Ageing and Transport

MOBILITY NEEDS AND SAFETY ISSUES

OECD

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Ageing and Transport

MOBILITY NEEDS AND SAFETY ISSUES

OECD

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Ageing
and Transport

MOBILITY NEEDS AND SAFETY ISSUES

HIGHLIGHTS

OECD

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

HIGHLIGHTS

Introduction

In most OECD Member countries, older adults comprise the fastest growing segment of the population, and in many, one in every four persons will be aged 65 or over in 2030. Over the next three decades, the maturation of the "baby boom" generation (those born between 1946 and 1964), combined with increased longevity and declining birth rates, will markedly transform the developed world's demographics. By 2050, the population of those over 80 years of age is expected to triple in most OECD Member countries.

By 2050, the population of those over 80 years of age is likely to triple.

Over the next 30 years, the significant increase in the adult population aged 65 or more will place new and growing demands on transport systems in OECD Member countries. On the whole, older people who drive will prefer to continue doing so for as long as possible. They will also expect to have access to alternative transport modes that meet their individual needs, especially as they approach 80 years of age. Future transport systems and services will play an essential role in supporting independent, healthy ageing.

The time horizon, 2030, marks the year when the last of the baby boomers will reach 65 years of age. The analyses, projections and policy recommendations are based on the expected status of older road users in OECD Member countries in 30 years time.

Providing for the ongoing, safe mobility of ageing baby boomers will require active planning and a rethinking of strategies, policies and provision of services in order to support their continued health and well-being into and beyond retirement.

The study described in this volume had as its aim to identify current and emerging mobility and safety issues arising from the ageing of the baby boom generation and to develop policy and research recommendations to meet older people's transport needs while maintaining acceptable safety standards. On the basis of literature and policy reviews, analysis of demographic and statistical data and study of recent research findings and case studies, the study has sought to:

This volume seeks to dispel many myths and misconceptions about older road users…

- Assess the effects on safety and mobility of changes in demographics, economics and older people's functional abilities.

- Determine the ageing population's travel patterns and the implications for transport needs. Evaluate the effectiveness of past strategies for reducing older people's exposure to crash risk and their impact on mobility.

- Identify new strategies for addressing the mobility and safety needs of the elderly, including an assessment of infrastructure provision and maintenance, public transport options, new technology, vehicle design and regulation (*e.g.* driver licensing requirements).

- Evaluate the extent to which road infrastructure design and maintenance has taken into account the needs of older road users.
- Identify the impact of road infrastructure on older people's safety and mobility.
- Develop and make recommendations on key policy issues concerning the mobility and safety needs of an ageing population.
- Identify marketing strategies to disseminate information to educate, advise and promote ways to improve safe mobility for older road users.

… and provide the latest research findings to assist planners and decision makers to formulate sound policies, programmes and services that meet the mobility needs of their ageing populations.

This volume identifies four key issue areas, offers eight major policy recommendations and specifies eight areas for further research (Chapter 10). Issues discussed in the report range from reasonably specific measures (for example, altered vehicle design specifications) to overarching recommendations (such as improved land-use planning). The study attempts to identify the main policy issues flowing from the analysis of the mobility needs and safety problems of an ageing society. It considers measures for targeting key decision makers associated with specific issues so that they are informed of the recommended policy options.

Key issues

Older drivers tend to be safer than is commonly believed…

Safety, mobility, land use and socio-economic factors are the principal areas addressed:

- Older drivers tend to be safer than is commonly believed. They have fewer reported crashes per capita or per number of drivers. The most important safety concern is their frailty and consequent vulnerability to personal injury or death in a crash. Older pedestrians have higher fatality rates than younger ones; they account for nearly half of all pedestrian fatalities in many OECD European countries.

… but they are frailer and thus more vulnerable to personal injury or death in the event of a crash.

- Older people who suffer from health-related limitations must often cease walking or using public transport before they cease driving.
- In most OECD Member countries, older people tend to age in place. Well-planned communities facilitate ageing in place, and improved land-use planning is paramount to facilitating lifelong mobility.
- The ratio of working to retired persons is decreasing and hence generating less funding to support retirement pensions and health care programmes for older adults. Governments therefore need to anticipate the mobility and safety needs of older adults.

Major policy priorities identified

The report identifies eight major policy priorities…

- Support and funding to enable lifelong mobility.
- Support for older people to continue driving safely.
- Provision of suitable transport options to the private car.
- Safer vehicles for older people.
- Development of safer roads and infrastructure.
- Appropriate land-use practices.

- Involvement of older people in policy development.
- Educational campaigns to promote maximum mobility and safety for older people.

Support and funding to enable lifelong mobility

Governments face substantial challenges for developing integrated approaches to supporting lifelong, safe mobility and for raising the level of awareness of the coming needs of an ageing population so that this issue has budget parity with other national priorities.

- National governments need to recognise and then demonstrate the cost savings to be achieved through the support of lifelong mobility.
- Mobility provides a link to independence, freedom of movement, social activity and choice.
- The ability to travel is as important to older people as to other age groups.
- Continued mobility and access to services will be best achieved in conjunction with successful strategies for ageing in place. The sooner governments act, the better. By 2030, it is unlikely that there will be sufficient public funds to support the wide range of programmes and services needed. A proactive rather than a reactive approach is vitally important.

Governments need to take a proactive approach to enable lifelong, safe mobility to be achieved

Support for older people to continue driving safely

As the number of older people in OECD Member countries increases over the next 30 years, most will have driving licences and access to cars and will prefer driving as their primary means of transport:

- This policy objective will require support from all levels of government, health and social service providers, caregivers, families, transport planners, licensing bureaus, enforcement agencies and businesses.
- Mandatory age-based testing targeting older drivers appears to be ineffective. A licence management alternative that targets only those drivers considered at higher risk is recommended. Thus, assessments can be more thorough and individually tailored. This will require a community-based referral system involving doctors and health professionals, police, community workers, friends and families of older drivers and older drivers themselves.
- It is necessary to define more clearly and support driver assessment and rehabilitation approaches for those afflicted with significant functional impairment that can affect safety.
- Media campaigns will need to relay information to the public and raise general awareness, particularly in countering the misconceptions that create a distorted image of older road users.

Mandatory age-based testing targeting older drivers appears to be ineffective. A licence management alternative that targets only those drivers considered at higher risk is recommended as such an approach allows assessments to be more thorough and individually tailored.

5

Provision of suitable transport options to the private car

A key issue is to encourage older people to choose the mobility option which provides the highest level of safety.

By 2030, the health of older people may well be much better than at present. Nevertheless, a sizeable proportion of the older population will have some type of disability. What transport options will be most suitable for meeting the diversity of older people's functional abilities? How can older people best be encouraged to use the appropriate mobility options?

- Transport services must be designed to suit older users if they are to serve as viable alternatives to the private car.
- Changes to the physical infrastructure to support ease of use of alternative transport options need to be identified and implemented. Public-private partnerships offer opportunities to leverage public funds to provide improved transit services.
- Mobility management programmes for functionally limited older people need be developed to achieve their transition to user-friendly transport options over time. Effective introduction of this new approach would benefit substantially from comprehensive demonstration projects and regular information sharing.

Safer vehicles for older people

Vehicle safety features need to be significantly improved if lives are to be saved.

New technologies can make a significant contribution to improving the safety and use of roads, streets and vehicles by older drivers and passengers, pedestrians, cyclists and public transit riders. Unless there are marked improvements in vehicle safety features, there will be a significant increase in fatalities for older drivers and pedestrians, more than for any other age group.

- Vehicle manufacturers must be mandated or encouraged to increase substantially the protection of vehicle occupants in the case of a crash and to design vehicles with less aggressive external characteristics in order to protect pedestrians.
- Vehicles need to be designed to be easier for older people to drive.
- Particular attention needs to be given to evaluating new technologies to ensure that older people can use them comfortably.

Development of safer roads and infrastructure

Roads need to be made safer and easier for older people to use.

Governments are urged to continue to improve roads to make them safer and easier for older people to use. Policies are needed to:

- Provide safer roads and roadside environments for older drivers, pedestrians, cyclists and users of powered wheelchairs and scooters. Improved pedestrian safety for older users will require policy initiatives that address personal security concerns. Improved road environments will facilitate or reduce older drivers' need to make complex decisions and perform time-related tasks and will give them advance notice.
- Make roadways and advisory systems standard and consistent across different jurisdictions
- Keep abreast of technology, which plays an important role in improving the intrinsic safety of the road system.
- Provide user-friendly and convenient public transport, featuring low-floor buses and trams to facilitate kerbside access to these vehicles.

Appropriate land-use practices

There is an urgent need for governments to improve their approach to land-use planning if ageing in place is to be a major strategy for managing the mobility and safety needs of older people.

- In particular, it is vital to develop local services and facilities appropriate to an ageing community and supported by sufficient transport services.

- New practices arising from improved land-use planning include the need for proposed road and pedestrian networks to meet road safety standards while providing efficient public transport routes.

- Where pavements, sidewalks and safe road crossings are lacking, consideration should be given to retrofitting these where appropriate.

- Measures that improve the environmental sustainability of communities are similar to those needed to enable older people to maintain independent mobility.

- Where cycle routes are introduced for more sustainable transport, these should provide the infrastructure needed for powered wheelchairs, scooters and other unlicensed low-speed alternatives to the car.

- Provision of an adequate policy framework and practical guidelines for regional and planning authorities to implement such improvements would be beneficial. This action could be very effectively supported by a number of demonstration projects in partnership with the private sector.

Ageing in place requires governments to take a new look at land-use planning.

Involvement of older people in policy development

Formulating effective policy to address safe mobility for an ageing society must involve older people and their caregivers in a comprehensive and meaningful way. It must be recognised that no single solution will satisfy their diverse needs, expectations, preferences and lifestyles. Flexible policy approaches are needed.

As older people, baby boomers will be better educated and more politically involved than earlier generations, and they are expected actively to seek the means to meet their needs. By their sheer numbers, this group will be a formidable political and social force and will compel decision makers to respond to their demands for services.

Directly involving ageing populations in the development of relevant processes and achieving beneficial outcomes will be a challenge for local, regional and national governments. Families, businesses and professional organisations must also be involved in developing measures that meet the mobility and safety needs of older people. Failure to respond to this challenge in an integrated way across all levels of government is likely to result in misguided and therefore rejected programmes and policies.

A key policy issue relates to the acceptable balance between mobility and safety. Research indicates that the greatest safety risk to older road users is the possibility that they will be injured or die in a crash because of their fragility. As the principal group at risk, older people clearly need to be involved in formulating policy responses to the mobility risks they routinely face.

Older people have diverse needs, expectations, preferences and lifestyles. This calls for a flexible policy approach.

Educational campaigns to promote maximum mobility and safety for older people

Decision makers and stakeholders need to be informed about the safety and mobility needs of older people.

As governments address the safety and mobility needs of older people, it is important to ensure that all decision makers and stakeholders are well informed of these requirements and have access to information on the measures needed to promote them.

- Community awareness programmes need to be conducted over the next five to ten years, with the following objectives:
- Inform all segments of the community and policy makers that older drivers do not represent a major risk to other road users.
  - Establish that older people in particular (and society overall) will benefit substantially by remaining mobile.
  - Persuade all age groups to support the transport options developed for older people.
  - Educate key decision makers in all areas relevant to older people, especially but not only those involved in transport.
- Educational campaigns that promote the concept that older people can most easily meet their transport needs by driving will pose sizeable political and policy challenges.
- Policy makers will also need to address the practical aspects of educational campaigns that promote existing (and new) transport options. In particular, it is important to convince designers of alternative transport modes that they need to be practical for all users and not just for the disadvantaged or disabled.
- Regular information and guidance will need to be provided about availability of services, schedules, location of stops, etc., in an easily understood and readily accessible manner, to support the perception, and the reality, that alternative transport systems are safe and user-friendly.
- These programmes should include informational materials to help the media correctly depict older adults' mobility and dispel inaccurate stereotypes.
- People need to be informed about the importance of preparing for access and mobility needs before they reach retirement age. This will enable them to make informed decisions while they have various options available.
- Governments may assist in these programmes by offering incentives to people to encourage them to reside closer to transport services and other facilities and to land developers to design accessible communities.

Recommendations for research and development

Co-ordination of research and subsequent development among OECD countries is essential.

There is a pressing need for co-ordinated research and subsequent development of the results in OECD Member countries if older people are to be provided with safe mobility through to 2030 and beyond. While each Member country may undertake efforts to address this challenge on its own, collaboration on research and sharing of best practices and relevant information offer great potential.

The eight research and development recommendations made here are:

- Improve older peoples' ability to avoid/survive crashes.
- Improve the assessment and rehabilitation of older drivers.
- Determine, demonstrate and promote the societal benefits of providing road improvements.
- Determine, demonstrate and promote the societal benefits of providing older people with continued, safe mobility.
- Provide transport options in an efficient and cost-effective way.
- Support health improvements for older adults.
- Enhance land-use planning and sustainable communities.
- Encourage cross-national co-operation in the development of data and information sources.

Improve older peoples' ability to avoid/survive crashes

- Automobile manufacturers, supported by motor vehicle regulators in Member countries, should work to develop better motor vehicle safety standards for older, more fragile road users as vehicle occupants, pedestrians and cyclists.

Motor vehicle safety standards need to be increased.

- Manufacturers and designers should examine the possibility of extending the driving life of older people by offering maximum assistance to compensate for functional limitations.

Improve the assessment and rehabilitation of older drivers

In order to promote continued safe use of motor vehicles:

- National governments, working with universities and other research groups, should develop a programme of research and development to identify the functional limitations that preclude safe driving.

Functional limitations that preclude safe driving need to be identified…

- The programme should also aim to identify functional limitations that can be overcome and to describe effective rehabilitation options.
- Equally important is the need to work with health and social service programme developers to identify and demonstrate programmes that can reduce the likelihood of people becoming functionally impaired as they age.

Determine, demonstrate and promote the societal benefits of providing road improvements

National governments, working with universities and other groups, should develop programmes to demonstrate the road improvements that will enable older people to drive, walk and use alternative transport options safely well into old age.

… and road improvements adopted that will enable older people to drive, walk and use alternative transport options safely well into old age.

- Guidelines to improve roads for older people developed in the United States and in Australia need to be evaluated through a series of demonstration projects so that the most beneficial aspects can be identified and applied in other Member countries.
- Since many measures, of varying cost-effectiveness, have been taken to improve the road system, co-ordinated demonstrations across co-operating OECD Member countries should be undertaken to identify the most cost-effective. The value of such measures in terms of design or remediation ("black spots") needs to be established to determine where funding can be most efficiently directed.

9

Determine, demonstrate and promote the societal benefits of providing older people with continued, safe mobility

Best practices for transport options for older and less mobile people should be shared.

International organisations should work together to foster co-operation in programmes aimed at improving the safe mobility of older people, including broad dissemination of results to promote best practices for transport options.

- Particular attention should be paid to activities that are initially costly and require time to prove their effectiveness, such as the development of sustainable communities that allow people to age successfully in place and the development of road improvement programmes and driver assessment and rehabilitation programmes.
- Additional areas that need to be addressed include transport options, health, vehicle crash worthiness and co-operative research.
- National and regional governments, working with universities, transport providers and other advocacy groups, should conduct co-ordinated demonstration projects using tailored approaches to provide transport to people with different types of impairment.

Support health improvements for older people

Particular attention should focus on health, fitness and wellness programmes that help to reduce frailty.

National and regional governments, in collaboration with universities, medical institutions and stakeholder groups should co-ordinate research and conduct demonstration projects to explore whether the functional limitations that affect the mobility of older people can be reduced.

- Particular attention should focus on health, fitness and wellness programmes that help to reduce frailty.
- There is a need for in-depth studies of the relationship between quality of life, welfare and health costs and the degree of mobility of older people in different OECD Member countries.

Enhanced land-use planning and sustainable communities

Better land-use planning can help people to stay mobile longer.

National and regional governments, working with universities and appropriate interest groups, should conduct co-ordinated research and demonstration projects to enhance ageing in place through better land-use planning.

- Particular attention should be given to finding ways to locate residential areas closer to the goods, services and facilities needed by older people. To improve land-use planning, comprehensive cohort studies of travel patterns are needed. In addition, studies are needed on preferences for retirement housing and activities to improve knowledge of the "new old" in different social and cultural contexts as well as on mobility solutions (public and private) for older people in different countries.

***Encourage cross-national co-operation in the development of data
and information sources***

- National and regional governments, working with universities and appropriate interest groups, should design a standardised, personal transport survey that Member countries can adopt and administer in order to identify changes in transport patterns over time and permit cross-national comparisons.

- A system needs to be designed to record annual driver licensing numbers and crash and injury numbers for road and other transport modes to be used by OECD Member countries to monitor possible shifts in transport safety.

Finally, a health survey needs to be designed and conducted regularly across all Member countries to track the expected continuation of improvement, or identify specific areas of deterioration, in older people's health and well-being.

*Co-operation
and harmonisation
can make it easier
to track shifts in
transport patterns.*

11