



**To:** Place Directorate

**From:** Adrian Davis

**Date:** 30/06/2014

**Subject:** Essential Evidence on a page: No. 123 Effect of subsidising bus travel on the occurrence of road traffic casualties

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Top line: Investing in low bus fares across a journey to work area benefits the health of the local population both by providing additional travel using a highly safe form of transport and through the physical activity associated with travel to and from bus and train stops.

Between 1975 and April 1986, public transport by bus in the metropolitan county of South Yorkshire, England, was increasingly subsidised. In 1975/6 South Yorkshire Public Transport Executive adopted a low fares policy and froze bus fares. This resulted in a large decrease in fare prices in real terms over a ten year period. Between 1975 and 1981 the real fare level rose by 28% for bus services nationally, but it fell by 54% in South Yorkshire as bus fares were maintained at a constant level in cash terms.

Trends in road traffic casualties between 1974 and 1983 in all the six provincial English metropolitan counties were compared in order to examine the possible effect of a subsidy (better described as investment) on the incidence of road traffic casualties.<sup>1</sup> During that period the total number of casualties in South Yorkshire did not change significantly compared to the other metropolitan counties. However, the proportion of all casualties in South Yorkshire who were bus occupants did increase relative to other metropolitan counties, indicating either an increase in the amount of bus travel or a decrease in travel by other modes. There was a large increase in bus patronage in South Yorkshire relative to the other metropolitan counties, and the conclusion of the researchers was that it was the transport policy in South Yorkshire which resulted in an actual increase in distances travelled by bus. Since bus is the safest form of road travel, it is concluded that the public transport subsidy in South Yorkshire benefited the health of the local population by providing the social amenity of additional travel at the least additional health cost. The researchers also concluded that if this extra travel had been undertaken by modes other than bus, there would have been substantially more casualties than there actually were.

Even though the evidence is that the South Yorkshire fares policy resulted in an increase in bus passenger casualties and had no impact on casualties from other modes, it should be remembered that the purpose of public health and other social policies must be to provide services and their derived benefits at the least health cost, and not simply to minimise the health costs alone. To achieve the latter aim one would simply ban all travel. Seen in this light the South Yorkshire fares policy seems indirectly to have provided a clear health benefit to the population by encouraging them to travel, and to travel in the safest possible way-by bus.

As a coda, since this research was published greater understanding of the role of walking and cycling in improving health has developed substantially. With reference to public transport there is now robust evidence that there is, in particular, significant walking associated with bus use which contributes to total physical activity time and hence health benefits.<sup>2</sup>

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<sup>1</sup> Nichol, J., Freeman, M., Williams, B. 1987 Effects of subsidising bus travel on the occurrence of road traffic casualties, *Journal of Epidemiology and Community Health*, 41: 50-54.

<sup>2</sup> See, for example, <http://www.travelwest.info/evidence> No 28.