

Definitions and used methodology

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The Investment in Transport Infrastructure database contains annual data collected from ITF Member countries Administrations and Statistical offices. It covers gross investment spending and maintenance expenditure for five main transport modes: road, rail, inland waterways, maritime ports and airports.

Infrastructure expenditures include both public (state, regional and local authorities) and private sources of financing. Maintenance expenditures refer to government spending only and do not include expenditure financed by the private sector.

While the ITF collected and printed publications containing these data since the 1980's, [online data series](#) go as far back as 1992.

Definitions used

The term “transport infrastructure” refers only to infrastructures that are open to the general public. It covers buildings and other constructions as well as machinery and equipment, but it excludes vehicles and rolling stock.

Definitions used in our data collection are based on the [fourth edition of the Glossary for Transport Statistics](#) that provides the following definitions:

- Investment expenditure on infrastructure: Expenditure on new construction and extension of existing infrastructure, including reconstruction, renewal and major repairs of infrastructure.
- Maintenance expenditure on infrastructure: Expenditure for keeping infrastructure in working order.

For rail, infrastructure includes land, permanent way constructions, buildings, bridges and tunnels, as well as immovable fixtures, fittings and installations connected with them (signalisation, telecommunications, catenaries, electricity sub-stations, etc.) as opposed to rolling stock.

For road, maintenance includes surface maintenance, patching and running repairs (work relating to roughness of carriageway's wearing course, roadsides, etc.).

For Inland waterways expenditures on locks are included.

It is important to draw the attention on the fact that the data coverage varies significantly from a country to another. This is mainly due to the lack of more detailed common definitions and the difficulty for countries to change their data collection system.

[Country notes](#) provide differences with main definitions. For example depending on countries, private investment are or are not included in annual figures, rail data could include urban rail, metro and tram networks, road data could include urban road, Airports data could include logistic buildings linked to the

airport activity, some countries include VAT in their data, others don't. In addition, the border line between investment and maintenances expenditure is not the same for all countries, etc. For this reason the ITF recommends to use these figures with great care and to rather analyse country data trends instead of spending levels.

There is a strong need for having more precise common definitions and methodology in order to improve the quality of and the comparability of our data series.

Methodology used for data conversions

The original information is collected on an annual basis, in current prices and in millions units of each country's national currency, and in some cases in US dollars.

To present data tables and graphs with consistent and coherent historical series, or to calculate indices such as investment as a share of GDP, the original data is converted into Euros and deflated according to the following methods:

Conversion into Euros

Euro exchange rates used are yearly averages. They come from different sources to cover all ITF member countries. We used the Euro rates collected in the ITF Quarterly statistics survey, completed with information from other sources (OECD, UNECE, etc.)

For constant prices calculations, the exchange rates used refer to the year 2005

Conversion into constant prices

National Accounts do not provide PPP's that could be used for transport infrastructure data series. Therefore to deflate current values "construction cost in land use planning" indices were used since they appear to be the most appropriate index for this activity. The sources for those indices are country national accounts or statistical offices.

If no "construction cost and land use planning" index could be found, then indices for similar activities were applied (construction cost indices for civil engineering projects, Index for fixed capital investment, construction price indices, etc)

In the case that no appropriate index could be found to deflate transport investment data series, then the country GDP's implicit price deflator (2005=100) has been applied. The source for GDP price deflators is the UNECE.