Improving road infrastructure and traffic flows

IRU Resolution

adopted by the Council of Direction at its meeting in Brussels on 18 May 2000

The mobility of people and goods is dependent on the efficient use of existing traffic infrastructure, and the modernisation and expansion of traffic infrastructure to meet the future demand for transport services efficiently and cost-effectively. This applies in particular to roads, since road transport accounts for more than 90% of all passenger transport and more than 80% of all goods transport in most countries in terms of passengers and tonnes carried. Impediments to mobility such as traffic restrictions, road blockades, closures of certain road infrastructure sections, or congestion due to bottlenecks in road infrastructure ignore the fact that

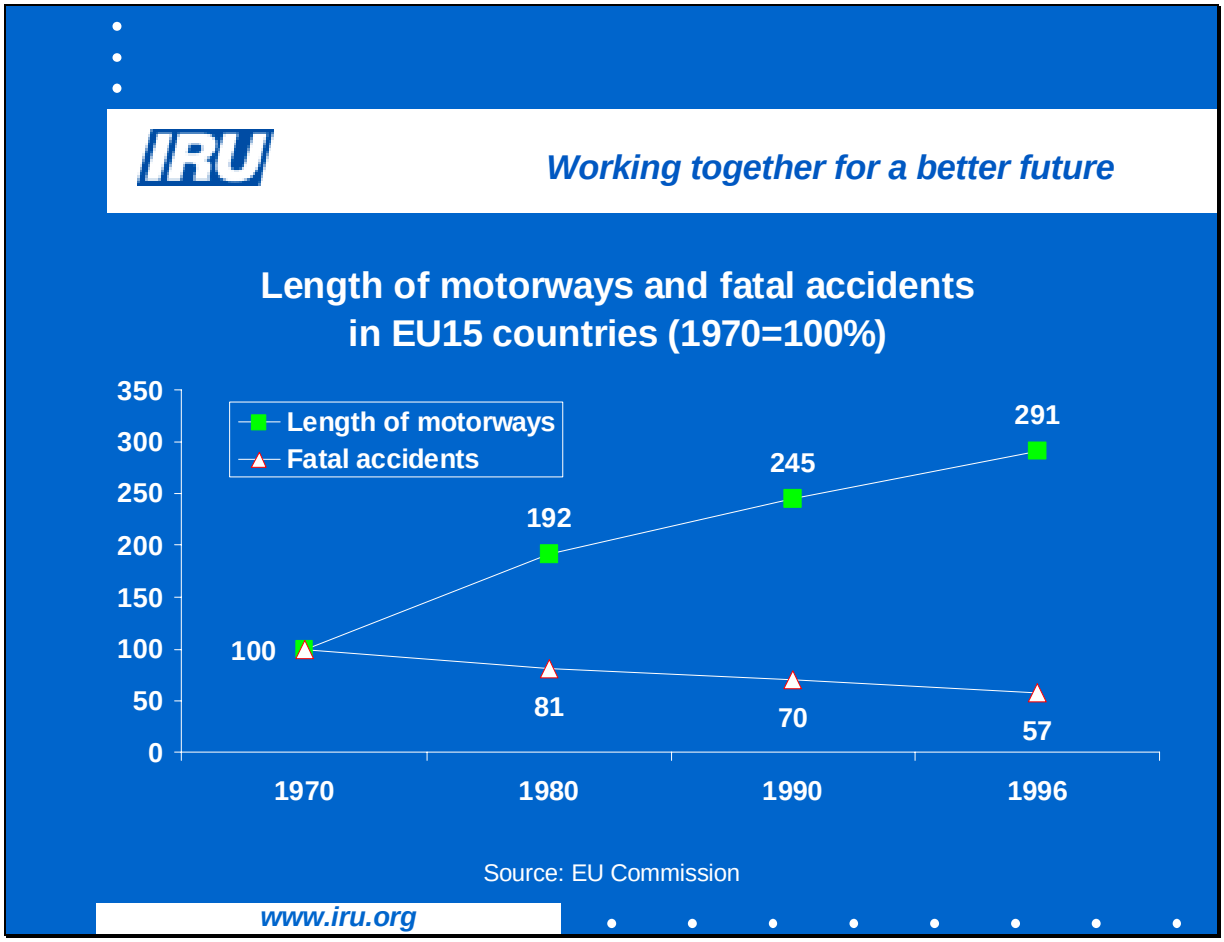
- road infrastructure investments are a vital prerequisite for improving road safety, **(see annex 1)**
- revenues from the transport of goods by road (fuel taxes, vehicle ownership taxes, road user charges) more than cover expenditure on road building and maintenance, as do revenues from the transport by bus and coach **(see annex 2)**
- congested traffic leads to a significant increase of fuel consumption by a factor of up to 3, **(see annex 3)**
- on average, only 0.5% of total land surface in most countries is used for road infrastructure, **(see annex 4)**
- the economic benefits of road infrastructure investments are 29 times its investment costs, and thus the highest of all infrastructure sectors, including other transport modes, **(see annex 5)**
- the economic cost of impediments to road transport (congestion, border delays, traffic bans, blockades etc.) amounts to 0.5% of GDP, i.e. for the European Union approximately € 40 bn per year. **(see annex 6)**
- the permanent closure of a main traffic artery such as the Mont Blanc tunnel would not improve the air quality in the region, nor reduce the risk for accidents, but would lead to significant increases of transport volumes at other crossing points and would increase the cost of transport for shippers by 25% (which corresponds to extra costs for the Italian economy alone of over 500 million Euro per year). **(see annexes 7 to 10)**.

In view of the negative impacts inefficient use or insufficient provision of road infrastructure has on the sustainable - i.e. the economic, social and environmental - development of societies, the IRU calls upon governments to maintain the free choice of transport modes and to take all measures necessary to improve mobility of people and goods, and in particular, to

- increase funds for road infrastructure investments both at national and multinational level,
- allocate revenues raised from road transport to the necessary maintenance and expansion of road infrastructure,
- cut back and harmonise traffic restrictions, and to stop taking measures that restrain the mobility of people and goods,

- take all necessary measures to promote the harmonisation, simplification and acceleration of border crossing procedures, and to improve the quality and increase the capacity of border crossing related infrastructure,
- take preventive measures to avoid road blockades by protesters,
- equip tunnels with modern safety devices and monitoring techniques, in particular, and for strategic reasons, with two separate tubes, one for each direction.

Geneva/Brussels, 18 May 2000



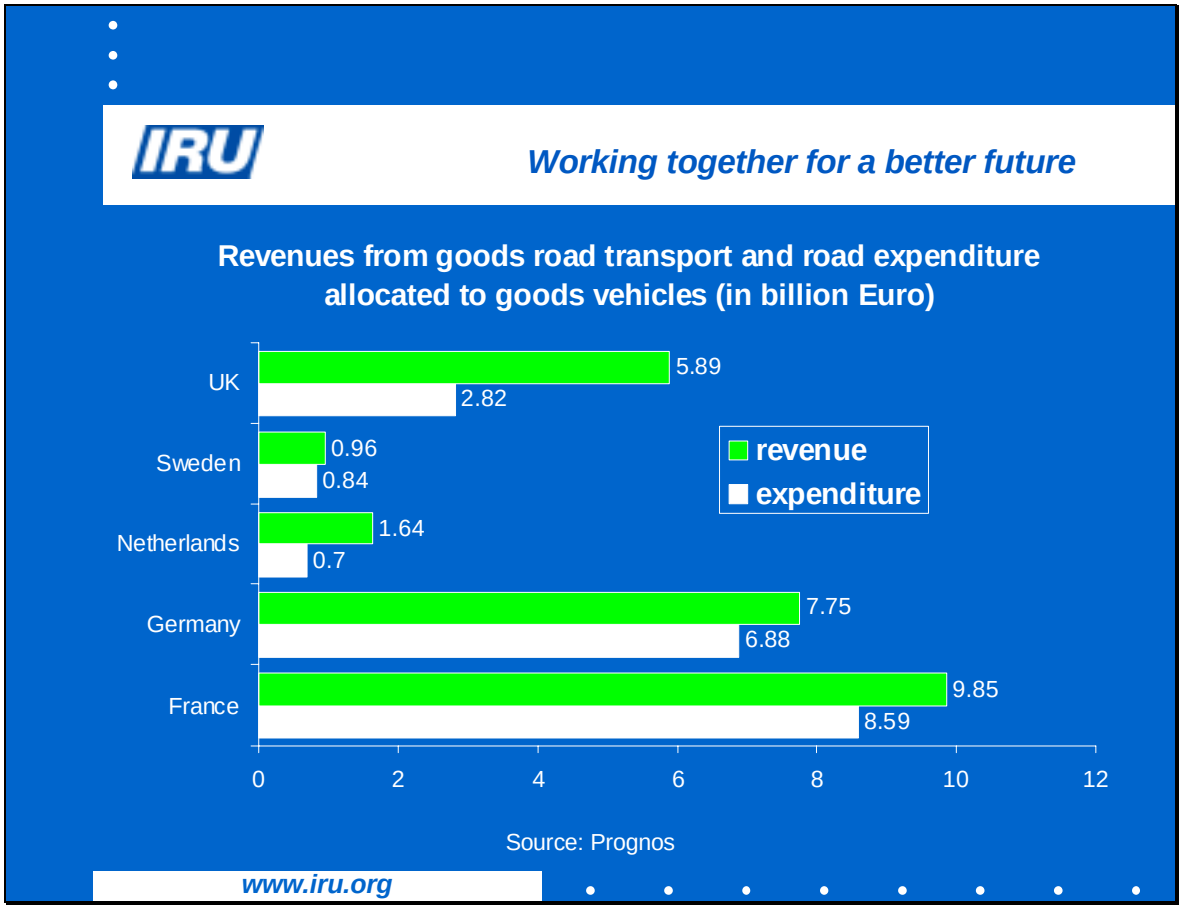
Road safety needs to be increased through improvements to the infrastructure, to vehicles and to human behaviour.

Statistics show that road infrastructure is an important prerequisite for improving road safety, particularly for reducing fatal accidents.

However, investment in road infrastructure is a field outside the control of the transport industry. It falls under the authority of governments.

To continue the long-term trend of declining fatal accident figures, Europe must increase its efforts to improve road infrastructure capacities.

Yet, investments in the European Union are falling at the expense of the construction of road networks which meet the needs of safe mobility for people and goods.



The figures show the results of a study undertaken by the Prognos AG on behalf of the IRU. They indicate the revenues from the transport of goods by road (diesel fuel tax, vehicle ownership tax, road user charges, etc.), the expenditure for road building and maintenance allocated to goods vehicles, and the extent to which revenues cover expenditure.

The calculated ratios leave no doubt that trucks pay their way, and even more. The corresponding revenue over expenditure cover ratios for goods road transport are

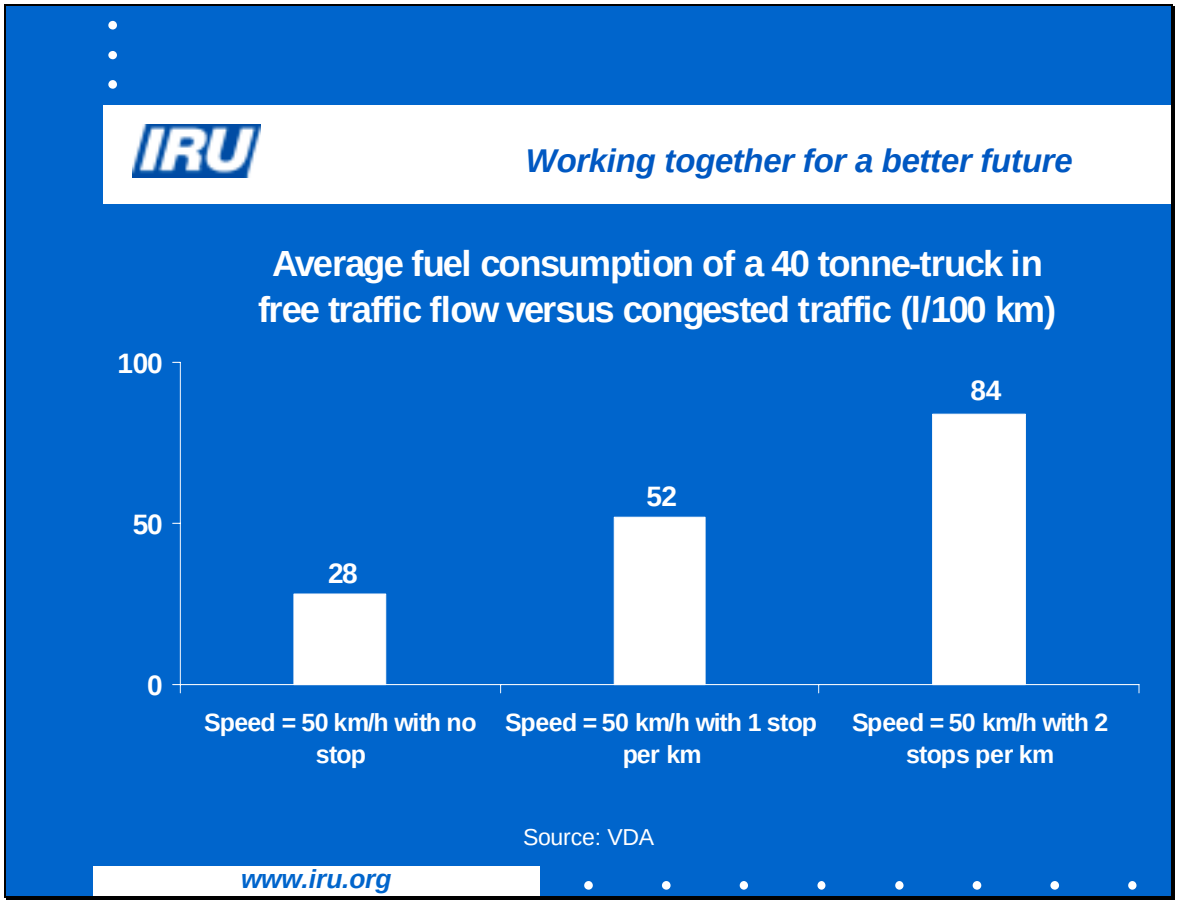
113% for Germany,

115% for France and Sweden,

209% for the UK, and

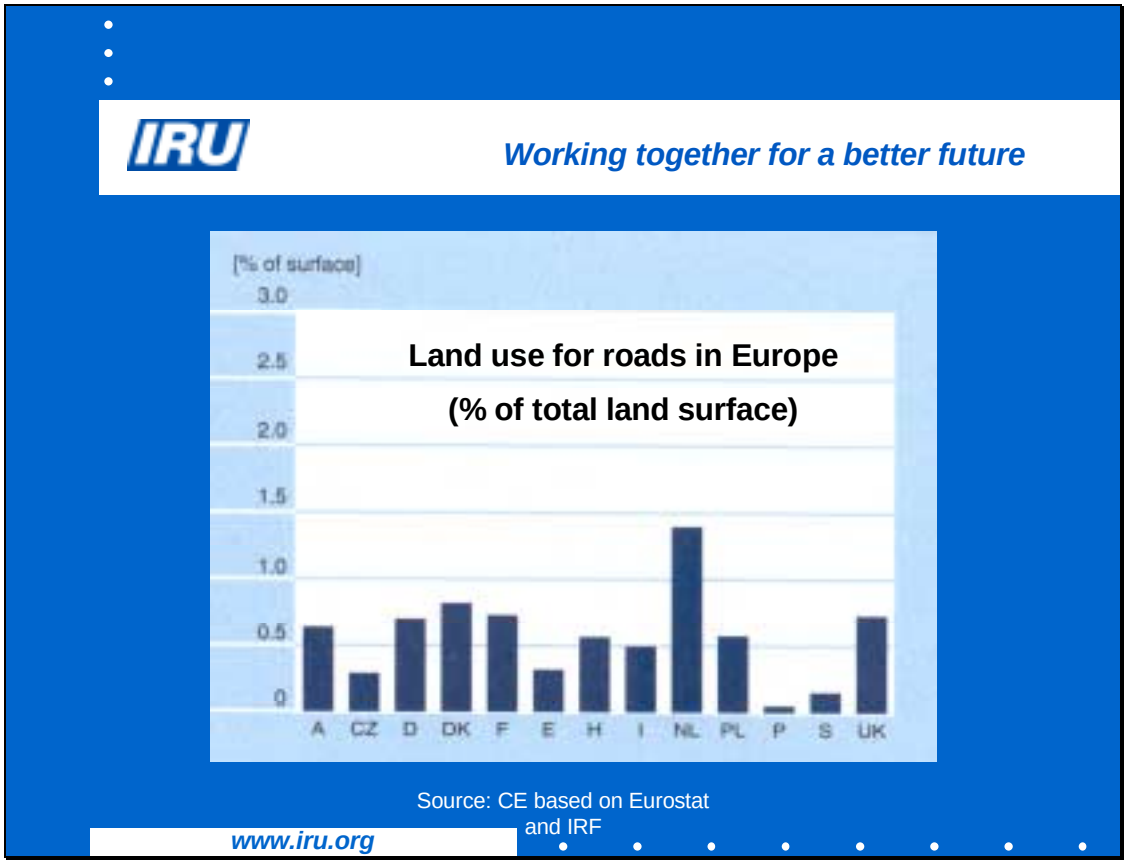
233% for the Netherlands,

i.e., in all researched countries, the revenues from the transport of goods by road are higher than the road expenditure allocated to trucks.



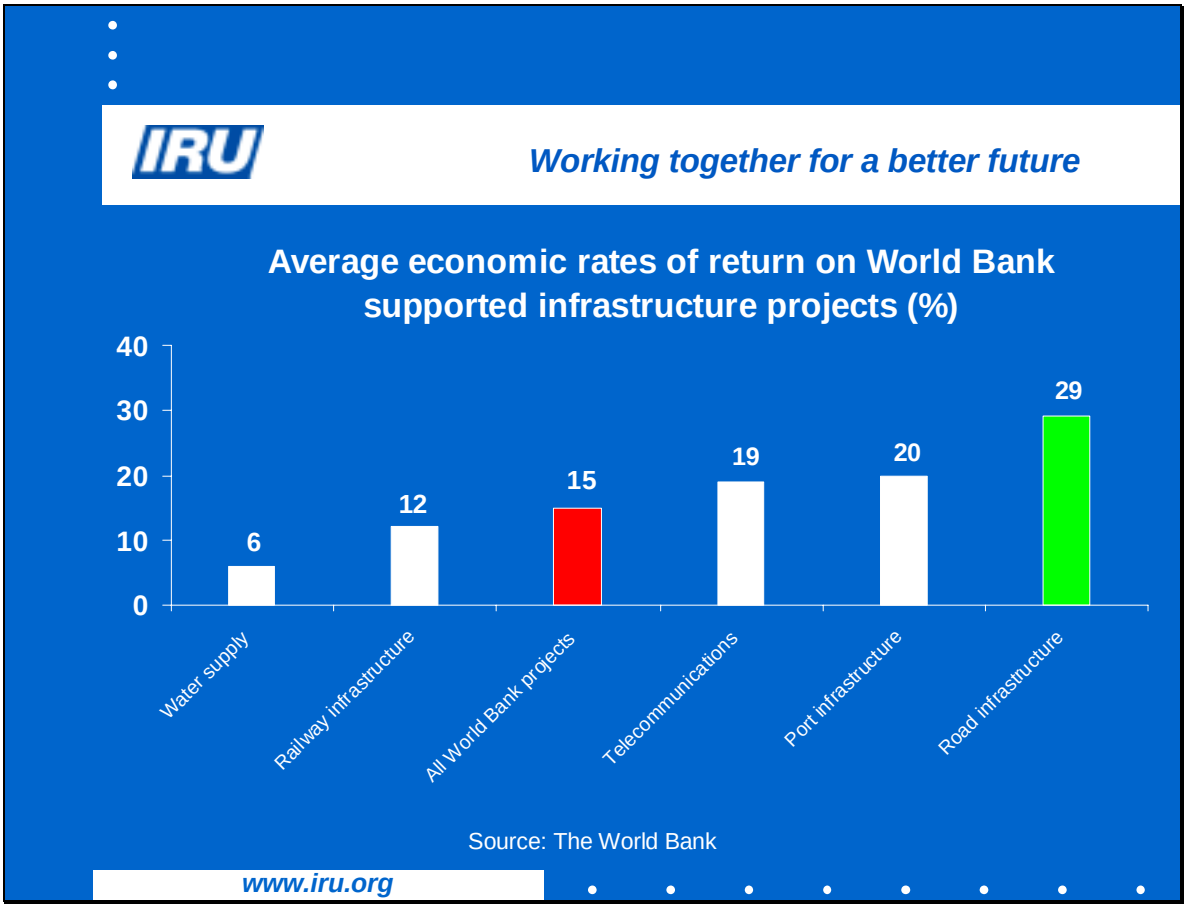
If infrastructure investments fail to keep pace with economic demand, and if best use is not made of existing infrastructure, environmental initiatives which the road transport industry has taken or is prepared to take will be in vain if vehicles, designed to obtain peak performance in terms of low emissions and fuel consumption, are left to idle on congested routes and in bottlenecks.

Congested traffic leads to a significant increase of fuel consumption by a factor of up to 3 with all its negative effects on CO_2 and gaseous emissions.



Contrary to popular belief, the percentage surface area covered by roads, even in small densely populated countries like the Netherlands, does not match public perception.

On average, only 0.5% of total land in Europe is used for road infrastructure.



For World Bank-supported road infrastructure investments, the economic rate of return was 29 times its investment costs (average return rate for all investments in highways between 1983 and 1992).

Thus, road infrastructure investments achieve the highest economic rate of return of all infrastructure investments supported by the World Bank. Their economic rate of return is twice the return rate for all World Bank projects and 2.4 times the return rate on railway infrastructure investments.

Other sources calculate even higher economic rates of return for road infrastructure investments. For the US and Asia, return rates for infrastructure investments are between 50 and 60. For all OECD countries, the economic benefits of road infrastructure investments are 19 times its investment costs.

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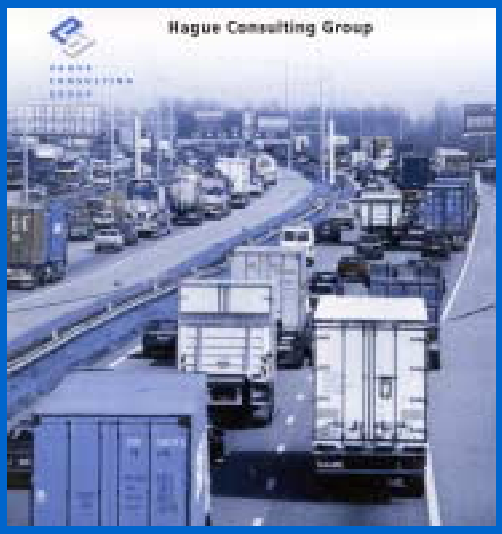


- Study into the economic cost of barriers to road transport in 5 countries: CZ, F, I, PL, UK.
- Annual economic cost of € 8-16 bn or 0.5% of GDP of these countries.
- For the European Union this would amount to approximately € 40 bn per year.

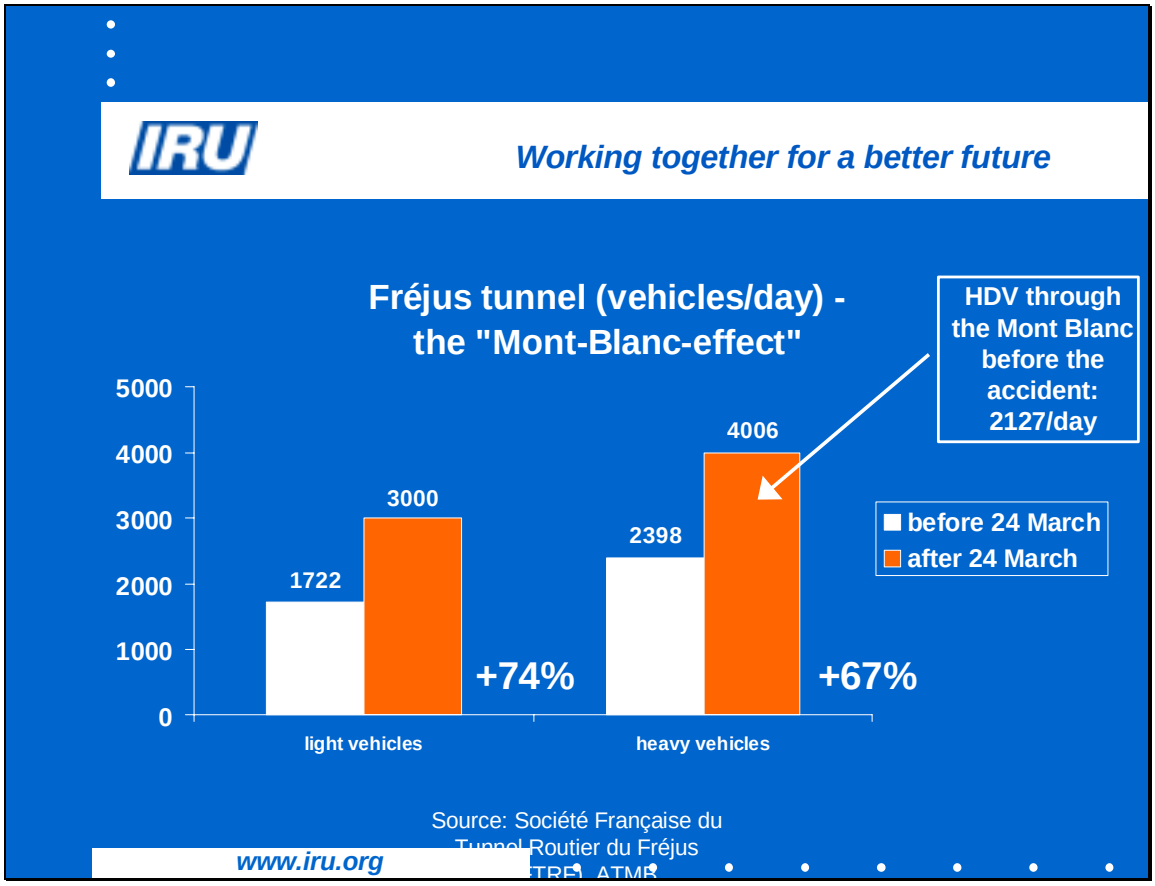
Source: The Hague Consulting Group

www.iru.org

Impediments to road transport comprise insufficient road capacity/road congestion, border delays/waiting times, traffic bans, strikes/blockades, and others.

The annual economic cost of these impediments for road transport amounts to 0.5% of GDP.

For the European Union, this would amount to an economic cost of €40 bn per year.

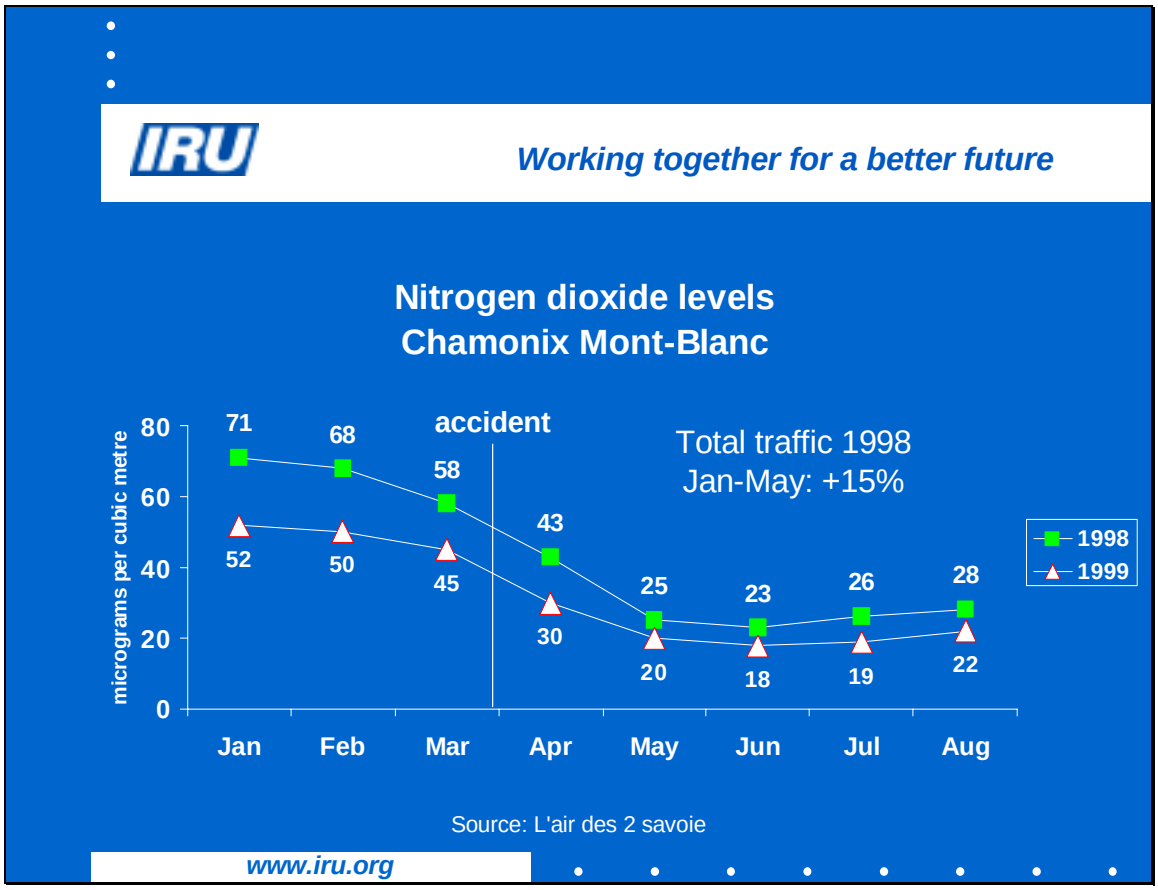


A permanent ban on trucks through the Mont-Blanc tunnel, as is currently being discussed, would not lead to a shift of goods transport from road to rail nor to combined transport, but would make road transport search for alternative routes through the alps.

Traffic would be deviated to alternative routes (and tunnels) rather than shifted to other modes, leading to an increase in the cost for shipments by road from Italy to Central Europe by 25%.

A temporary increase of almost 70% in the number of heavy commercial vehicles through the Fréjus tunnel after the Mont-Blanc tunnel was closed on 24 March 1999 gives a clear indication of where the traffic would go, with all its negative impacts as regards the economy, environment and safety.

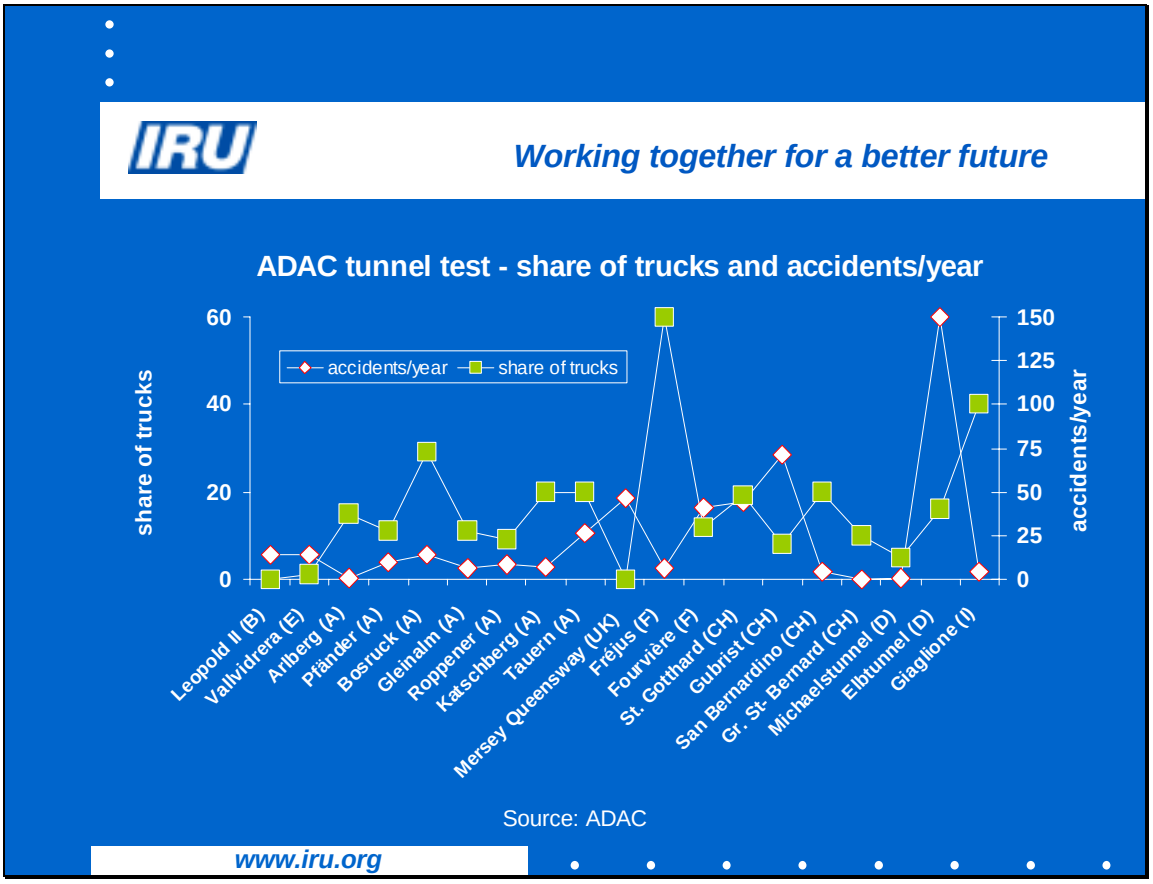
Such a “reorganisation” and deviation of traffic flows would lead to an increase in the overall number of trucks on the road, due to inefficiencies and productivity losses.



A “before accident” and “after accident” comparison of the nitrogen dioxide levels measured in Chamonix leads to the following conclusions: Although total traffic between January and May 1998 increased by 15%, nitrogen dioxide levels fell by almost two thirds. This is a clear indication that other sources, such as private heating, have a much stronger influence on NO_2 levels in the region.

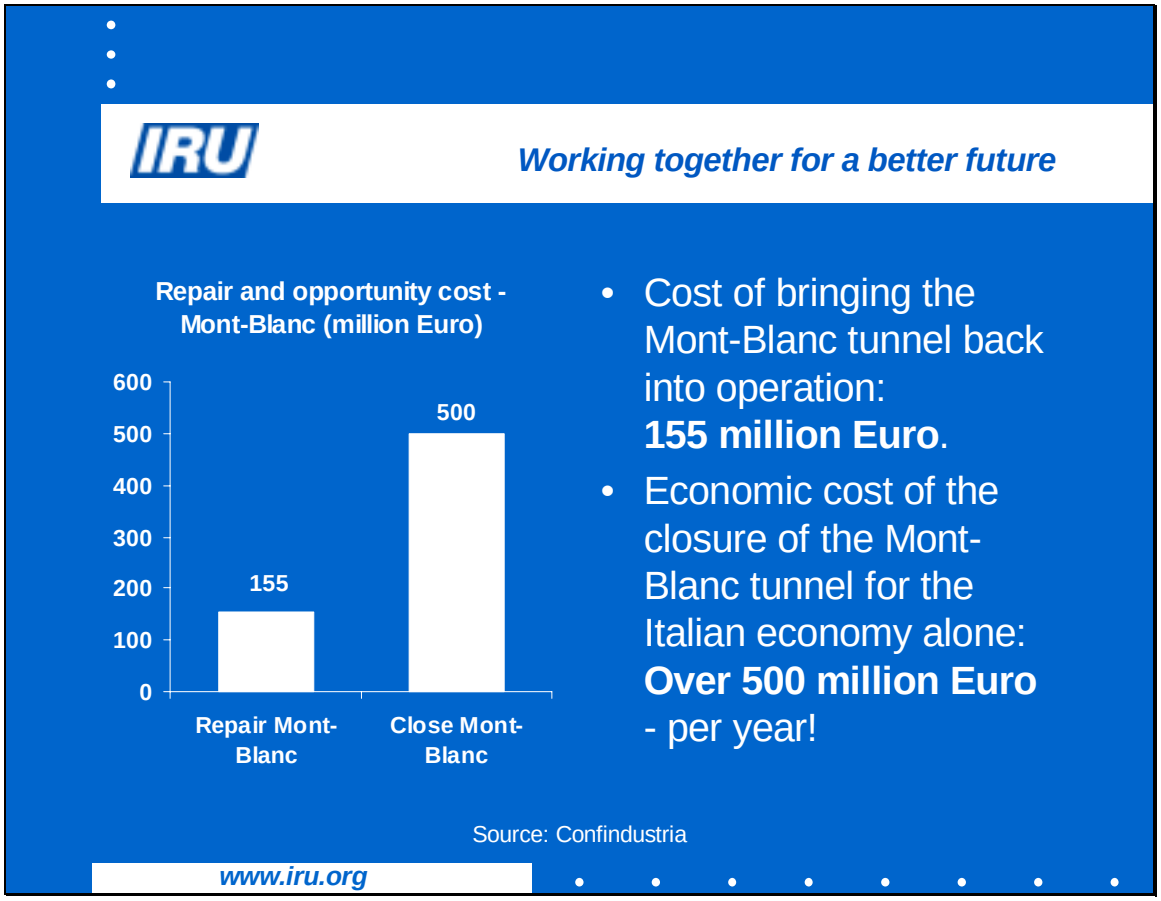
Regardless of the amount of traffic, nitrogen dioxide levels in 1999 were lower than in 1998. From January to August, i.e. before ***and*** after the tunnel was closed in 1999, the reduction was on average between 20 and 25% when compared to levels in 1998.

There is no evidence, whatsoever, that due to the closure of the tunnel, air quality in the region has improved, or would deteriorate once the tunnel was back in operation for all vehicles.



There is little or no positive correlation between the share of trucks in total traffic through a tunnel and the number of accidents. On the contrary, while the Fréjus tunnel has an extremely high proportion of heavy duty vehicles (almost 60%) but a low number of accidents per year (only 6), the Elbtunnel with a moderate share of goods vehicles (approx. 16%) has an extremely high number of accidents per year (150). These are the results of the most recent and comprehensive investigation of European tunnels by the ADAC.

The distinction between „accident involvement“ and „accident responsibility“ is often neglected in accident statistics. „A truck was involved“ does not necessarily mean that the truck caused the accident. On the contrary, „A truck was involved“ very often means that the truck (and his driver) suffered as much from an accident as other road users and victims. The question that has to be raised in this context is „To what extent are authorities responsible for an accident“, if, for example, they neglect their responsibility for the modernisation and adaptation of road infrastructure, including tunnels.



The road transport industry would be less affected by a permanent ban than one might expect. Above all, it is the economies at both ends of the tunnel that suffer from the closure of the Mont-Blanc tunnel, temporarily or permanently.

While the cost for bringing back the Mont-Blanc tunnel into operation is estimated at "only" 155 million Euro, the economic cost alone for the Italian economy is estimated at over 500 million Euro - per year!