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Workshop on statistics on the volume of road traffic (vehicle-kilometres)

(Copenhagen, 1-2 December 2005)

**Actual vehicle-kilometre calculation possibilities in the
Hungarian statistical system**

Transmitted by the Government of Hungary

In Hungary, for the time being, there is not any statistical survey or officially accepted methodology for the calculation of the vehicle-kilometre data, nor any publication on this issue. There are no mobility surveys either, from where some basic information for vehicle-kilometre could be calculated.

The existing vehicle-kilometre estimations are made by a private company working as a contractor of the Ministry of Economy and Transport. The calculations serve as background information for the Ministry as well as for external data submitting (short-term trends survey for ECMT). The calculation is a very rough one, not accredited by HCSO and it is unquestionable that the method should be substantially improved.

Data sources

Actually, there are two sources from where vehicle kilometres data could be calculated. One of them is a KTI (Transport Research Institute) data collection and the second one comes from traffic counting provided by The Technical and Information Services on National Roads (ÁKMI Kht).

1. Data collection on “road contentment” (1999)

The main goal of this data collection managed by KTI (Transport Research Institute) was to obtain information on roads: the car holders were asked to what extent they are satisfied with the Hungarian roads. The sampling, and the data collection was carried out by Gallup Hungary by phone for a short period of two weeks in 1999. One of the questions asked was the total amount of kilometres run by cars during a year.

Advantages of this type of data source:

- at least an available information source on the vehicle kilometres run by Hungarian passenger cars
- the experience of the KTI and Gallup Hungary can be a basis for future co-operation on this issue.

Disadvantages:

- the question on vehicle kilometres is of secondary importance within the data collection
- the basic data on vehicle kilometres was an estimation itself
- no method to distinguish between the first and second car of the household, car for personal and business use etc.
- rather “old” data

2. Data from traffic counting (actually used)

(Determination of Traffic Flows on the National Road Network)

The Technical and Information Services on National Roads (ÁKMI Kht) since 1995 provides traffic data by a cross-sectional traffic counting of the Hungarian public roads. The traffic counting is provided by the regional subsidiaries of the AKMI Kht. using the so-called rolling system, where approximately 20% of the public roads from every county are monitored. The observation posts (cca. 4000) are installed on motorways as well as on motor roads, first category main roads, second category main roads, connecting roads, access roads, railway station access roads, intersection legs. The observation (the manual counting) is settled on a given period of a day, and with the use of some coefficients (monthly factor, part of a day, weekday factor) is calculated an average daily traffic for different vehicle categories. For every road a “validity section” (an average length) is established and from the multiplication of the length and the traffic the vehicle-kilometre is calculated (for vehicle type as well). The calculation of traffic volume is based on a mixture of automatic and manual counting methods.

Advantages:

- Well experienced calculation method
- Data are already available (on CD, and on the homepage of ÁKMI Kht.)
- Covers the whole country
- No major extra costs needed
- Estimations can be made for quarters, months
- The traffic counting covers the different vehicle types

Disadvantages:

- Traffic counting do not distinguish between nationality of the vehicles
- No information on traffic within the built up area (local roads), as well as on private roads
- Not any statistical error calculation has been made yet.

Future possibilities, recommendations for December WP

Hungary is aware of the fact that the simplest way of measuring the vehicle-kilometre data would be a comprehensive direct, National Transport Mobility Survey, with special surveying methods – e.g. “odometer readings”. (In case the necessary financial support should be available, it is intended to launch a new mobility survey in the year 2008). Therefore, on the one hand, it would be of major interest to know whether the European countries make use of mobility surveys to have road traffic data or indirect calculation methods are applied. On the other hand, it would be interesting to have a harmonized methodological background for vehicle kilometres as a recommendation for future calculations in the Glossary and in the European transport statistics system.
