

Steering mobility through pricing

In brief

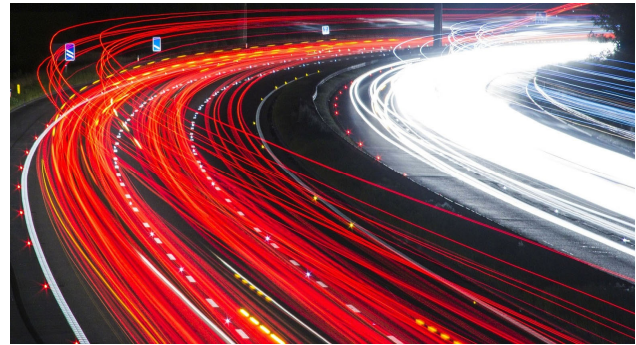
- Traffic congestion costs the EU over €80 billion annually.
- All major European cities face the challenge of reducing congestion, pollution and accidents in the years to come.
- Currently, there is no single consistent mobility pricing scheme in Austria. Various approaches for different transport modes co-exist.
- Mobility behaviour can be governed sustainably by optimising pricing patterns for all modes of transport and directing them towards common goals.

What is it about?

Today, most cars carry only one passenger and are stationary for more than 95 % of the time. Transport policies aim to reduce congestion in cities and free up road spaces occupied by parked cars. Innovative mobility concepts should reduce CO₂ and pollutant emissions currently caused by the use of fossil fuels. Nevertheless, innovative solutions such as precise sensors and robotics in computerised vehicles as well as sensors and road markings on roads for improved communication are very resource-intensive and still carry the potential to lead to greater demand and thus more congestion. Technologies in these fields are changing rapidly and standardisation has still not been achieved. Many stakeholders such as industry, research institutions, consumers and government organisations need to work together in new fields.

If cars no longer run on fossil fuels, governments need to make arrangements to secure tax income previously obtained by taxing petrol and diesel. Sufficient energy production

needs to be secured if, in addition to industry and household consumption, countries are meant to provide electricity for millions of cars. New mobility solutions can be supported through optimised mobility pricing. Mobility pricing describes the charges for using any transport infrastructure or services on all transport modes. Mobility pricing in the form of charges for trips and parking, road tolls, subsidies for public transport, and taxes has long been used by governments as a method to reduce congestion, obtain revenue, and to encourage people to use alternative modes of transport. By optimising pricing, travel demand and mobility behaviour can be influenced with the aim of reducing peak hour travel, congestion, air pollution, and greenhouse gas emissions, all of which are negative externalities arising from the underlying mobility choices.



Traffic congestion costs the EU over €80 billion per year, causing substantial harm to health and the environment.

Consequently, pricing schemes for roads or any other transport infrastructure should be designed so that the price reflects social and ecological costs. The EU promotes pricing schemes that are in line with “user pays” and “polluter pays” principles, thereby encouraging the use of taxation and infrastructure charging. Such schemes usually differ in their design from schemes that predominantly aim at generating public revenue but have only limited steering objectives.

In the future, mobility pricing could make better use of transport and traffic data to create more precise pricing mechanisms. For example, driving to a currently congested area could be charged at a higher price than driving where and when there is less traffic. A journey that is shared can be priced lower than one in which a person is travelling on their own.

Basic data

Project title:	Shaping the Future of Mobility
Project team:	Peer, S. and Sinozic, T. in cooperation with the European Parliamentary Technology Assessment (EPTA) network
Duration:	01/2017 – 11/2017
Website:	eptanetwork.org

Mobility pricing in Austria

In Austria, the main means of transport are passenger cars (50.5 % of trips on an average working day), public transport (14.6 %), walking (17.8 %), and cycling (6.4 %). For motorised passenger transport, the pricing instruments mainly exist at national level (fuel duty, Austrian car registration tax, motor-related insurance tax); they counteract (mostly also national) subsidies for commuter transport (commuters' allowance, "commuter Euro"). At local level, it is mainly the pricing of parking that is used as a steering instrument. In addition, there is the motorway toll ("Vignette"), which is independent of use for annual vignette owners, as well as local tolls (e.g. Brenner motorway). E-mobility is subsidised, but its share in Austria remains quite low (1.54 %). Car-sharing is supported and has more than 100,000 users in Vienna, yet remains an urban phenomenon.



While road pricing has been implemented for a long time, other schemes such as an inner city toll remain controversial.

In Austria, various pricing schemes for public transport co-exist, yet these differ heavily between regions. In some cities and regions, public transport is relatively cheap for monthly and annual ticket holders, which also affects the modal split. For example, the introduction of the €365 annual pass (previously: €449) in Vienna in 2012 has led to a significant increase in the number of annual ticket holders and the number of kilometres travelled by public transport, whereas car ownership and kilometres travelled by car have decreased.

Changes in mobility pricing are highly politicised in Austria. There is, however, no single overarching mobility pricing system that allows for mobility prices to correlate with the "user pays" or "polluter pays" principles.

What to do?

Mobility pricing is a suitable instrument to manage traffic demand and address capacity bottlenecks. It could also help to reduce pollution and meet environmental goals.

- The purpose of mobility pricing measures and the respective use of revenue needs to be clearly defined and stated with transparency. It is then possible for potential conflicts of objectives, e.g. increasing public revenue vs. capacity management or environmental protection, to be balanced and for evidence-based decisions to be made.
- Various international studies have assessed the impact of different mobility pricing schemes in great detail. These studies may be used as the basis for robust decision-making on specific mobility pricing schemes in Austria.
- Because of various conflicting interests in the transport sector, stakeholders may be resistant to changes. Participatory processes may lower the potential for conflict by inviting various stakeholders to a productive dialogue, e.g. residents, policymakers, and the transport industry.
- Complementary measures to mobility pricing schemes may include policies on land-use or urban planning. Also, associated measures such as encouraging flexible working hours, working from home, or carpooling may enhance the effect of mobility pricing.

Further reading

Peer, S. and Sinozic, T., (2017) 'Austria', Chapter 2 in TA-SWISS (2017) (Eds.) *Shaping the Future of Mobility: Mobility Pricing in Europe and Beyond*, European Parliamentary Technology Assessment (EPTA), Bern. epub.oeaw.ac.at/ita/ita-projektberichte/EPTA-2017-Mobility-Pricing.pdf

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