

PROJECT

PETS

Pricing European Transport Systems

Funding: European (4th RTD Framework Programme)

Duration: Jun 1996 - Jun 1999

Status: Complete with results



Background & policy context:

The European Commission's policy papers 'Towards fair and efficient pricing in transport' and 'Fair payment for infrastructure use' have placed transport pricing high on the policy agenda. These papers advocated principles for pricing, but raised questions about its implementation. Therefore, recent research has sought to develop practical advice on how to establish appropriate pricing policies and their impacts on traffic volumes and modal choice.

Objectives:

The main objectives of PETS were to:

- report on the current pricing situation of passenger and freight transport in Member States;
- assess whether such prices provide appropriate price signals in the light of all relevant internal and external costs;
- forecast the consequences of moving to a more appropriate price level and structure in the face of external constraints and developments.

Related Projects:

- AFFORD - Acceptability of fiscal and financial measures and organisational requirements for demand management.
- CAPRI - Concerted Action on transport pricing research integration.
- EUROTOLL - European project for toll effects and pricing strategies.
- FISCUS - Cost evaluation and financing schemes for urban transport systems.
- QUITTS - Design and testing of an integrated methodology for the valuation of the quality of transport systems and services in Europe.
- TRANSPRICE - Trans modal integrated urban transport pricing for optimum modal split.
- TRENEN II STRAN - Models for transport, environment and energy - version 2 - strategic transport policy analysis.

Parent Programmes:

[FP4-TRANSPORT - Specific research, technological development and demonstration programme in the field of transport, 1994-1998](#)

Institute type: Public institution

Institute name: European Commission; Directorate-General for Energy and Transport (DG TREN; formerly DG VII)

Funding type: Public (EU)

Partners:

NA

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Key Results:

Through case studies on five transport corridors, PETS has shown that a practical methodology to calculate marginal social cost (the basis for efficient pricing policies) for all modes does exist, although many of the valuations remain subject to considerable uncertainty.

The case studies covered cross-Channel passenger and freight, trans-Alpine freight, Finnish passenger and freight, Tagus passenger crossing and Oslo-Gothenburg passenger traffic. Four pricing scenarios were used, comparing current pricing with 'pure' marginal cost pricing and 'full' cost recovery from users.

PETS demonstrated that a purely commercial approach to transport pricing is not appropriate and may push prices in the wrong direction. However, the effects of moving to a more efficient pricing system are likely to be diverse, depending on the national context and the current level of prices and subsidies. Thus, it is not universally true that the more environmentally friendly modes would uniformly benefit at the expense of other modes.

For instance, the current price of inter-urban car travel is estimated to be too high relative to the marginal social cost in 2010, partly as a result of tighter vehicle emissions regulations. On the other hand, PETS confirmed the case for urban road pricing in congested cities. Similarly whilst there is generally a case for lower prices for public transport (bus, rail and air), in some places existing subsidies are already excessive. A substantial switching of trips onto public transport is justified only in the urban case, with a reduction of car traffic of up to 40% and a similar percentage increase in public transport.

In the case of road freight, long-distance freight is generally under-charged (with the exception of the trans-Alpine corridors through Switzerland), because taxes do not increase sufficiently with vehicle weight and distance travelled. For the cross-Channel services, the existing charges for Le Shuttle (for both passengers and freight) are significantly above the marginal cost-based charges that would maximise economic efficiency.

The modelling results also indicated that further extension of deregulation might not necessarily benefit rail transport in terms of the relative pricing compared with other modes, reflecting the different starting points in terms of pricing policies and subsidies between the modes.

Policy implications

The evidence from PETS demolishes the argument that marginal cost pricing cannot be implemented in practice because such prices cannot be measured. However, this does not mean that all the relevant agencies currently possess the information and ability to estimate marginal social cost, so further efforts will be needed on disseminating the methodology. In addition, further research is needed, for instance to refine the estimates of external costs and the estimation of prices on a countrywide basis.

One of the critical conclusions is that the appropriate level of charges is strongly dependent on the local context. Current charges can be too high in sparsely populated regions with limited traffic, and too low in busier areas.

PETS concluded that there is a clear case for reform of road freight vehicle taxation, to introduce a charge based both on vehicle characteristics and distance travelled.

Documents:

 [pets.pdf \(Final report\)](#)

STRIA Roadmaps: Network and traffic management systems

Transport sectors: Passenger transport, Freight transport
Societal/Economic issues,

Transport policies: Decarbonisation