

Group 5. Price signals

Indicator 14 - Real change in passenger price by mode

<i>Objective</i>	Decoupling of transport volumes from economic growth, promoting environmentally friendly transport modes and technologies through the use of pricing instruments.
<i>Definition</i>	Trend in public transport fares relative to the cost of car use and the growth in the personal disposable income, at constant prices.
<i>Sub-indicators</i>	<p>Index for:</p> <ul style="list-style-type: none"> Private car transport Bus transport Transport by train Transport by air Transport by sea and inland waterways Disposable income
<i>Concepts</i>	<p><u>Private car transport</u> is defined as transport by private car. The costs connected to private car transport include purchase, operation of personal transport equipment (spare parts and accessories, maintenance, repair and other services) and the use of petrol by operation of the vehicle.</p> <p>Real prices of private car transport are based on price series for:</p> <ul style="list-style-type: none"> – Purchase of cars, – Operation of cars (excl. use of petrol) – Use of petrol at current prices <p>A weighted average of the three price series is calculated using the budget shares as weights.</p> <p>In the EU, different countries update their weights in different years; the weights have to be changed at least every 7th year. The weights are based on the National Account and the Household Budget Survey.</p> <p><u>Bus transport</u> is defined as local and long-distance transport of individuals and groups of persons and luggage by bus.</p> <p><u>Transport by train</u> is defined as local and long-distance transport of individuals and groups of persons and luggage by train.</p> <p><u>Transport by air</u> is defined as transport of individuals and groups of persons and luggage by airplane and helicopter.</p> <p><u>Transport by sea and inland waterways</u> is defined as transport of individuals and groups of persons and luggage by ship, boat, ferry, hovercraft and hydrofoil.</p> <p><u>Real price change in the price indices</u> for each transport category is defined as the sub index expressed in current prices, divided by the total consumer price index (CPI), obtaining a real price index.</p>
<i>Methodology</i>	Real prices of private car transport are based on price-series for purchases of cars, price-series for operation of the car (excl. use of petrol), and price series for use of petrol in running prices. Those series can be found in the sub-indices from the consumer price index (CPI), concerning car transport.

Real price series for bus transport are based on the sub-indices in the consumer price index (CPI) for the fares of bus transport.

Real price series for train transport are based on the sub-index in the consumer price index (CPI) for the fares of transport by train.

Real price series for transport by air are based on the sub-index in the consumer price index (CPI) for the transport by air.

Real price series for transport by sea and inland waterways are based on the sub-indices in the consumer price index (CPI) concerning transport by sea and inland waterways.

The disposable income can be obtained from the National Account.

Relevant Literature

1. Are we moving in the right direction? EEA 2000
2. Indicators tracking transport and environment integration in the EU EEA 2001
3. Transport and Environment statistics for the Transport and Environment Reporting Mechanism (TERM) for the European Union. Eurostat.
4. Council Regulation (EC) no. 2494/95 concerning harmonized indices of consumer prices (HICPs)
5. Commission Regulation (EC) no. 2214/96 concerning harmonized indices of consumer prices (HICP): Transmission and dissemination of HICP
6. Commission Regulation (EC) no 1749/1999 amending Regulation (EC) no. 2214/96
7. Compendium of harmonized consumer price indices reference documents (2/2001/B/5), Eurostat publication, Dec. 2001
8. EEA fact sheet, cf.
http://themes.eea.eu.int/Sectors_and_activities/transport/indicators/cost/change/Transport_prices_TERM_2001.doc.pdf

Indicator 15 - Fuel prices and taxes

<i>Objectives</i>	Limit fossil fuel consumption and CO ₂ emissions from road transport. Promote a shift towards cleaner fuels such as unleaded petrol and low-sulphur diesel, cleaner petrol, LPG, methane, and non-fossil energy sources.
<i>Definition</i>	Fuel price and the share of tax included in the price.
<i>Sub-indicators</i>	Sales prices of fuels and tax part of price for <ul style="list-style-type: none"> - Leaded petrol - Unleaded petrol - Diesel fuel
<i>Methodology</i>	Price information is supplied to the EU Commission on a weekly basis. Prices and taxes are published by the DG for Energy and Transport in the <i>Oil Bulletin</i> . From this, nominal price information and real price developments have been derived using the Consumer Price Indices (CPIs) from Eurostat. Eurostat data on annual sales per fuel type were finally used to arrive at weighted average EU fuel price development.
<i>Relevant literature</i>	<ol style="list-style-type: none"> 1. Are we moving in the right direction? EEA 2000 2. Indicators tracking transport and environment integration in the EU EEA 2001 3. Transport and Environment statistics for the Transport and Environment Reporting Mechanism (TERM) for the European Union. Eurostat. 4. Energy prices, DG Energy and Transport http://europa.eu.int/comm/energy/en/oil/bulletin_en.html 5. EEA fact sheet, cf. http://themes.eea.eu.int/Sectors_and_activities/transport/indicators/cost/fuel/Fuel_prices_and_taxes_TERM_2001.pdf

Indicator 16 - Transport taxes

<i>Objectives</i>	Promote environmentally friendly fuels and reduce fuel consumption.
<i>Definition</i>	Transport taxes and charges
<i>Sub-indicators</i>	<ul style="list-style-type: none"> – Taxes associated with the acquisition of a means of transport, e.g. registration taxes – Taxes on the possession or ownership of a means of transport, e.g. circulation taxes – Taxes related to the use of a means of transport, e.g. road tolls
<i>Methodology</i>	<p>Taxes are compulsory transfers to the general government sector without any link between the payment and acquisition of services.</p> <p>The revenues from transport taxes and charges can be made up as the payment received (<i>cash basis</i>) or alternatively as taxes levied (<i>accrual basis</i>) by the public authorities.</p>
<i>Relevant literature</i>	<ol style="list-style-type: none"> 1. Are we moving in the right direction? EEA 2000 2. Indicators tracking transport and environment integration in the EU EEA 2001

Indicator 17 - Subsidies

Objective Promote environmentally friendly transport.

Definition Subsidies on transport services by mode

Methodology At present, data on subsidies is not collected in a way that enables a EU-wide indicator to be quantified. Such an indicator is likely to show wide variations in subsidy policy and level across the EU. (1)

An attempt to define subsidies generally and discussions of different types of subsidies can be found at the The Earth Council's website (2).

However, no operational objectives, definitions or sub-indicators have been set up in the TERM-regi. The indicator shall be seen in connection with indicator 19.

- Relevant literature*
1. Are we moving in the right direction? EEA 2000
 2. Indicators tracking transport and environment integration in the EU EEA 2001
 3. <http://www.ecouncil.ac.cr/econ/subsidies/amdoc964.htm#Definition>

Indicator 18 - Expenditure on personal mobility per person by income group

<i>Objective</i>	Fair and efficient pricing across (transport) modes.
<i>Definition</i>	The proportion of household expenditure on transport by private and public transport.
<i>Sub-indicators</i>	Household expenditure on transport: <ul style="list-style-type: none"> Total expenditure. Purchase of personal transport equipment Operation of personal transport equipment (incl. use of petrol) Purchased transport.
<i>Concepts</i>	<p><u>Total expenditure</u> is defined as total private consumption in the National Account.</p> <p><u>Private transport</u> is defined as the sum of the National Account consumption groups for:</p> <ul style="list-style-type: none"> – Purchase of personal transport equipment, group 7100. – Operation of personal transport equipment (incl. use of petrol), group 7200. <p><u>Public transport</u> is defined as the consumption group 7300 in National Account group: Purchased transport.</p> <p>The <u>proportion of household expenditure for private transport</u> is defined as the sum of the private transport groups divided by the total private consumption (Total expenditure).</p> <p>The <u>proportion of household expenditure for public transport</u> is defined as the consumption in the public transport group divided by the total private consumption (Total expenditure).</p> <p>All prices are expressed in current prices.</p> <p>The classification of consumption groups is made according to the COICOP classification.</p>
<i>Methodology</i>	<p>The sources for the expenditure group's private and public purchase of transport can be found in the National Accounts system.</p> <p>The statistics are in accordance with the ENS95 (European National Accounts System).</p>
<i>Relevant literature</i>	<ol style="list-style-type: none"> 1. Are we moving in the right direction? EEA 2000 2. Indicators tracking transport and environment integration in the EU EEA 2001 3. Transport and Environment statistics for the Transport and Environment Reporting Mechanism (TERM) for the European Union. Eurostat. 4. ENS (Europe) 1995, Eurostat. 5. SNA (world) 1993 System of National Accounts, UN.

Indicator 19 - Internalisation of external costs

Objective Differentiation of transport taxes and charge structures on the basis of marginal costs.

Provisions of efficient incentives to reduce the environmental, congestion and accident impacts of transport.

Definition The existence of economic policy tools (e.g. taxation and charge structures) intended to have a direct link or to be a proxy for marginal external costs of the use of different transport modes - thus providing direct incentives to both procedures and consumers to lower the environmental, congestion and safety impacts of transport.

The indicator has recently been changed from the more or less quantitative indicator 19, to a qualitative/policy-orientated one.