**Congestion charging and Negative Externalities**

The congestion charge introduced in London is one year old and as part of its birthday, different groups have been reflecting on the success or otherwise of the policy. Whilst the charge clearly affects those who live in the London area and who have to live and work there, it has relevance for many other towns and cities in the UK, given that they have been watching the progress of the London charge with interest. If the charge appears to work there would be an incentive to introduce similar schemes in other towns and cities that suffer from congestion - and that could mean almost anywhere!

The charge came into force in London on February 17th 2003. Motorists entering the charging zone between the hours of 7am and 6.30 pm have to pay a fee of £5 per day . The charge is exempt to certain vehicles and owners who must register in advance to claim their exemption. The congestion-charging zone has a network of 230 cameras situated on and within the zone limits. Details of vehicles passing into the zone are compared to database records of those who have paid the charge. Those that do not pay the charge are liable to a fine of £80. The fine is halved for prompt payment but rises to £120 if ignored, with the potential for the offender to be taken to court in extreme cases.

The charge was controversial to say the least but since it was introduced, 1.1 million people every day are taking the bus into the centre while trains and the tube have seen increases of around 10% in passenger numbers. The reduction in traffic has been hailed a success in terms of reducing congestion and improving the quality of life in general in the city but not everyone is convinced. Businesses, especially shops have complained that the charge has led to a reduction in the number of people coming into London to do their shopping and those who do, have changed what they buy. They are tending not to buy larger, bulkier items because they are more difficult to take home on public transport.

Traffic congestion poses a major threat to economic efficiency and environmental pollution. On another side, the cut in the number of vehicles using the zone's roads - estimated to be around a third - has meant that the money raised from those paying the charge has not been as high as expected and as such the funds available for the investment into public transport is not as high as hoped. It was estimated that the scheme would raise a surplus of £200 million but this figure is expected to be closer to £68 million.

Other problems associated with the scheme have been the ease of payment method - although there are 7 different ways of paying the charge - and the problem of ensuring that transgressors are chased up and pay their fines.

There are a number of methods of trying to reduce congestion, apart from the idea adopted by London, of users paying a charge.

* A form of electronic monitoring system that charges users according to the amount they use their cars - the car is fitted with a device that is 'read' by systems in or at the side of roads, the driver receives a bill or can buy a charge card similar to a phone card.
* Encouraging people to use public transport - necessitates providing more and better quality public transport.
* Rationing road use:
  + Stipulating when vehicles can use roads possibly linked to whether the vehicle registration plate has odd or even numbers?
  + Placing tolls on roads.
  + Encouraging people to use roads when they are not busy and reduce demand for roads when they are busy - may necessitate changes to working practices.
  + Encouraging more efficient use of the roads through car sharing schemes increasing the cost of the road fund licence.
* Raising the age at which people can drive.
* Increasing the price of fuel so that those who use their cars must pay for it directly.

These methods all, in some way or another, increase the responsibility for the choice of using vehicles onto the prime user. If these measures, individually or in combination, are used the chances are, as in the London experiment, that vehicle numbers will fall.

This is likely to, at least partly, solve the problem of congestion but as in the London experience it may lead to side effects that may or may not be anticipated. Whether the policy as a whole works therefore is dependent on the **value of the benefits** of the policy (the reduction in congestion) and the **value of the costs** of the policy. The respective values have to be the same unit of account to be able to facilitate a comparison to be made between them. If the former outweighs the latter then it can be concluded that the policy is worthwhile. Such an approach reflects a more formal **'cost-benefit analysis'**.

The experience of London so far has not provided conclusive evidence as to the success or otherwise of the project; it is likely to need more years before any firm conclusions can be drawn but the early signs suggest that other cities will be looking to plan their own congestion charging schemes in the not too distant future.

**Tasks**

1. Produce a mind map or list, depending on your preference, of as many potential costs and benefits of some form of road pricing scheme as you can think of.
2. Describe how you might go about assigning a value to the costs and benefits you have identified in the task above.
3. Using appropriate diagrams, explain how congestion charging might lead to a more socially efficient use of roads.
4. Look at the list of potential methods of reducing congestion in the 'Theory' section above. Assess the potential for these measures in reducing congestion.
5. Imagine another major UK city was investigating policies to reduce congestion. Present a cost-benefit analysis to the Council on a selected policy for reducing congestion. The policy could be one measure or a combination of measures