## **Summary:**

# Impact of the car on the welfare and quality of life of the elderly

In 20 to 30 years' time, about 25 percent of the population will be 65 years of age or older, and in 2030 most of the Norwegian population over 65 years will have a driving licence. Improvements in health and longevity, increased access to cars and, for some groups, higher incomes are the right conditions for more varied activities and extended travelling than is the case among the present elderly population. However, a large proportion of the new generation of the elderly will be in the oldest group, i.e. 80 years and older, and today already have difficulty travelling -- whether walking, driving or using public transport. The gender aspect is important. A majority of this group will be women who may require special services from the transport system, i.e. services necessitating adjustments to the transit system and road network, because many will continue to use their cars well into old age. In this report, based on an analysis of the Norwegian Passenger Travel Surveys and the results from five focus groups carried out in Oslo and Stjørdal, we present results from a study on the welfare and mobility of the elderly population.

## **Transport and welfare**

Transport is primarily a tool for satisfying needs in relation to practical tasks and social activities, but can be connected with needs for security, safety and self-realization as well. Transport and travelling can also be seen in a welfare perspective, with transport from one place to another regarded as satisfying needs in different welfare arenas. In combining welfare, social activities and car use/mobility, we use the terminology of Erik Allardt, whose welfare concepts – "having, loving and being" — can be related to the purpose of the trip. For "having", in relation to income, education, employment, etc., we make the connection with commuting and shopping trips; for "loving", in relation to friendship and social relations, with trips related to visits; and for "being", in relation to leisure activities, personal development and self-realization, with leisure trips. Access to transport resources contributes to the satisfying of needs in these three welfare arenas and travel activity is an indication of participation in them.

Institute of Transport Economics, Gaustadalléen 21, NO 0349 Oslo

Telephone: +47 22 57 38 00 Telefax: +47 22 60 92 00

#### Gender differences in access to a car

Access to a car has increased for women during the past 20 years. Many women obtained a driving licence in middle age, some because their husbands could no longer drive, others encouraged by their children -- this in a period of fairly intense debate about gender equality (in the 1970s).

Car use has increased for both older men and women, but still there are significant differences. Among women 80 years and older, only 30 percent live in a household with a car, while 80 percent of men in this age group have a car in the household.

Having a driving licence and a car in the household does not necessarily mean having access to the car when needed. The different groups always having access to a car are shown in Figure 1 (they have both a driving licence and use of the car whenever they want).

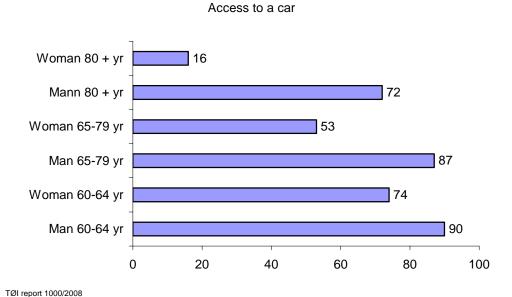


Figure 1. Always have access to a car. Norwegian National Travel Survey 2005. Percent

The men in all three age groups have significantly more access to a car than women in the same age groups. However, the youngest groups of women have as much access as the oldest groups of men. Only 16 percent of the oldest women always have access to a car.

# Commuting disappears and travel distance decreases

The number of trips taken after retirement is almost as many as before retirement. Work-related trips virtually disappear, while others are stable. Only in the case of people over 80 years of age do the statistics show a clear reduction in travel activity, and this in connection with health problems, reduced access to means of transport and less of a need to travel. The elderly with a car travel more than those without.

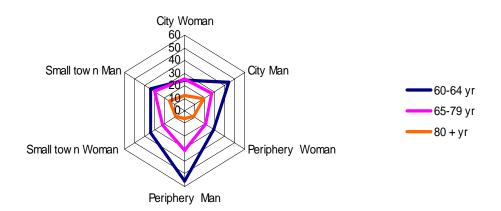
Shopping trips vary depending on age and gender. In rural areas, the older women go on shopping trips less than the younger women, while men in the 65-79 years group are the most frequent shoppers. Men, along with the youngest group of women, use the car for shopping more than other women do. In the city, the oldest women tend to walk to the shops; the focus groups confirm this. While elderly women in Oslo shop often, they buy little each time because they cannot carry too much. For many, the shopping trip also has a social aspect in that it is an opportunity to meet others.

In general, men go on more leisure trips than women do, but less with age in both genders. Contrary to both commuting and shopping trips, about half of all leisure trips are on foot, irrespective of where the person lives -- the other half by car with men the drivers and women the passengers.

The social network of elderly people is geographically dispersed, and so, contrary to leisure trips, these trips are based on car use. Among men, the share of the car on these trips varies between 70 and 80 percent, and among women between 25 and 50 percent. Women are dependent to a greater extent on others or on public transport to keep up with their social contacts. By and large, it is only women in the bigger cities who use public transport for this purpose.

It is more common for the elderly living in Stjørdal to get a 'lift' from their relatives, especially their children, than is the case for the elderly in Oslo. Urban women are reluctant to ask their children to drive them to different activities because the children are always so busy. They would rather have a public transport supply than be dependent on their relatives or friends.

Travel distance reduces with age. Figure 2 illustrates two phenomena: on a daily basis, men travel further than women do and the "reach" of the different activities "shrinks" with age.



TØI report 1000/2008

Figure 2. Daily length of travel by age, gender and living area. The Norwegian National Travel Survey 2005. Kilometres

# Significance of the car

A multivariate analysis categorizes the elderly in different mobility groups. The most active, measured by number of trips, are known as the "chauffeurs that love". This group consists of a majority of drivers on all kinds of trips (related to Having, Loving and Being). They do more "Loving" trips than the other groups; they are men with few health problems; they have ready access to a car and a varied travel pattern; they undertake many trips and they belong to the younger elderly.

The least active are the "Low Mobile" group. They are the ones with the fewest number of trips; they travel by public transport or as passengers in cars. Few of them have a driving licence or access to a car. They belong to the oldest group of the elderly and most of them are women. It is obvious that many in this group experience little freedom when it comes to activities and travel.

Even though few of the participants in the focus groups belonged to this group, lack of a driving licence and of access to a car restricts their activities and renders them dependent on the goodwill of others (children or relatives).

The importance of a car for the elderly varies especially by where they live (urban or rural). Living in the bigger cities, or centrally in smaller towns and villages, the elderly can manage everyday life quite well without a car. However, those who live in the peripheries of municipalities have problems without a car, because there is no transport alternative. The results from the focus groups show that the car also provides an opportunity to do things on impulse; it gives the elderly control over their situation, an experience of freedom and authority, and contributes to a positive self-image. Having access to a car increases the quality of life of the elderly.

# Adaption of car use and measures for maintaining mobility and accessibility

Few of the elderly want to stop driving. For many, ownership of a car is an important part of their daily lives. Some believe that the car is more important to them in their old age than it was when they were younger, because they are less fit than they once were. The elderly who no longer have access to a car feel that what they can take part in is limited and that they are dependent on others.

Many of the elderly, especially those 75 years and older, adjust their car use to what they feel capable of. They drive when the traffic is less, and not in the dark or when the roads are icy. They choose routes that they know and where the traffic environment is relatively straightforward. Adjustments such as these could be the basis for an evaluation of the possibility of giving elderly people a restricted driving licence rather than banning them from driving altogether. For elderly people this would be significant for their taking part in the different welfare arenas, and would give them more freedom and control of their everyday lives.

Even though more elderly would be able to continue to drive under such a scheme, other measures would be necessary in addition. Not everyone can or

would want to drive a car. In the focus groups, several measures were mentioned; for example, service lines in public transport, improved schemes of special transport offers for people with impairments, subsidised taxi use, home services of different kinds, mobile library, goods delivered to the home and specially arranged tours for the elderly. In general, most emphasised that they did not want to be dependent on the goodwill of private persons (relatives or others) nor become a burden on others.

# **Further work**

Two data sources were used in this study: national travel surveys and focus groups. The data from the travel surveys give a good picture of how access to a car and the travel patterns of the elderly have developed. They describe the situation of different groups of the elderly, but they do not provide information about travel needs that are not satisfied, nor about how different transport modes are experienced. Neither do they report on different measures that might ensure the transport needs of elderly people.

The focus groups answer some of these questions, but based on a limited group of people from only two types of residential area. The next step should therefore be to extend the number of focus groups, and on that basis carry out a quantitative study with a large, representative sample, for both Norway and Sweden, if possible.