

To: Neighbourhoods and City Development

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Subject: Essential Evidence on a page No. 92: Impact of a free 1 month public transport ticket on mode choice

Top line: The value of a free month public transport card lies in its potential to capture previous car drivers and to retain their patronage once the free travel has ended. A precursor to such an intervention may be the need to enhance the general public transport offer such as quality of routes, frequency of service and reliability, as well as pricing.

Newspapers, book clubs, telephone services and many other subscription services are often marketed to new customers by means of a free or substantially discounted trial period. This article evaluates this method as a means to promote commuting by public transport in a field experiment and based on a behavioural–theoretical framework. In one study in Kyoto, Japan¹ researchers found that a free one-month bus ticket led to an immediate increase in the frequency of bus use and that, although the frequency of bus use fell a month after the ticket had expired, it was still higher than before the free bus ticket. The participant numbers of the study was, however, too small to prove that the change was effective and had a lasting effect (eg over 12 months).

A more recent study in Copenhagen reported results similar to earlier interventions in other countries.² A random sample of car owners in the greater Copenhagen area was selected and randomly assigned to receive a free month travel card or serve as a control group. For subjects in both groups, the use of public transport for commuting was measured by self-reports before and twice after the intervention. Perceptions of the price structure as a limiting factor to public transport use were reported.

In terms of results, the most important was that the intervention led to a significant behaviour change in the short run. The price promotion led to a doubling of the use of public transportation in the experiment group and a positive effect remained half a year after the intervention. Further, an important indirect effect was that the price promotion strengthened these drivers' intentions to commute by public transport, which made them use it more. Together these results confirm that the price promotion worked as expected: a free month travel card is sufficiently noticeable to attract the attention of car drivers and disrupt their automatic execution of ingrained travel mode habits and it is sufficiently attractive to persuade them to try public transport (“an offer you cannot resist”). Hence, in spite of the price seemingly not being perceived as an important limiting factor for using public transport, changing the price in a way that improved the attractiveness of public transport significantly promoted the desired behaviour.

An additional observation from the study is worth noticing: that the impact of the price promotion depended on perceived control (opportunities) for commuting by public transport. This finding illustrates an important limitation of price promotions: it assumes that more important structural conditions (e.g. the route plan, the frequency of the service) are not prohibitively limiting the use of public transport. If they do, this should be resolved before considering price promotions, or any other “soft” measures.

¹ Fujii, S., Kitamura, R. 2003 What does a one-month free bus ticket do for habitual drivers? *Transportation*: 30: 95.

² Thøgersen, J. 2009 Promoting public transport as a subscription service: effects of a free month travel card,

