

Road Funding – Is the fuel levy the answer?

The funding of roads in South Africa continues to attract debates from all quarters, in particular when the question of tolls arise. Most of these debates lack any factual foundation and thus are given to emotional outburst which polarises more than it clarifies.



Many believe that the fuel levy should continue to be the answer. With the rapid urbanization the world over and South Africa being no exception, the provision of adequate capacity and management of trunk roads in urban areas face the biggest challenge. If one considers the N1 between Pretoria and Johannesburg as an example, providing additional lanes will only assist to a certain extent. Hence the answer lies not only in engineering solutions but in managing the provided road capacity through other means as has been done in certain parts of the world

When the fuel levy was introduced in the early parts of the last century, the urbanization phenomena was hardly on the horizon, and the issue then was connecting the various parts of South Africa. Here the fuel levy played its role but such a road pricing mechanism is woefully inadequate to deal with the issues of urbanization, the imminent introduction of electric vehicles, air quality, safety etc. To adequately deal with this new paradigm a totally different approach would be required. Here we need a tariff setting mechanism that influences behavior for which the fuel levy is not suitable.

The fuel levy raised as a means to finance roads is considered **not** ideal as it:

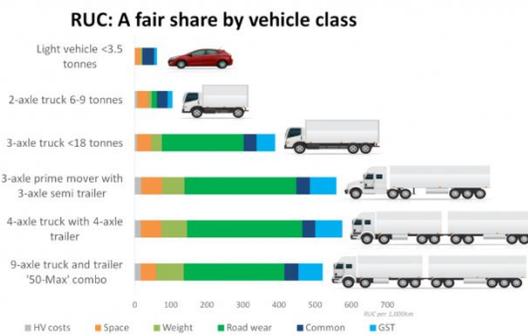
- Is not fair (if considered a tax, it is a regressive tax) - the poor pay as same as the riche eg. a person earning R5000 a month pays the same rate of tax as one earning R50 000 a month or more.
- Is not equitable – the latest (more fuel efficient) vehicles owned by those who can afford the latest, pay less than the older models owned by those who can't afford the latest in order to travel the same distance.

	Old car	New car	Hybrid	Electric
l/100km	11	6	2	0
R/100km*	37,07	20,22	6,74	0

*** Fuel Levy at R3.37 per litre**

- Is not transparent – whilst one can easily establish the rate per litre which the fuel levy attracts, it is difficult to calculate trip costs.

- cannot be utilized as a tool to manage congestion during peak periods, a dilemma which all major cities face.
- Does not consider road damage caused by the mass of the vehicle. As a result of this, movement of freight by truck could possibly be subsidized by light motor vehicles and thus skew the comparison with the cost of freight on rail. The illustration below, ex research in New Zealand, which consider various components that could be considered in formulating a road user charge, explains the issue at hand.



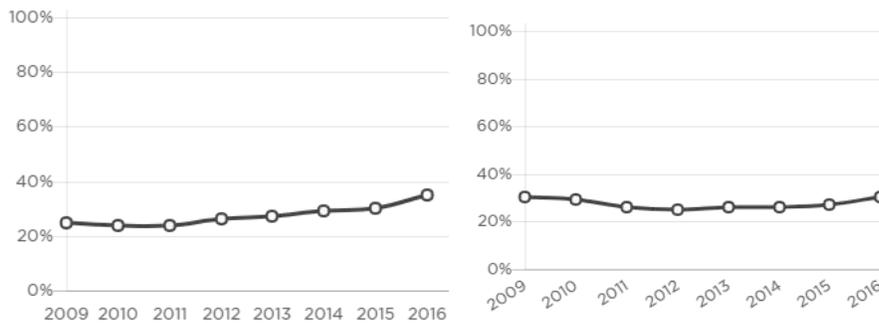
Road Space
Weight
Road wear
Common
Vat

With electric vehicles on the horizon, which attracts no fuel levy for use of the road, the situations described above will be exacerbated.

The fuel levy is considered appropriate in two instances:

1. It's easy to collect and
2. It is ideally suited to raise an emission charge, should this be considered.

In some form or another, road users pay for the use of a road. If It's not in money, it might be in time in the case of congestion or in vehicle operating cost where the road is not in ideal condition.



The Tomtom Indexes above shows Cape Town's congestion levels on a steady increase from 2009 resulting in an additional 42 minutes per day (163 hours per year) in 2016. The route between JHB and Pretoria shows an initial improvement as a result of the Gauteng Freeway Improvements pre 2010, but now again shows a similar upward trend. With vehicle growth alone (other than densification policies etc.) this will only deteriorate over the coming years unless planned interventions are made. These could

be in the form of congestion charges or dynamic road user charges where a charge is raised based on the time of day, location, average speed, etc.

Much misconception can be dealt with if a new Road Use Charge systems is cost-effective, efficient, sustainable, equitable, transparent and well administered.