



METHODOLOGICAL EXPLANATION

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ROAD CROSS-BORDER TRANSPORT

This methodological explanation relates to the data releases:

- Transport, Slovenia, annually (First Release)
- Transport, Slovenia, monthly (First Release)
- Road border crossings, Slovenia, annually (First Release)



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1 PURPOSE

The purpose of publishing data on road border crossings is to present data on vehicle traffic at road border crossings. Data show the number of passenger and goods vehicles by vehicle type that entered or left Slovenia at road border crossings with Austria, Croatia, Italy and Hungary.

Key statistics in this area include data on the number of passenger and goods vehicles by type of vehicle. Passenger vehicles include cars, motorbikes and buses, while trucks are divided into light, medium and heavy vehicle and trailers and tractors.

2 LEGAL FRAMEWORK

- [Annual Programme of Statistical Surveys \(LPSR\) \(only in Slovene\)](#)
- [National Statistics Act \(OJ RS, No. 45/95 and 9/01\)](#)
- Guideline of the European Central Bank of 16 July 2004 on statistical reporting requirements in the field of balance of payments and international investment position statistics and proposals for the provision of data on international reserves and foreign exchange liquidity (ECB / 2004/15) CELEX: 32004O0015

3 UNIT DESCRIBED BY THE PUBLISHED DATA

The unit described by the data is a vehicle that crossed the road border crossing.

4 SELECTION OF OBSERVATION UNIT

The units of observation are the road border crossings of Slovenia with Austria, Croatia, Italy and Hungary.

The monthly statistical survey of Road Border Crossings (TR-MEJ) is a complete survey. All vehicles crossing the border crossings with Austria, Croatia, Italy and Hungary are included in the survey.

5 SOURCES AND METHODS OF DATA COLLECTION

Data are collected monthly.

For the traffic of passenger and goods vehicles at road border crossings with Austria, Croatia, Italy and Hungary, the source of data is the Slovenian

Infrastructure Agency (DRSI), which collects data on the basis of automatic traffic meters at border crossings.

6 DEFINITIONS

Traffic counting on Slovenian roads, it is carried out with manual vehicle counting and automatic traffic counters, or a combination of both. At road border crossings, automatic traffic counters are used for counting, which count in both directions.

A counting station is a point in the road network where traffic counting is conducted. A counting place is determined by road number, section number, counting place name, counting method, direction and x and y coordinates.

Traffic counters record the number of vehicles in a selected time interval. In addition to the number of vehicles, the QLTC counter model records the following traffic parameters:

- direction of travel,
- class or type of detected vehicles,
- vehicle speed,
- classifying vehicles into a speed class
- time distance between vehicles,
- time occupancy of the carriageway.

Vehicles are classified into classes based on signal shape analysis. When the vehicle is transported over the loop, the inductance of the loop changes, which is an integral part of the inductive-capacitive oscillating circuit. Each vehicle has a characteristic inductive footprint. When the vehicle passes through the loop, the traffic counter counts the number of axles and, based on this data and the distance between the axles, classifies the vehicle or determines the type of vehicle.

Border crossing is a place designated for the controlled passage of passengers and goods across a state border. A border crossings can be international, interstate or for local border traffic. Depending on the type of traffic is intended for, it can be road, rail, airport, sea or river.

Traffic of passenger vehicles across road border crossings: the number of passenger transport vehicles that entered or exited Slovenia via road border crossings. The data include passenger cars, motorbikes and buses, which are classified into classes based on the distance between the axles.

Traffic of goods vehicles across road border crossings: the number of goods vehicles that entered or exited Slovenia via road border crossings. The data include light, medium and heavy goods vehicles as well as trailers and road tractors, which are classified into classes based on the distance between the axles.

7 EXPLANATIONS

7.1 CLASSIFICATIONS

An [internal classification](#) is used to display data by border crossings by bordering country and customs offices.

7.2 DATA PROCESSING

DATA EDITING

The data were edited using data imputation procedures. When imputing the data, we used a combination of two methods: the Historical Imputation Method and the Hot-Deck Imputation Method.

You can read more about statistical data editing in the general methodological explanation [Statistical Data Editing](#).

WEIGHTING

Weighting was not performed.

SEASONAL ADJUSTMENT

Seasonal adjustment is not applicable.

7.3 INDICES

Indices are not published.

7.4 PRECISION

The precision is not calculated.

7.5 OTHER EXPLANATIONS

Some totals do not add up due to rounding.

8 PUBLISHING

- SiStat Database: Transport - [Road transport](#) - [Road cross-border transport](#). Absolute data are published.
- First Release (Transport): "Transport, Slovenia, monthly"
- First Release (Transport): "Transport, Slovenia, annually"
- First Release (Transport): "Road border crossings, Slovenia, annually"

9 REVISION OF THE DATA

9.1 PUBLISHING OF PRELIMINARY AND FINAL DATA

Provisional data are not disseminated. Only final data are published.

9.2 FACTORS INFLUENCING COMPARABILITY OVER TIME

As part of the monthly and annual release of data from the Transport survey, data on passenger arrivals at road border crossings with Croatia (in 1,000) were published until 2021. The source of the data was the Ministry of the Interior (MNZ), which collected data until Croatia joined the Schengen area on 1 January 2023. Now only data on passenger and goods vehicles as regards all border crossings are published based on data from traffic counters collected by the Slovenian Infrastructure Agency.

10 OTHER METHODOLOGICAL MATERIALS

Methodological materials on SURS's website are available at <https://www.stat.si/statweb/en/Methods/QuestionnairesMethodologicalExplanationsQualityReports>.

- Questionnaire:
 - SURS does not collect data for this survey by using a questionnaire.
- Quality report for the survey:
 - Road border crossings (TR-MEJ / M)

Theme: Transport, Subtheme: Road transport