxis, including cost and driver attitudes. Private lifts are generally preferred because they are convenient and many people prefer being chauffeured by a friend or family member (Liddle, McKenna, Broome, 2004).

Retiring from driving therefore often affects immediate family members, to whom older people may turn for transport assistance. These chauffeuring tasks generally fall more on women than men (VATS, 1993-4). For some family members this may be somewhat of a burden, due to the time involved and the extra tasks and responsibilities associated with helping older family members (Alsnih and Hensher, 2003).

Future generations of older people may not have such ready access to family transport. For many, younger family members may not live within close proximity. Female participation in the workforce is also greater now, leaving families with less time for non-work activities. Many couples have also had children later in life and may have both young children and older relatives to look after at the same time (referred to as the 'sandwich generation'). Mothers in particular have little spare time (especially if they are also working) to provide support to both groups, and their young children are likely to be the first priority. The availability of 'private lifts' may, therefore, decline. Moreover, older people do not like continually calling on others for assistance.

4.3 Taxis

Taxis are used by older people when they no longer drive, as taxis provide flexible mobility (McKenzie and Steen, 2002). However, the cost of taxis can be prohibitive for those on low incomes; and even the perceived cost can be of concern to middle and higher income

earners (McKenzie and Steen, 2002). Other difficulties are also reported: a 1997 study indicated that 25% of older people found getting in and out of taxis a problem, 30% found them expensive and 30% believed them to be a safety risk (Stacey and Kendig, 1997).

Some people have also had the experience of taxi drivers refusing short trips, despite industry codes that ban such behaviour. The perception that taxi drivers do not like to cater for short trips has serious ramifications for those with declining mobility, as they are more likely to want to travel short distances within their local area. For example, if walking is difficult, a local or linking taxi type service would be very useful to access public transport services, to get to local shops, or the doctor.

For those with a permanent and severe disability and who pass a “means test”, the Victorian Multi Purpose Taxi Program (MPTP) gives access to subsidised taxi services. Participants in this program can travel in taxis for 50% of the metered fare, with the maximum subsidy per trip being \$30 and an annual subsidy cap per user of \$1,000 for some groups of users who meet particular eligibility criteria. MPTP users can apply for an extension of this cap but an increased subsidy is generally limited to trips for health, education, employment and volunteering activity and is not available for social trips or for tasks such as shopping.

Older Victorians in rural areas have very limited public transport options and tend to be heavily reliant on taxis if they have ready access to taxi services, but for others taxi services may be very limited.

4.4 Walking

Walking provides a good opportunity for most people, including the elderly, to increase physical fitness and engage with their local community. The benefits of physical activity for health and longevity among older adults are similar to those for younger people and are well established (for example, ACSM, 1998). Physical activity is an effective intervention for the reduction or prevention of many of the functional declines of ageing - including reducing the severity of cardiovascular disease, obesity, chronic lung disease, diabetes, osteoporosis and osteoarthritis, and improving sleep and immune function. There may also be benefits for mental health, although the limitations of experimental design make it difficult to isolate the effect of walking from the concomitant social contact this leads to improved psychological well-being.

A 1997 socio-medical study in Melbourne of 1000 people aged 65 or older found walking was the most used alternative to the car. Yet, nearly 25% stated that walking was difficult in their local area, with half of difficulties there citing pertaining to hilly terrain and footpath problems, 4% citing difficulty making street/road crossings, and 5% fearing attack (Stacey and Kendig, 1997). There are also problems associated with lack of adequate lighting, seating and toilets, all of which can deter people from walking. These problems can also limit older people’s ability to access public transport.

Older pedestrians aged (65 or more) are over-represented in pedestrian fatalities and serious injuries, accounting for 35% of all pedestrian fatalities and 19% of serious injuries, whilst making only 13% of the population (TAC, 5 yr average, 2000 – 2004). Most pedestrian fatalities occur while crossing roads, with the reduced physical mobility that accompanies ageing making it difficult for older pedestrians to walk quickly, react rapidly to danger, and to evade an oncoming vehicle (Monash University Accident Research Centre, 2002).

Older pedestrians and cyclists are also over-represented in non-vehicle collisions, and are more likely than younger adults to sustain a severe injury as a consequence of falling, tripping or stumbling (Monash University Accident Research Centre, 2002). Older people also have lower injury thresholds and have more difficulty recovering once injured (Bishop, 2000).

For older walkers, particularly for those with declining levels of mobility, hearing or vision, sharing footpaths with bike riders and skateboarders can be problematic. An encounter with bikers or skateboarders travelling at high speeds on pathways will deter many from walking on particular routes, as they fear injury or death.

A further problem is that in some areas the road reserves are not designed for walking (eg. there are no footpaths) and convenient crossing points are not provided. Where signal-controlled crossings exist, signal phases may be too short for the pedestrian who has difficulty walking quickly. The introduction of “PUFFIN” crossings (signals that adjust the length of the walk phase in response to pedestrian presence, thus extending the green walk phase for slower pedestrians) is helping older people to cross roads. All new pedestrian crossings installed by VicRoads in Victoria are now of this PUFFIN type.

Our research also found many older people are afraid of walking alone and/or at night, with concerns that they may “take a turn”, or trip and fall, or be attacked. Inadequate lighting and/or lack of passive/incidental supervision on streets can heighten feelings of insecurity. Safety concerns for walkers may require both community education and environmental modification. Some guidelines have already been introduced which address environments that are not pedestrian friendly and promote more considered design (see, National Heart Foundation of Australia, 2004).

Melbourne’s metropolitan planning strategy, *Melbourne 2030*, also supports walking and other sustainable forms of travel by designating a network of over 100 Principal and Major metropolitan activity centres, encouraging higher density residential development around major transport nodes and planning for walkable neighbourhoods (Victoria Department of Infrastructure, 2002).

4.5 Scooters / Electric Gophers

For some people, low speed scooters are a popular method of travel. In Victoria, some types of electric powered scooters are legal for use on footpaths and low speed public roads (local roads with speed limit not greater than 50km/h). Scooters can be used provided they have an ungoverned power output of less than 200 watts, and a maximum speed of no more than 10km/h. Also, a motorised wheelchair capable of a speed of not more than 10km/h which is used solely for the conveyance of an injured or disabled person is not considered a motor vehicle.

There are, however, problems associated with scooter usage. One problem is that there is little information or independent assistance available about the most appropriate type of scooter to purchase (in contrast to the UK where there is network of Mobility Centres, see: www.mobility-centres.org.uk). In addition, there is no recognised training provided on how to use a scooter safely. Additional problems arise from a lack of facilities for scooter parking, no designated paths for them to travel on, and limited public opportunities for recharging batteries.

In Victoria, a small number of Occupational Therapists are able to advise on scooter use and some programs and information booklets that are being developed, including:

- Nillumbik Shire Council RECHARGE Program involving local businesses providing accessible power points to enable people to recharge their scooter (Nillumbik Shire Council, 2005).
- A Metlink brochure that outlines how to use mobility aids on public transport gives appropriate dimensions for scooters, and gives information on stability and manoeuvrability (Metlink, 2005).
- The Bass Coast Transport Connections project booklets for motorised scooters and wheelchairs outlining the best types of scooters to buy, how to use them safely,

insurance issues, maintenance of the scooter etc (Bass Coast Transport Connections, September 2005).

4.6 Community Transport

Community transport services are typically restricted to specified users, and usually involve a broad spectrum of travel assistance. For instance, driver/helpers may provide a range of assistance, including helping with getting ready to leave home, waiting while the person receives a service, assisting with any additional tasks such as filling prescriptions and offering comfort and support (Bishop, 2000).

Community transport has the potential to provide for a range of needs and purposes, offering greater access, more flexible routes and relevant timetables. However, common problems experienced with community transport include:

- restricted eligibility,
- long advance booking times,
- restricted choice of destinations,
- limited operating hours, and
- anxiety for users when a return trip can not be guaranteed (Metz, 2003).

While most communities have a range of both formal and informal community transport, Harris has noted that many older people are not aware of these services (Harris, 2002). The very local nature and lack of an overarching governance structure for community transport in Victoria appears to limit its effectiveness and availability for many Victorians with mobility difficulties. Eligibility requirements must usually be met and many older people do not meet these requirements. Even those eligible for a community transport service often find that it prioritises medical trips over requests for leisure/social activities. Moreover, the lack of an overarching structure for community transport services means that there are stark differences in the level of service offered in different areas, especially between metropolitan and rural areas.

A significant number of Victorians however rely on the door-to-door transport provided by community transport. A range of organisations including local governments, community service organisations, volunteer organisations and Community Health Services provide community transport (Coalition For People's Transport, 2004). Most services rely on volunteers to drive their own cars or drive vehicles like community buses provided by an organisation and there are problems with obtaining and retaining volunteer drivers. Funding for community transport tends to be ad hoc and comes from a variety of sources and levels of Government (Coalition For People's Transport, 2004).

The importance of community transport and its potential to play a more effective role have recently received greater recognition in Victoria. Over the past three years, a program called Transport Connections has been piloted under cross-government support. Under this program, nine projects have been established in rural, regional and interface areas of the State to assist local communities identify how the transport resources in their areas might be more effectively deployed and developed. Following positive interim results achieved under this program, funding has now been extended to extend the program to other parts of the State. The program has been renamed Flexible Transport Solutions, and will be delivered by the Victorian Department of Victorian Communities, with the active support of several other departments, including Infrastructure (State of Victoria, 2006).

It is noted that New South Wales has taken a different approach with community transport being overseen by the State Government and with funds pooled between the health and transport departments, with money allocated on a systematic basis by the Community Transport Group.

4.7 Public Transport

The train and to a lesser extent tram services, tend to be designed and operated to serve the needs of the able, working population, with the majority of services in the older established areas and focused on central Melbourne.

A traditional response to supporting the travel needs of older people has been to provide them with subsidised travel on public transport. For example the Victorian Government's Seniors Card provides concession priced travel for those over 60 years who are not in full time work. From 1 July 2006, all Seniors are also now eligible for free travel on public transport on Sundays - an initiative intended to encourage older people to use and become more familiar with public transport, possibly well ahead of the time that they may need to be thinking about reducing their driving or giving up driving altogether. However, the reasons older people give for not using public transport services, where services are available, are not primarily economic. The main difficulties are getting to stops, getting into vehicles and the lack of seating; these account for 70% of the reasons for not using available public transport (Productivity Commission, 1999). Discussion groups conducted by DOI, with the support of the Old Colonists' Association of Victoria, also revealed fear of falling, particularly on trams, as a deterrent to tram and bus use (Priest, 2005).

An environment in which older people are comfortable using public transport requires attention to factors such as: safety from crime, fear of falls, ease of use in regard to ticketing and way finding and easy accessibility for those with mobility problems. These are important factors for older people as well as the usual requirements for reliability, timeliness, and frequency of service.

In our research and that by others, older people speak of numerous difficulties with using public transport, even in areas where it is available.

- Significant walking distances from homes and to destinations to and from stops,
- Fear of falling / lack of rails, etc., to hang on to, particularly on trams,
- Limited space between seats and difficulty accessing seats due to narrow aisles in some buses,
- Difficulty in moving past some seated passengers, school bags, etc,
- Automatic doors closing too quickly on trains and trams,
- Non-automatic doors being hard to open,
- A radial rail system (focused on Melbourne's CBD) that does not conveniently serve the cross-suburban trips older people wish to make,
- Lower levels of service in outer suburbs than those in the inner suburbs,
- Long waiting times at exposed locations and concerns over service reliability,
- Lack of integration between public transport services (e.g. bus and train) for people attempting cross town (non-radial) travel.
- Staff not being accessible to provide information or assistance,
- Lack of information in languages other than English,
- Timetables and information in confusing formats and small print,
- Poor signage (if any) provided for bus route service details on stops and the absence of route information on the exterior of buses and trams (or what is provided being difficult to read),
- Bus stops being too far away from the kerb / failure of bus drivers to pull over in line with the kerb for alighting passengers,
- Getting on and off trams at most stops and older "high floor" buses
- Using the steps at entrance/exits and any internal steps,
- Difficulty and confusion in purchasing and validating tickets,

- Fear of (intimidating) ticket inspectors, especially when deployed in groups;
- The cost of public transport, along with poor information on cheap fares and concessions,
- Lack of visible staff / stations not being manned,
- Lack of toilets or locked toilets at unstaffed stations,
- Safety concerns (fear of being attacked or abused while at stops and on public transport).
- Unsympathetic and condescending attitudes of some staff providing the services.

Difficulties compound to make public transport undesirable for many older people (Family and Community Development Committee, 1997). In 1997, research conducted by Stacey and Kendig on 1000 people aged 65 and older, found that difficulty getting on and off public transport was mentioned by 4 out of 5 people who used public transport. As Metz has said, “many elements of the transport system disadvantage people with disabilities. Given that disabilities increase with age, the ability of (some) older people to use both public and private transport will tend to decline as their years advance” (Metz, 2003). Moreover, research shows that it only takes the prospect of one difficult interchange for an elderly person to abandon their plans for a trip altogether (Mertz, 2003).

The physical accessibility of public transport is nonetheless currently receiving much greater attention, due in part to obligations imposed on State governments by the Commonwealth Disability Discrimination Act 1992 (DDA). In a recent major statement, *Meeting Our Transport Challenges*, the Victorian government has announced a significant 10 year program of funding commitments to make access improvements to train, tram and bus services, in both metropolitan and regional areas, together with a very significant boost to the funding of public transport services generally (including taxis in regional areas).

The fitness levels of older Victorians in the future are likely to be higher than those of the same age today. They are more likely to live longer, be healthier at most ages and survive and recover from ill health. As a result, it could be expected that significant numbers would be able to use public transport to get around, although this may not necessarily be the case, after they have had to stop driving. It should not be assumed that in the future many older people will be able to use public transport once they have to stop driving. It remains to be established what proportion of “retired drivers” will be able to use public transport. Nonetheless, in delivering conventional public transport services it is desirable to understand and recognise the specific needs of older people, to ensure that services are as inclusive as is cost effective to do so.

The Office of Senior Victorians and the Council On The Ageing (COTA) have both identified the importance of strength training for older people (see, COTA ‘Living Longer Living Stronger’ program which helps to improve the strength of older people (<http://www.cotavic.org.au/llls/llls.html>)). Improving older people’s strength may also help reduce the risk (and severity of consequences) of people falling on public transport or while they are walking. Thus, if public transport is to be an option for older travellers, they may need to be, and feel, strong and confident.

4.8 Mobility Substitutes

Motorised mobility is not the only way of gaining access to services. The increasing availability and affordability of Information and Communications Technology (ICT) is leading to the growing use of the internet and the telephone as a means of access to services such as banking, paying bills and getting information or advice (Kenyon, Lyons, Raffery, 2003). Currently, however many older people have little knowledge of, or exposure to, the use computers or the internet. According to ABS data, in 2002 only 25% of Victorians aged over 55 had used the Internet. As age increased the likelihood that an adult was either a

computer user or an Internet user decreased rapidly. This is likely to change in the future as the internet-savvy “baby boomers” move into the older age brackets. Mobility substitutes (such as internet shopping and home delivery) could increasingly provide solutions to some mobility needs in the future.

Multimedia Victoria is developing several initiatives which will support the provision of free or affordable internet access to target disadvantaged Victorians. The Victorian government’s *Connecting Communities* strategy includes many measures to assist older Victorians with mobility difficulties (Multimedia Victoria, December, 2004).

Mobility substitutes are, however, not without associated problems as they reduce social contact, and can not deliver one of the primary benefits of mobility - the social and physical aspects of getting out and about.

4.9 Longer term changes to Land Use and Urban Design

As noted previously, *Melbourne 2030*, supports increased walking, cycling and public transport use by encouraging a more integrated approach to land use and transport planning. Sustainable or “smart” land use arrangements and access management, such as locating more housing near to activity clusters, will lead in the longer term to a greater choice of residential location and housing types. Mobility options for older people will also benefit from urban designs that facilitates travel by all modes (particularly non-car options). Of importance, too, will be encouraging people when considering where they will live in retirement, to recognise the value of ready access to local services. Retirement planning that includes consideration of the relationship between residential location and affordability of access and mobility, with and without a car, is to be encouraged.

5 Conclusion

In developing a supportive mobility policy framework, it is essential to acknowledge the varying characteristics of ageing travellers and their range of levels of mobility, physical and mental health, residential location, community networks, level of income, gender, languages spoken, and so on.

Given the strong connection between quality of life and mobility, viable mobility alternatives to driving a car need to be further developed for both drivers and non-drivers.

Older people vary considerably in the way they prepare for relinquishing driving. While there are some who plan for the time that they will no longer drive, many current drivers prefer not to contemplate this future possibility. Consequently, in practice the responsibility for planning for this possibility rests largely with Governments.

Given the diverse range of mobility levels among drivers and non-drivers, solutions will need to involve a combination of initiatives including:

- individual information on travel choices in much the same way as provided in the Victorian Government’s TravelSmart programs, with incentives for people to gain experience in using alternative modes, information on the health benefits of walking and the comparative expense of owning and maintaining a private motor vehicle compared with the cost, when needed, of other transport modes, such as taxi services;
- provision of a mix of transport alternatives, including: local public transport, community transport, car pooling, taxi services, walking, cycling and the use of scooters/electric gophers;

- detailed attention to improvements in local infrastructure, like footpath surfaces and their maintenance, legibility of signs, street lighting, seating convenient crossing points etc.
- access management, such as locating housing near to activity clusters, and encouraging people to recognise the importance of good local accessibility when relocating; and
- mobility substitutes, utilising phone or internet shopping with home delivery options, phone and internet bill paying and banking (although little used now by older drivers, these are likely to be of increasing importance).

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The views expressed in this paper are those of the authors and do not necessarily reflect the views of the Victorian Department of Infrastructure.

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