

**(Topic 9a)**

**COSTS OF DELAY, DIVERSIONS AND SPEED REDUCTION. November 2009**

Over the past decade traffic management measures have caused congestion where none need exist, turns have been banned, forcing substantial detours on motorists, and there has been downward pressure on speed, with 20 mph limits now common.

This note provides indicative costs associated with those measures. The values are substantial, suggesting that the traffic management of the past decade has imposed unreasonable costs upon the nation, let alone the air pollution. Indeed some might say those measures are cavalier.

**Here is the data where the price base is 2008:**

**Delay:** One minute per thousand vehicles/day at a junction costs £83,700 per year. Two minutes added to all vehicle trips would cost £12 billion annually.

**Diversions:** For vehicles travelling at 40 kph adding 1 km to a journey costs £189,000 per thousand vehicles/day over a year. Adding 1 km to all vehicle trips costs £13.5 bn annually. Since most start or end in urban areas the 40 kph speed is reasonable.

**Speed:** The time cost of reducing speeds on urban roads by 5 mph from an assumed 25 mph would be £12.6 bn per year. If a 5 mph speed reduction were imposed on all roads the time cost would be £17.1 bn annually. Of course, in urban areas traffic is often constrained to less than 20 mph by congestion, nevertheless outside the peak and in many areas the natural driving speed may be above 30 mph Hence, the costs of any forced speed reduction should be evaluated before the imposition.

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**Calculations** are in [Appendix 1](#) they depend on national data dealing with the value of time and vehicle operating costs as published in Unit 3.5 6 of the Department of Transport's Transport Appraisal Guidance, Web TAG at

<http://www.dft.gov.uk/webtag/documents/expert/unit3.5.6.php>

and upon data from (a) the 2008 edition of Transport Statistics Great Britain, the TSGB.(b) the 2006 National Travel Survey.

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The above values exclude any allowance for road tax, insurance, or depreciation