REPUBLIC OF CROATIA
CROATIAN BUREAU OF STATISTICS

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QUALITY REPORT FOR STATISTICAL SURVEY

Annual Report on Railway Transport (PŽ/G-11) for 2025

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0. Basic information

- Purpose, goal, and subject of the survey

  The purpose of the survey is collection and dissemination of data on the railway infrastructure (length of railway lines, railway stations and other official places), railway vehicles (status of passenger and goods wagons by classes, seats and capacities as well as by year of construction), transport of passengers and passenger-kilometres by types of transport, international transport of passengers by countries of embarkation/disembarkation, goods transport and tonne-kilometres by types of transport and types of goods, international goods transport by countries of loading/unloading, combined goods transport, goods transport in containers, transport of road vehicles by railway, utilisation of vehicles, supply and consumption of fuels, traffic accidents, funds used for investments and maintenance of the railway infrastructure and railway vehicles, transport of dangerous goods, employed persons.

- Reference period

  Calendar year

- Legal acts and other agreements

  Annual Implementation Plan of Statistical Activities of the Republic of Croatia

  Official Statistics Act (NN, Nos 25/20, 155/23, 124/25 – corr. and 69/26)

  Regulation (EC) 2018/643 of the European Parliament and of the Council of 18 April 2018 on rail transport statistics (recast)

  Commission Regulation (EC) No 332/2007 of 27 March 2007 on the technical arrangements for the transmission of railway transport statistics

  Commission Regulation (EC) No 105/2007 of 1 February 2007 amending the annexes to Regulation (EC) No 1059/2003 of the European Parliament and of the Council on the establishment of a common classification of territorial units for statistics (NUTS)

  Commission Regulation (EC) No 1304/2007 of 7 November 2007 amending Council Directive 95/64/EC, Council Regulation (EC) No 1172/98, Regulations (EC) No 91/2003 and (EC) No 1365/2006 of the European Parliament and of the Council with respect to the establishment of NST 2007 as the unique classification for transported goods in certain transport modes

- Classification system

  – National Classification of Activities 2025

  – Standard Goods Classification for Transport Statistics, 2007 version

  – Classification of territorial units for statistics

- Statistical concepts and definitions

  Railway transport is any movement of goods and/or passengers by using a railway vehicle in the railway network.

  Railway traffic is any movement of railway vehicles on railway lines.

  Passenger is any person, excluding the train crew, who travels in the railway vehicle. Geographically, the passenger transport is presented as national and international transport, and transit.

  National transport includes the conveying of passengers between a place of embarkation and a place of disembarkation located within the borders of the Republic of Croatia. It may include transit through a neighbouring country. National passenger transport can be interurban and urban passenger transport.

  International passenger transport includes the transport of passengers between a place of embarkation in the Republic of Croatia and a place of disembarkation abroad and vice versa.

Transit is a transport through a territory of the Republic of Croatia between a place of embarkation and a place of disembarkation abroad.

Rail passenger-kilometre (pkm) is a unit of measure representing the transport of one passenger over a distance of one kilometre. For the purpose of this survey, only passenger-kilometres travelled in the Republic of Croatia are presented.

Goods are any goods which is transported in the railway vehicle. The total weight of the goods carried includes all packaging and equipment such as containers, swap bodies and pallets as well as road goods vehicles transported by rail. Empty private wagons are excluded. Geographically, the goods transport is presented as national transport, international transport − loading, international transport − unloading, and transit. Until 2008, the Standard Goods Nomenclature for Transport Statistics (NST/R) was applied. In 2008, this classification was replaced by a new goods nomenclature NST 2007. As opposed to hitherto applied classification NST/R, which was based on the physical form of goods, the classification NST 2007 takes into consideration economic activity of goods origin.

National transport includes the conveying of goods between a place of loading and a place of unloading located within the borders of the Republic of Croatia.

International transport − loading means transport of goods between a place of loading located within the borders of the Republic of Croatia and a place of unloading abroad.

International transport − unloading means transport of goods between a place of loading abroad and a place of unloading located within the borders of the Republic of Croatia.

Transit means transport through the Republic of Croatia between a place of loading and a place of unloading outside the Republic of Croatia.

Tonne-kilometre (tkm) is a unit of measure which represents the transport of one tonne of goods over a distance of one kilometre. For the purpose of this survey, only tonne-kilometres travelled in the Republic of Croatia are presented.

INFRASTRUCTURE

The length of the railway lines can be actual or operated, and, by number of tracks, it is divided to single-track and double-track lines.

Electrified line is a line with one or more electrified running tracks. Both AC and DC are used. Sections of lines adjacent to stations that are electrified only to permit shunting and not electrified as far as the next stations are to be counted as non-electrified lines.

Track is a pair of rails over which rail borne vehicles can run. Electrified track is a track provided with an overhead catenary or a conductor rail to permit electric traction. Both AC and DC are used.

VEHICLES

Locomotive is a tractive railway vehicle with a power of 110 kW and above at the draw hook equipped with prime mover and motor or with motor only, used for hauling railway vehicles. Types of locomotives are: electric, diesel and steam locomotives.

Railcar is a railway vehicle equipped with a motor intended for the rail transport of passengers or goods.

Goods wagon or wagon is a railway vehicle normally intended for the transport of goods. Goods wagons can be open wagons, covered wagons, flat wagons and other wagons.

Covered wagon is a wagon characterised by its closed construction with a roof and fully enclosed sides, capable of being locked and/or sealed. Covered wagons can be ordinary, special and refrigerated ones.

Open top wagon is a wagon without roof and with solid sides. They can be of ordinary or special type.

Flat wagon is a wagon without roof or sides, or wagon without roof but with sides not higher than 60 cm, or swing-bolster wagon, of ordinary or special type.

Wagon for intermodal transport is a wagon specially built or equipped for the transport of intermodal transport units (ITUs) or other goods road vehicles.

Passenger wagon is a railway vehicle intended for the transport of passengers, other than a railcar or a railcar trailer.

Passenger capacity relates to the number of seats and/or berths available in a passenger vehicle when performing the service for which it is intended. Seats in dining coaches and buffet compartment places are excluded.

Tractive vehicle-kilometre is a unit of measure representing any movement of an active tractive vehicle over a distance of one kilometre. Tractive vehicles running light (without hauling a load) are included, while shunting movements are excluded.

Consignment is a collection of goods transported under cover of the same transport document in accordance with regulations or tariffs in force where they exist.

Full train load is any consignment comprising a train with one or several wagon loads transported together for one consignor with no change in train composition from a single point of loading to a single point of unloading.

Full wagon load is any consignment of goods requiring the exclusive use of a wagon throughout its journey whether the full wagon loading capacity is utilised or not; wagons in a full train load are excluded.

Smalls/small load is any consignment other than full train loads or full wagon loads.

Intermodal transport unit (ITU) is a container, swap body or semi-trailer/goods road motor vehicle suitable for intermodal transport.

Container is a special box to carry freight, strengthened and stackable and allowing horizontal or vertical transfers.

Swap body is a freight-carrying unit optimised to road vehicle dimensions and fitted with handling devices for transfer between modes, usually road/rail.

TEU (Twenty-foot Equivalent Unit) is a statistical unit based on an ISO container of 20 foot length (6.10 m) to provide a standardised measure of containers of various capacities and for describing the capacity of container ships or terminals. One 20-foot ISO container equals 1 TEU. One 40-foot ISO container equals 2 TEU. One container with a length between 20 and 40 feet equals 1.50 TEU. One container with a length of more than 40 feet equals 2.25 TEU.

RAILWAY ACCIDENTS

Railway accidents are accidents in which at least one moving railway vehicle is involved. They are divided into the following categories: collisions, derailments, level crossing accidents, accidents to persons caused by rolling stock in motion, fires in rolling stock and other accidents. In addition, railway accidents are further divided into accidents with dangerous goods involved and accidents with dangerous goods released.

Collisions of trains are front to front, or front to end impacts between two trains, or a side impact between one train and part of another train not clear of the loading gauge, or a train impacting with shunting movements, with fixed objects such as buffer stops or objects temporarily present at or near the track (except at level crossings), such as rocks, landslides, trees, lost parts of railway vehicles, road vehicles and machines or equipment for track maintenance.

Derailment is any case in which at least one wheel of a train leaves the trails. Derailments as a result of collisions are excluded.

Level crossing accident is any accident at level crossings involving at least one railway vehicle and one or more crossing vehicles, other users of the road such as pedestrians or other objects temporarily present at or near the track.

Level crossing is any level intersection between a road and a railway, as authorised by the infrastructure manager and open to public or private road users. Passages between platforms within stations are excluded.

Accidents to persons caused by rolling stock in motion are accidents to one or more persons that are either hit by a railway vehicle or part of it or hit by an object attached to or that has become detached from the vehicle. Persons that fall from railway vehicles are included as well as persons that fall or are hit by loose objects when travelling on-board vehicles.

Accidents caused by fires in rolling stock are fires and explosions that occur in railway vehicles (including their load) when they are running between the departure station and the destination, when they stopped at the departure station, the destination station or intermediate stops, as well as during re-marshalling operations.

Person killed (fatality) is any person killed immediately or dying within 30 days as a result of an accident.

Person seriously injured is any person injured who was hospitalised for more than 24 hours as a result of an accident.

OTHER

Investment in railway infrastructure encompass funds expended for construction of new and expansion of existing infrastructure including reconstructions, makeover and major repairs to infrastructure. Infrastructure includes land, permanent way constructions, buildings, bridges and tunnels as well as fixed equipment, accessories and installations attached to them (signalling, telecommunications, electricity substations, etc.).

Investment in railway vehicles also includes funds spent for purchase of new railway vehicles.

Maintenance of infrastructure encompasses expenses for the maintenance of functional rails. It includes expenditures for the maintenance of tracks, repairs of damages and current repairs.

Maintenance of railway vehicles includes expenditures for the maintenance of operating railway vehicles.

Employed persons are persons who work in a railway undertaking as well as those working outside it, but who belong to it and are directly paid by it. Employed persons are person engaged in general administration, operations and traffic, traction and rolling stock, permanent way development and maintenance and other operations. General administration includes central and regional management staff (e.g. finance, legal, personnel etc.) and boards of directors. Operations and traffic includes station staff, train crews and associated central and regional offices. It includes tourism and advertising. Traction and rolling stock include tractive units' crews, workshops, inspection staff and associated central and regional offices. Permanent way development and maintenance include permanent way maintenance and supervision staff (excluding staff operating control and safety systems). Other operations encompass passenger and goods road services, shipping services, electric power plants, hotel staff, etc. They are recorded as persons employed outside the activities of the railway enterprise.

- Statistical units

Business entities, i.e. railway undertakings engaged in the railway transport of passengers and goods engaged in the railway transport of passengers and goods, and railway infrastructure managers. According to the Commission Regulation (EC) No 2018/643, a railway undertaking is any public or private undertaking which provides services for the transport of goods and/or passengers by rail.

- Statistical population

Data on transport of goods and passengers are collected from railway undertakings engaged in the transport on the national territory, while data on infrastructure and accidents are collected from infrastructure managers.

1. Relevance

1.1. Data users

State institutions and different organisations in the transport sector

1.1.1. User needs

The standard in use at the level of the European Statistical System satisfies national and international users.

1.1.2. User satisfaction

The first user satisfaction survey of the Croatian Bureau of Statistics was carried out in 2013, and since 2024, the survey has been conducted annually. The survey results are available on the Croatian Bureau of Statistics website under User satisfaction surveys.

1.2. Completeness

The survey covers all variables determined in the legal basis.

1.2.1. Data completeness rate

Data completeness rate is 100%.

2. Accuracy and reliability

2.1. Sampling error

Not applicable.

2.1.1. Sampling error indicators

The indicator is not applicable.

2.2. Non-sampling error

Not applicable.

2.2.1. Coverage error

The indicator for this survey is not computed.

2.2.2. Over-coverage rate

The indicator is not applicable.

2.2.3. Measurement error

During the statistical analysis, data validation is implemented according to the established algorithms for particular types of errors. A matrix containing 99 conditions for conducting material check and control have been set up; of the total number of conditions, 99 of them relate to non-tolerable errors.

2.2.4. Non-response error

Non-response errors are reduced to zero during the analysis by frequently contacting the reporting units (by phone, e-mail and letters) as well as by building good business relationships with reporting units.

2.2.5. Unit non-response rate

The indicator is not computed.

2.2.6. Item non-response rate

The indicator is not computed.

2.2.7. Processing error

The indicator for this survey is not computed.

2.2.8. Imputation rate

The indicator is not applicable.

2.2.9. Model assumption error

Indicator for this survey is not applicable.

2.3. Data revision

2.3.1. Data revision – policy

The users of statistical data are informed about revisions on the website of the Croatian Bureau of Statistics, on the link General Revision Policy of the CBS.

2.3.2. Data revision – practice

Provisional figures are not published in this survey and therefore regular revisions are not planned. As a rule, unplanned revisions caused by events that could not be foreseen and prevented (later changes in data sources or errors in already submitted data that were detected only later) are disseminated as soon as possible.

2.3.3. Data revision – average size

The indicator is not applicable.

2.4. Seasonal adjustment

Indicator for this survey is not applicable.

3. Timeliness and Punctuality

3.1. Timeliness

Eight months after the end of a reporting year.

3.1.1. Time lag – first results

The indicator is not applicable.

3.1.2. Time lag – final results

Timeliness of final results is T + 237.

3.2. Punctuality

There is no time lag between the actual dissemination of the data and the planned date when they were to be disseminated according to the Calendar of Statistical Data Issues.

3.2.1. Punctuality − delivery and publication

Delivery and publication is 1.

4. Accessibility and clarity

Data are disseminated in printed form as well as electronically on the website of the Croatian Bureau of Statistics.

4.1. News release

Data compiled in this survey are not published in First Release.

4.2. On-line database

Data are not available in online databases.

4.3. Micro-data access

The conditions under which certain users can access microdata are regulated by the Ordinance on Conditions and Terms of Access and Use of Confidential Statistical Data of the Croatian Bureau of Statistics for Scientific Purposes (NN, No. 5/23).

4.4. Documentation on methodology

– Glossary for Transport Statistics – fifth edition (on the website of the Croatian Bureau of Statistics)

– Statistical Report “Transport and Communications”

– Statistical Information

– Croatia in Figures

– Reference Manual on Railway Transport Statistics (Eurostat’s website)

5. Comparability over time

5.1. Asymmetry for mirror flows statistics

Mirror analysis is conducted in order to compare the consistency of traffic between two partner countries. Checks are run for international traffic, embarkment/disembarkment in the passenger traffic and international loading/unloading in the goods traffic.

5.2. Comparability over time

Since the third quarter of 2006, the total passenger transport has included free tickets (pupils, students, pensioners, social tickets) as part of subventions for including the rail transport in the public urban passenger transport system in Zagreb. Since 1 July 2011, the co-financing of free transportation has been abolished in the City of Zagreb. This resulted in change in the method of calculation of the number of passengers in the national transport. The calculation excluded subsidized tickets, which means that the calculation is based on the number of sold tickets and bus/tram passes in the urban and suburban transport.

5.2.1. Length of comparable time series

Length of comparable time series is 13.

5.2.2. Reasons for break in time series

Since 2011, free tickets/passes for transport of passengers by rail as part of the public urban passenger transport system in the City of Zagreb have been excluded from the calculation of the number of passengers in national transport. Due to the large share of passenger transport within the public urban transport in the total number of passengers transported by rail, the change is significant and has an impact on the analysis and estimation of the phenomenon over a certain period of time.

5.3. Coherence – subannual and annual statistics

The indicator is not applicable.

5.4. Coherence – national accounts

The indicator is not applicable.

5.5. Coherence – administrative sources

The indicator is not applicable.

6. Cost and burden

6.1. Cost

The indicator is not computed.

6.2. Burden

Information on the burden on reporting units is unknown.