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Urban transport statistics:

Tracking final leg deliveries

Survey on light commercial vehicles in Switzerland

Transmitted by the Government of Switzerland

Background

A description of the survey on light commercial vehicles in Switzerland can be found in the annex to the present document and the survey will be described in more detail in a presentation during the session.



Annex

Survey on light commercial vehicles in Switzerland: 2013 survey report

I. Introduction

1. Transport by light commercial vehicles has increased in recent years. While the fleet of heavy goods vehicles in Switzerland remained relatively stable between 2000 and 2020 (+6%), the fleet of delivery vehicles increased by 75% during the same period. Light goods vehicles contribute significantly to the transport of goods, with a share of approximately two thirds of total kilometre performance. In 2013, the performance of light goods vehicles was recorded for the first time in 15 years.

2. The light commercial vehicles survey (EVL) complements the survey on the transport of goods (ETM), which collects data on the performance of heavy goods vehicles. EVL is a sample survey of keepers of light goods vehicles registered in Switzerland. It aims to capture the performance and purpose of use of local light commercial vehicles. It was conducted in 1993 and 1998, each time using a different methodology. The next survey will be carried out in 2023.

3. EVL is one of the surveys required by the Federal Statistics Act and the Ordinance on Statistical Surveys (RS 431.01 and RS 431.012.01). It covers only the performance of light commercial vehicles registered in Switzerland.

II. Overall function of the survey

A. Background

4. The 2013 commercial vehicle survey was conducted internally by the federal administration. A team of staff from the Federal Statistical Office (FSO) was responsible for ensuring that the survey ran smoothly. The Federal Office for Buildings and Logistics (OFCL) was responsible for sending out the questionnaires and the Federal Office of Information Technology, Systems and Telecommunication (OFIT) for the systems.

B. Survey

5. EVL was designed as a sample survey. Of the more than 300,000 light commercial vehicles registered in Switzerland, a sample of some 70,000 was selected at random from the vehicle register maintained by the Federal Roads Office. These vehicles (delivery vehicles and articulated vehicles) were required to have a maximum total weight of 3,500 kg and a white licence plate. In addition, the vehicle keeper had to be domiciled in Switzerland. Information on a given reference day was collected from the keepers surveyed. The survey was conducted during 56 reference days spread over the year 2013. These reference days were randomly selected prior to the start of the survey, with each day of the week (Monday to Sunday) considered twice per quarter.

6. To minimize the burden on respondents and maximize the reliability of the results, what is known as the double survey method was used. 40% of the respondents received a detailed questionnaire (type 2) aimed at collecting complete information on transport (type and weight of the goods transported, places of loading and unloading with mileage). 60% of the respondents received a simple questionnaire (type 1), which was used mainly to adjust the results of the extrapolation of the data from the detailed questionnaire.

7. The forms for the light commercial vehicle survey could be filled in on paper¹ or online over the Internet.

C. Plausibility check of collected data

8. Despite efforts to simplify it, EVL remained a complex survey. For example, respondents were asked to code the type of goods transported, which was not always easy to do. In order to help them in this task, FSO staff were available to answer their questions.

9. We also conducted an internal plausibility check of the responses received. The plausibility check process can be broken down into several steps. First of all, the questionnaires digitized by OFIT were uploaded to the FSO computer system. The staff then corrected simple coding errors detected by an application (typographical errors, non-existent codes, etc.). This validation step was followed by the actual plausibility check. Automated tests were also used to check whether the data were consistent with those in the registers. For example, the declared weight of the goods could not exceed the payload of the vehicle (including trailers) as described in the vehicle register. In exceptional cases, staff called respondents to clarify open questions.

III. Use of administrative registers

10. FSO aims to make maximum use of available administrative registers so as to reduce the burden on respondents. Within the framework of EVL, this has resulted in the use of two registers: the vehicle register (managed by the Federal Roads Office) and, for articulated vehicles subject to a heavy goods vehicle charge (HGVC), the register for the performance-related HGVC (managed by the Federal Customs Administration). Unfortunately, these two registers did not allow for the survey to be dispensed with, as they do not contain any information on the goods transported (type, weight). However, these registers have been used to the fullest extent possible.

11. The vehicle register contains the specifications of the vehicles. For example, the emission class, payload and year of entry into service of the vehicles are important pieces of information that did not need to be asked of the respondents. These data were extracted directly from the register.

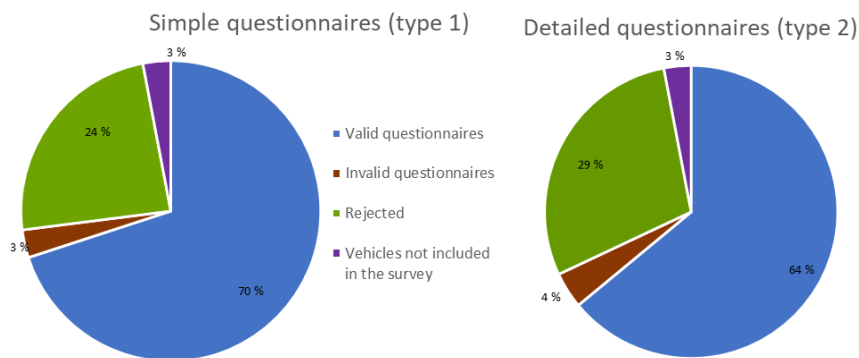
IV. Participation of carriers

12. EVL requires no small effort on the part of respondents. In particular, filling in the detailed questionnaire (type 2) was a complex task requiring a considerable investment of time.

13. The graph below provides a breakdown of the replies for the 2013 light commercial vehicle survey.

¹ The survey forms can be found at www.bfs.admin.ch/bfs/fr/home/statistiques/mobilite-transport/enquetes/lwe.html.

Breakdown of replies



- The valid questionnaires were those used in the calculation of performance and also those concerning vehicles that were not running during the survey period (e.g. due to repairs or a driver’s illness). In the case of simple questionnaires, the proportion of valid questionnaires was 70% and, in the case of detailed questionnaires, 64%.
- Those rejected include questionnaires for which we did not receive a response as well as those for which a refusal to respond was sent to us. In the case of simple questionnaires, the proportion of rejected responses was 24% and, in the case of detailed questionnaires, 29%.
- Invalid questionnaires were questionnaires whose quality did not allow us to use them in the calculation of performance (e.g. incomplete questionnaires and questionnaires completed for the wrong vehicle). In the case of simple questionnaires, the share of invalid questionnaires was 3% and, in the case of detailed questionnaires, 4%.
- The 3% of vehicles not included in the survey were vehicles with incorrect addresses in the vehicle register or vehicles that were sold between the time of the sampling and the day of the survey, etc.

V. Results of the survey

14. The results of the 2013 survey as well as estimates for the key figures of the years without a survey can be found on the FSO website.²

² www.bfs.admin.ch/bfs/fr/home/statistiques/mobilite-transport/transport-marchandises/route/vehicules-legers.html.