Road usage charge: charging users rather than consumers

Faced with congestion, pollution and mobility funding issues, cities such as Singapore and States such as Oregon are currently testing a mileage charge system which entails charging users in proportion to their use of the road network.

→ THE "PAY FOR WHAT YOU USE" PRINCIPLE

In Oregon, revenues from the fuel tax will dwindle inexorably from 2020 while at the same time mobility infrastructure is deteriorating and there is an increased need for road network maintenance. This decrease in fuel tax revenues is due to the increasing numbers of more fuel-efficient vehicles and demographic growth, which always results in more vehicles on the road. The upsurge in hybrid and electric vehicles on the car market is shaking up the conventional mobility funding model in the United States by reducing the fuel tax base. Yet this state fuel tax, introduced for the first time in Oregon in 1919, is the primary source of revenue for the funding of the State's mobility infrastructure, generating no less than $600 million in revenue each year. It is therefore essential to depart from the "fuel purchase mirrors road use" model of the 20th century, which is becoming both obsolete and unequal[174]. With the launch of the Oregon Department of Transportation (ODOT) OReGO pilot programme on 1 July 2015, the Beaver State is once again the first US State to try out the road usage charge[175].

Five thousand miles from Oregon, Singapore has one of the most developed road pricing systems based on a city toll which taxes drivers in line with congestion levels[176]. This dynamic pricing system is made possible through cameras installed on gantries and on-board units in vehicles. Not only does it regulate (mainly at peak times) Singapore's road traffic but it also encourages users to consider alternatives to cars[177]. However, Singapore hopes to further develop its road pricing system by using vehicle geolocation, thereby establishing pricing according to the number of kilometres travelled.

→ A VIABLE MODEL ?

The Road Usage Charge Program tested in Oregon requires an electronic unit to be fitted in the vehicle's interior to record the number of miles covered. Data on mileage and fuel consumption are collected each month by private companies and passed on directly to the ODOT, which then bills users. Studies conducted among the 1,600 volunteers taking part in the pilot programme have demonstrated that this new tax was fairer than the fuel tax, in that all vehicles are subject to the same rate of 1.50 cent/mile and less fuel-efficient vehicles, which already pay fuel tax, have 30 cents/gallon credited to their account. This mileage charge is above all a means of securing a stable flow of revenue, dependent solely on the number of miles covered and not on fuel consumption. This experiment is proving to be a success: volunteers feel it is a positive experience and the OReGO programme received a $1.2 million subsidy from the federal government to perfect its model, which has, incidentally, attracted other US States.

→ SOME USERS REMAIN RELUCTANT

Most of the different models of mileage charge require new technologies and GPS data to improve and establish their services among users. In the digital era, however, users are sometimes reluctant to share their personal mobility data with private stakeholders, fearing that the data is used without their consent and for other purposes than the calculation of their travel costs. The various tests conducted by the ODOT between 2006 and 2015 have demonstrated that many car users are unwilling to approve a programme such as OReGO if it involves installing an electronic unit that collects GPS data[178].

In response to this, the pilot programme launched in July 2015 gives the option of installing a unit without GPS; though many volunteers were unaware of this. There is therefore a real communication challenge that must be met to increase the programme's acceptability so that it can ultimately replace the conventional fuel tax.

The success of Singapore's system can be explained in particular by the roll-out of an information campaign aimed at car users[179]. However, the 2020 upgrading of the City-State's city toll remains subject to the population's acceptance of the toll's operating conditions, in terms of both privacy and cost.

→ READ THIS REPORT ON OUR WEBSITE BY SCANNING THIS QR CODE.