

**Summary:**

# Travel behaviour over a 25-year period – trends and drivers

*TØI Report 1190/2012  
Author(s): Randi Hjorthol  
Oslo 2012, 43 pages Norwegian language*

---

*Between 1985 and 2009 we saw population growth of 17 percent and growth in the number of cars on the roads by nearly 50 percent in Norway. Fewer people now live in sparsely populated areas and personal income increased significantly. The work-force increased to 2.5 million, and the share educated to university level reached 26 percent. During the period under study, distance travelled daily increased from 34 to 42 km and the share of drivers from 46 to 52 percent, while cycling and walking decreased from 31 to 26 percent. Travel by public transport remained static throughout the entire period at 10 percent and the number of trips remained unchanged at about three per day.*

## Social changes

Material and demographic conditions changed significantly during the 25-year period 1985 to 2009 in Norway. The population increased by 17 percent and more people now live in urban areas. There was a net migration to central municipalities and much of it to eastern parts of the country.

Income and wealth increased significantly, the proportion with higher education rising and the number of cars and holiday cottages growing faster than the population. There was a larger proportion of women in work and more of them with a driving licence. All this meant more travel and more cars on the roads.

Today, the official statistics show a decrease in household size and an increase in life expectancy and in the average age of first-time mothers – all factors that have had an impact on the number of trips taken outside the home, on the reasons they are taken and on the mode of transport used. The increase in the population means that more people are travelling. The increased average age of the population, and of first-time mothers in particular, has brought a change in the reasons for travel, in the time of travelling and in the choice of transport.

During the period 1985–2009, the quality of the public transport supply improved but mainly in the bigger cities.

Penetration and distribution of information and communication technology (ICT) took place rapidly in the period, and while only 10 percent had a computer at home in 1985, by 2009 this was 92 percent. Internet technology came into use in the middle of the 1990s and in 2009 about 91 percent had access. Nearly everyone (97 percent) had their own mobile telephone in 2009, while in 1999 only 58 percent did so. The widespread distribution and use of ICT has created greater spatial and temporal flexibility for both private activities and work.

## The same number but longer trips

In 1985, the distance travelled daily was 32.4 km and in 2009 this had increased to 42.1 km. Time-use per day was 67 minutes in 1985 and 76 minutes in 2009. The number of trips was the same in both years at about three per day.

The number of drivers increased from 46 percent to 52 percent, with the biggest increase between 1985 and 1992. In the period after that (1992 and 2009) the percentage of drivers remained fairly stable. At the same time, the share of cyclists and walkers dropped from 31 to 26 percent. The percentage using public transport remained the same in the period at about 10 percent.

The increase in motorized travel reflects the fact that access to a car became more readily available. To a greater degree the car became an individual good. Travel as a passenger in a car decreased, as did non-motorized travel.

## Longer commuting distance, more use of public transport in Oslo

The average commuting distance increased from 10.6 km in 1985 to 13.8 km in 2009. The increase was highest in smaller towns and sparsely populated areas. Commuting distance is longest in the areas around Oslo averaged 20 km. Commuting time changed little in the period and is indicative of a change in choice of transport mode.

Both car-driving and use of public transport increased in the period. Fewer walked or cycled and there was a halving of the share of passengers in cars. The increase in public transport was primarily a consequence of a better supply and of more people living in urban areas, most typically Oslo.

## More shopping trips and new shopping patterns

In the 1985–2009 period, changes were made in both the spatial and temporal organisation of trade. In April 1985, modifications in the opening and closing times of shops were introduced, and in the period up to 2009 there were fewer restrictions. The temporal extension is shown in Figure S.1.

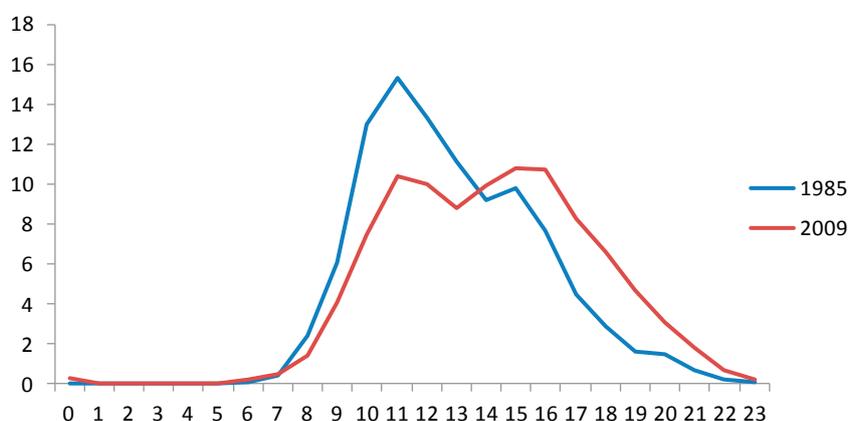


Figure S.1 Start time for shopping trips in 1985 and 2009. Norway. Percent

The distance travelled on shopping trips increased by 40 percent in both urban and rural areas. Only in the medium-sized cities did length of travel remain roughly the same. People went on shopping trips about 25 percent more often.

Going to the shops by car increased from 45 percent in 1985 to 55 percent in 2009. With car passengers taken into consideration, the share was 66 percent. The increase in car-use has come at a cost – there is now less walking and cycling. .

## **Small changes in travel related to leisure and visiting**

Visits to friends and family were the most typical purpose of travel related to leisure and visiting in the period (40 percent). About 20 percent included going for a walk, jogging or walking the dog, and another 20 percent different forms of organized leisure activity. Indoor activities, including visits to the cinema, theatre, a concert or restaurant, counted for 12 percent of this type of travel.

The number of trips and the distances covered remained almost unchanged during the period. On average, people were out and about once per day irrespective of where they lived in the country.

## **A doubling of travel in accompanying children**

The need to accompany children is determined by social issues such as employment, family situation, education, organization of leisure activities and traffic conditions. From 1985 to 2009 more women took up employment and with most parents working there is a need for child care and for escorting preschool children to and from kindergarten.

In 1997, when the school age was lowered from 7 to 6 years, the need for children to be accompanied to school increased. Centralization of schools meant a longer way to travel and in many cases a need for transport by bus or car. A majority of children took part in leisure activities organized outside school hours and often outside the home neighbourhood and were driven there and back by car.

Travel nearly doubled in the period – in a family with children, one trip a day. Although the average distance was less, car-use increased to 82 percent.

## **Young people postpone acquiring a driving licence**

In the 1990s, more and more young people in Sweden, Great Britain and Norway put off getting a driving licence until later. In Norway in 1992 the share in the age group 18-24 years who held a driving licence was 80 percent, while in 1998 it was 74 percent. Unemployment, longer periods under education, urbanisation and changes in values are given as explanatory factors.

Cohort analysis of this age group in 1992 has shown that these young people waited until around 30 years of age before acquiring a driving licence. After that, the changes were minor. A similar analysis in 2001 suggests the same tendency, but with the share of licence holders lower than in the older generation.

## **Development of the travel activity of older people**

Cohort analysis of older generations indicates that women obtained better access to a car in the period. In 1985 there was a steady decrease in access to a car after the age of 50 for women, but in 2009 this trend only began after the age of 75.

Men had significantly better access to a car than women in all age groups and in both years. The cohorts/generations maintained their access to the car over the period. There was a slight reduction for the oldest cohort, i.e. those 60-64 years in 1985 and 85-89 years in 2009.

As with other age groups, older people also travelled longer distances. Shopping and leisure activities increased except for those 85-89 years, who had reduced activity.

In the 1985–2009 period, car-use increased significantly among all groups of women. The three younger cohorts retained their car-use habits throughout the period, i.e. driving just as much (number of trips) at ages 65-79 years as they did at 40-54 years.

Chronological age in itself is not sufficient to explain travel activity. This analysis indicates a significant period effect on older people's travel activity.