

Passenger mobility in Europe

Europeans spend most of their travel time in cars

Statistics in focus

TRANSPORT

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Contents

Highlights 1

National results on passenger mobility 2

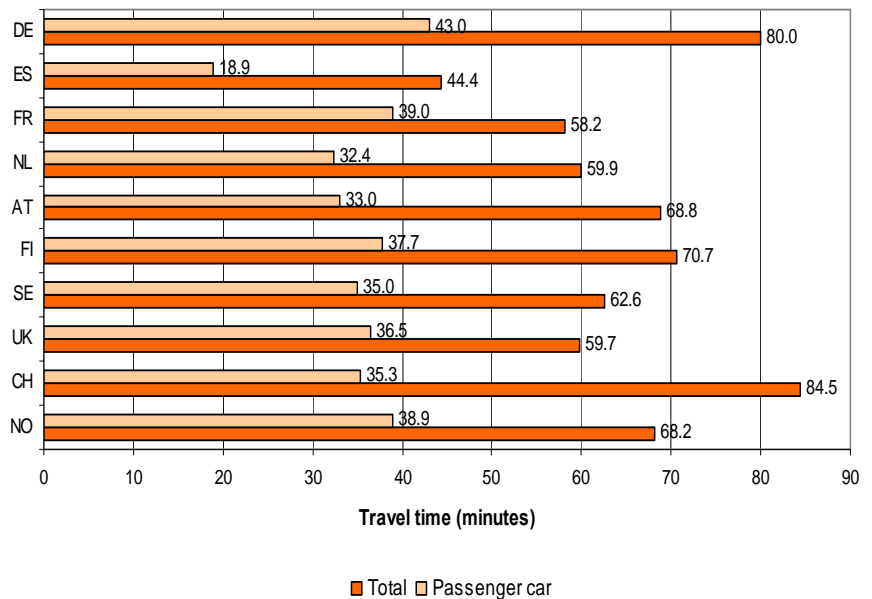
Other methods for measuring the volume of passenger transport and road traffic 5

Highlights

People's need for easy access to goods and services has increased the demand for transport. However, despite improvements in the means of public transport, this need is predominately satisfied by the use of private cars.

Chart 1 shows that in the European countries with available data people spend on average an hour per day travelling. More than half of this time is spent on travel by car.

Chart 1: Average travel time/person/day



Moreover, people in most countries make on average 3 trips per day and travel between 30 and 40 kilometres per day.

Regarding the purpose of travelling, leisure activities are the main reason, accounting for more than 40% of the time spent on travel in most of the countries with available information. Work is the second main reason for travelling. This situation is similar no matter whether analysing the distribution by travel time or by distance travelled.



National results on passenger mobility

The information presented in this paper has been derived from the existing national travel surveys on passenger mobility. These surveys respond to national needs and the methodological differences between

them do not allow a full comparison of the results obtained.

Table 1: Main characteristics of passenger mobility

| Country | Average number of trips/person/day | Average travel distance (km)/person/day | Average travel time (minutes)/person/day |
|-----------------|------------------------------------|---|--|
| BE | 3.0 | : | : |
| CZ | : | 21.9 | : |
| DK | 3.0 | 37.3 | : |
| DE | 3.3 | 36.9 | 80.0 |
| EE | : | 37.3 | : |
| ES | 1.8 | : | 44.4 |
| FR | 2.9 | 35.3 | 58.2 |
| LV | 1.9 | 8.7 | 13.0 |
| NL | 3.1 | 31.9 | 59.9 |
| AT | 3.0 | 28.1 | 68.8 |
| FI | 2.9 | 41.8 | 70.7 |
| SE ¹ | 2.7 | 44.1 | 62.6 |
| UK | 2.9 | 31.8 | 63.3 |
| CH | 3.6 | 37.1 | 84.5 |
| NO | 3.3 | 37.9 | 68.2 |

¹ The figures have a three year reference period: 1999-2001

Table 1 presents three main indicators for measuring passenger mobility. For most of the countries with available data, the results are homogeneous, showing for an average person/day about 3 trips, a distance travelled between 30 and 40 Km and a travel time of about one hour.

Chart 2 shows that people travel more for leisure purposes than for any other reason. In most of the

countries with data, leisure accounts for more than 40% of the time spent on travel. Work is the second most important factor. The large figure for 'other purposes' in Spain is due to the fact that return trips are recorded separately without being attributed to a specific purpose. Shopping is a relatively significant factor in most countries.

Chart 2: Distribution (%) of travel time by purpose of travel

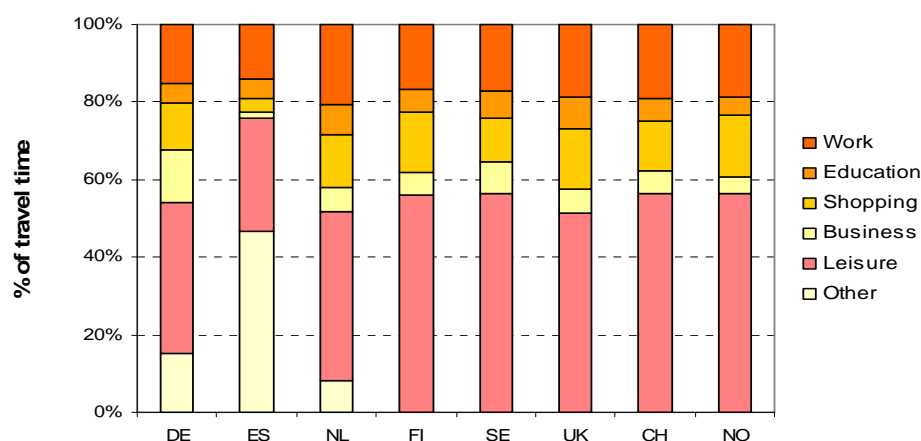
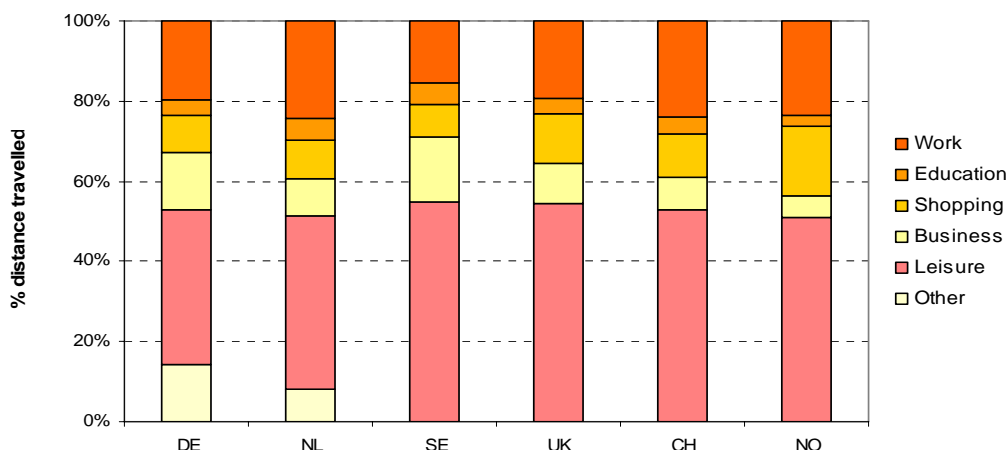


Chart 3 shows that people travel longer distances for leisure purposes while shorter trips are made for work, business, shopping and/or education purposes. Once more, leisure accounts for more than 40% of

distance travelled and is followed by work. In Germany and Sweden travelling for business is the third most frequent reason.

Chart 3: Distribution (%) of distance travelled by purpose of travel



Box 1: National travel surveys: Different methodologies make comparisons difficult

The statistics presented in this section are derived from passenger mobility surveys carried out at national level. Table 2 gives an overview of all passenger mobility surveys carried out in each country. However, before comparing the figures one should take into account that these surveys are conducted to respond to national needs, that no central coordination exists at EU level and that each country follows its own methodology. Depending on the survey design differences may be found in:

- Key concepts: not all key concepts are defined in the same way by all countries. For instance, the purpose of travel can be split in more or even different categories than the ones presented in the graphs above.
- Reference period: some countries record the travel undertaken by the respondent during the day prior to the interview while others record the travel undertaken over a longer period, i.e. a week, a month etc.
- Reference population: it generally includes residents of a certain age range. Some countries cover residents aged 6 years and over, others cover residents aged between 10 and 84 years, etc.
- Response rates: the response rates were very small in some countries producing results of lower reliability.
- Travel related information: not all countries record the same information about travel.
- Reference year: the statistics refer to the year each national survey was last carried out.
- Data collection method: some countries use a postal survey, others a face-to-face or telephone survey and others a combination of these.

For the reasons listed above any comparison between national results should be made with care before drawing any valid conclusion.

Moreover, it should be pointed out that all figures are based on statistics delivered by the national authorities on a voluntary basis. Therefore, it was not possible to include results on all three main indicators described in Table 1 for all countries that have carried out relevant surveys. Furthermore, any comparison of these indicators among countries should be made with care due to differences in country sizes and the different types of travel covered.

Finally, not all countries compile passenger mobility indicators with the same breakdowns. This explains why there is limited information on average travel time and average distance travelled by purpose.

Table 2: National passenger mobility surveys

| Country | Year | Periodicity | Survey scope / Information collected |
|---------|---------------|----------------------|--|
| BE | 1999 | Took place only once | Travel up to 200km undertaken by the respondent on the last day before the interview; travel over 200km undertaken in the last week before the interview |
| BG | 2006 | Quarterly | Number of passengers, passenger-kilometres, travelled distance. Only buses and coaches are covered. |
| CZ | 2001 | Every ten years | Frequency of journey to work and school, duration of journey and modes of transport used |
| DK | 2003 | Continuous | All travel undertaken by the respondent on the last day before the interview. |
| DE | 2002 | Next in 2007/2008 | All travel undertaken by the respondent on a given day |
| | 1994 | Annual | All travel undertaken by the respondent on a given week |
| EE | 2005 | Annual | All trips carried out by passenger car on the last day before the interview. |
| ES | 2000 | Not specified | All travel undertaken by the respondent on the last day before the interview |
| FR | 1994 | Every 10-15 years | Daily trips during the last day and last weekend before the interview |
| | | | Long distance trips carried out in a window of 6 months, i.e. travel undertaken in the last 3 months before the interview and travel the respondent will undertake during the 3 months to come |
| CY | 2007 | Next in 2008 | Trips of less than 100 kilometres within the national territory undertaken by the respondent on the last day before the interview and the last weekend |
| LV | 2003 | Not specified | All trips undertaken by the respondent on the last day before the interview |
| NL | 2006 | Continuous | Travel patterns of specific groups of the Dutch population |
| AT | 1995 | Not specified | Travel up to 50km undertaken by the respondent on the last day before the interview; travel over 50km undertaken in the last 14 days before the interview |
| PT | 1998 | Not specified | All trips of medium and long distance, i.e. over 50km |
| RO | 2005 | Quarterly | Seat-kms offered, number of passengers, passenger-kms, motor-vehicle kilometres |
| | 2006 | Quarterly | Travel with overnight stays for tourist purposes and professional trips conducted by people occupied in transport |
| SK | Not specified | Annual | Freight and passenger transport of organisations with main economic activity in transport |
| | | Quarterly | All trips undertaken by respondents during the reporting period |
| FI | 2005 | Every 6 years | Travel up to 100km undertaken by the respondent on the last day before the interview Travel over 100km undertaken in the last 4 weeks before the interview |
| SE | 1999 - 2001 | Next in 2005/2006 | All travel undertaken during the reporting period. Professional trips are included |
| UK | 2005 | Continuous | All travel undertaken during the reporting period as well as information about its cost |
| LI | 2000 | Every ten years | Start and end of a trip, total distance, total travel time, modes of transport used, car ownership |
| CH | 2005 | Every five years | All travel undertaken by the respondent on a randomly selected day |
| NO | 2005 | Every four years | All travel undertaken by the respondent on the last day before the interview |

Other methods for measuring the volume of passenger transport and road traffic

The volume of passenger transport is also measured in some countries through passenger-kilometres broken down by mode of transport. Moreover, road traffic volumes are measured through different methods that collect figures expressed in vehicle-kilometres.

Table 3 shows the amount of passenger-kilometres by main mode of transport and by country. These figures refer to passenger-kilometres covered by residents within the national territory. They are not however comparable due to the different sizes of the countries and different coverage of national figures.

Car travel accounts for most passenger-kilometres. Particularly, the use of passenger car accounts on average for about 70% of the total passenger transport. It is followed by the use of bus and coach (16%) and rail (8%) while non-motorised transport (walking and cycling) accounts on average for about 5% of the total passenger transport. In Switzerland and the Netherlands the share of passenger-kilometres in non-motorised modes of transport reaches almost 7% and 10% of the total transport respectively.

Table 3: Number of passenger-kilometres (million) by main mode of transport

| Mode of transport | BG ¹ | CZ | EE | NL | PT | SK | SE ² | UK | CH | NO |
|-----------------------------------|-----------------|-------|------|--------|-------|-------|-----------------|--------|-------|-------|
| Walking | : | : | : | 3900 | 0 | : | 2543 | : | 4188 | 1564 |
| Cycling | : | : | : | 13900 | 1 | : | 1868 | : | 2314 | 644 |
| Passenger car | : | 68640 | 9946 | 146100 | 10132 | 25824 | 86982 | 678000 | 61112 | 39220 |
| Other motorised private transport | : | : | : | 900 | 38 | : | 3839 | 10000 | 5129 | 151 |
| Bus and coach | 12942 | 14587 | 2716 | 6600 | 1984 | 7525 | 8740 | 48000 | 2854 | 3607 |
| Rail | 2574 | 15030 | 248 | 14500 | 848 | 2182 | 8773 | 52000 | 13665 | 2605 |
| Air | 3833 | 9736 | 1106 | : | 3407 | 2465 | 16046 | 9900 | 738 | 2526 |
| Water | 0.2 | 18 | 541 | : | 14 | 4 | 938 | : | 115 | 774 |
| Other public transport | : | 955 | 238 | : | 362 | 1399 | 1899 | : | : | : |

¹ National statistics do not cover all modes of transport, 2006

² Total number of passenger-kilometres over the years 1999-2001 divided by 3

Several EU countries measure the volume of road traffic in vehicle-kilometres.

Vehicle-kilometres are usually compiled through household or driver surveys. However, it is not uncommon to estimate the volume of road traffic by more than one single source. Besides specific surveys, many countries also compile vehicle-kilometres indicators from odometer readings, counts of numbers of vehicles that cross certain points (road counts) or fuel consumption data.

As is indicated in Table 4, vehicle-kilometres are more frequently compiled through surveys and road counts than through odometer readings or fuel consumption.

When more than one source is used, one method is taken as the main reference, complemented by other or others. This is the case in 10 countries, as is indicated in Table 4.

Table 4: Methods used in MS for measuring vehicle-kilometres

| Country | Household/Driver Survey | Odometers readings | Vehicle road counts | Fuel consumption data |
|---------|-------------------------|--------------------|---------------------|-----------------------|
| BE | | (√) | √ | (√) |
| BG | √ | | | |
| CZ | (√) | | √ | |
| DK | √ | (√) | (√) | |
| DE | √ | | √ | √ |
| EE | (√) | | √ | |
| EL | √ | | | |
| FR | (√) | | (√) | √ |
| LV | | √ | | |
| LT | | √ | | |
| HU | | | √ | |
| MT | | √ | | |
| NL | | √ | | |
| AT | | | | √ |
| PL | √ | | | |
| PT | | | (√) | √ |
| SI | (√) | | √ | (√) |
| SK | √ | | | |
| FI | | (√) | √ | |
| SE | | (√) | √ | |
| UK | (√) | (√) | √ | |
| CH | | √ | | |
| NO | √ | | √ | √ |

(): Complementary source

➤ ESSENTIAL INFORMATION – METHODOLOGICAL NOTES

Symbols and classifications used

" : " not available (Cf. Table 1) The codes and order used for EU countries are as follows

| Code | Name |
|------|----------------|
| BE | Belgium |
| BG | Bulgaria |
| CZ | Czech Republic |
| DK | Denmark |
| DE | Germany |
| EE | Estonia |
| ES | Spain |
| FR | France |
| LV | Latvia |
| NL | Netherlands |
| AT | Austria |
| PT | Portugal |
| RO | Romania |
| SK | Slovakia |
| FI | Finland |
| SE | Sweden |
| UK | United Kingdom |
| CH | Switzerland |
| LI | Liechtenstein |
| NO | Norway |

Concept definitions

Trip (Cf. Table 1): A series of stages connecting two activities.

Passenger car (Cf. Chart 1): Road motor vehicle, other than a motor cycle, intended for the carriage of passengers and designed to seat no more than nine persons (including the driver). The term "passenger car" therefore covers micro-cars (need no permit to be

driven), taxis and hired passenger cars, provided that they have fewer than ten seats. This category may also include pick-ups.

Purpose of travel (Cf. Chart 2 and 3): The main purpose of a journey or a trip without which the journey or trip would not have occurred. The following nomenclature was used:

- Work (travel to/from regular working place)
- Education (travel to/from school, conference, seminars etc)
- Shopping
- Business (meeting clients, other professional activities)
- Leisure (all other personal purposes, like culture, sports, going to restaurants)

ES, DE and NL use also the "Other" category. The former country defines "Other" as the return to the place of residence while in DE the "Other" category includes all reasons for travelling other than those already defined. In NL the category "Other" includes "Visiting a bank, post office, hairdresser, dentist etc" and "Remaining purposes".

Moreover, the "Leisure" purpose involves more categories in NL and FI. Specifically, "Leisure" in NL also involves "visiting someone or staying the night" while in FI it involves "travel to and from (summer) cottage" and "visiting friends or relatives".

Passenger-kilometres (Cf. Table 3): Unit of measure representing the transport of one passenger over one kilometre.

Vehicle-kilometres (Cf. Table 4): Unit of measurement representing the movement of a vehicle over one kilometre.

References to methodological information

The following documents were consulted when writing the present report:

1. Glossary for Transport Statistics'. Eurostat/ECMT/UNECE (2003)
2. D1.1_D2.1 – Up-to-date inventory of national surveys on passenger and car passenger mobility. Agilis (2006).
3. D1.2 – Non-harmonised database on short distance passenger mobility. Agilis (2006).
4. D1.3_D2.2 – Up-to-date methodological report on passenger mobility. Agilis (2006)
5. Handbook on statistics on road traffic. UNECE (2007)

NOTE: Since this publication is based on a one-time data collection, the data is not available in Eurostat's online database.

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