

To: Transport & Health Policy Makers, & Practitioners
From: Prof Adrian Davis, TRI, Edinburgh Napier University
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Subject: Essential Evidence 4 Scotland No. 27 Financial incentives to increase active travel

Top line: Financial incentives for active travel may represent an underused but potentially promising method for encouraging healthier behaviours and addressing traffic congestion.

Financial incentives, including taxes and subsidies, can be used to encourage behaviour change. They are common in transport policy for tackling externalities associated with use of motor vehicles, and in public health for influencing alcohol consumption and smoking behaviours. Financial incentives also offer policymakers a compromise between “nudging,” which may be insufficient for changing habitual behaviour, and regulations that restrict individual choice. They also could reinforce existing government priorities such as environmental sustainability, tackling health inequalities, and economic growth (via reduced congestion and absenteeism).

A Review explored the potential for financial incentives to encourage physical activity through active travel and influence related health outcomes.¹ They encompassed interventions at the macro-environmental (e.g., government) and micro-environmental (e.g. workplace) levels, including positive financial incentives rewarding active travel and negative financial incentives penalising sedentary travel. Several of the studies involved the direct payment of money to participants who took up active travel. One study of older Americans involved payment for walking. A group receiving fixed weekly payments of \$75 (£60). A comparison group received \$50 plus \$10 (or \$25) contingent on averaging at least 15 (or 40) aerobic minutes per day each week. This study concluded that this modest financial incentives tied to aerobic minutes is an effective, and potentially cost-effective, approach for increasing physical activity among sedentary older adults.²

One of the cycling studies showed that a £2 daily payment (2006 prices = £2.60 in 2020) to cyclists could increase cycling to work by 88%.³ The authors noted that payment for cycling to work appeared to have a large impact on the demand for cycling. A payment of £2 per day was not far from achieving a doubling of the amount of cycling and had a larger impact than the ideal scenario of cycling to work time being spent entirely on completely segregated cycle routes. It would yield a 5.4% reduction in car demand, increasing to 23.6% for a £5 daily payment. The forecasts related to UK locations whose topography is relatively flat. The extent to which hilliness interacts with the valuations of improvements to cycling and therefore provides an additional barrier to increased use was not researched.

The authors concluded that it is feasible to develop policies based around a package of measures which will have a significant bearing both on the amount of cycling and car dependency for commuting trips. The £2 payment to commute to work may be seen in the context of off-setting higher costs arising from congestion, pollution and absenteeism. Even larger increases in cycle share and reduction in car use could be achieved with more generous monetary incentives and providing for a larger proportion of cycling trips on safe routes.

¹ Martin, A., Suhrcke, M, Ogilvie, D. 2012. Financial Incentives to promote active travel, *American Journal of Preventive Medicine*, 43(6): E45-E57.

² Finkelstein, E. et al, 2008. A randomized study of financial incentives to increase physical activity among sedentary older adults, *Preventive Medicine*, 47(2): 182-187.

³ Wardman, M., Tight, M., Page, M. 2007. Factors influencing the propensity to cycle to work, *Transportation Research Part A*, 41: 339-350.