

## Sustainable urban transport – changing travel mode choice by push- and pull-measures

### Summary

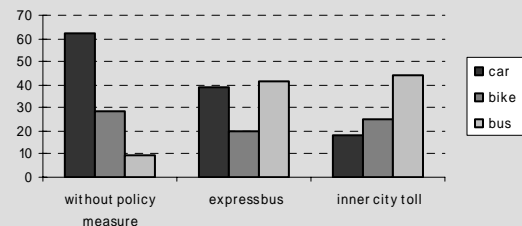
This study analysed the potential of two travel demand management strategies to weaken behavioural routines and to evoke new, environmentally more benign travel behaviour. In analogy to the experimental design of Verplanken, Aarts and Van Knippenberg (1997), subjects (N=130) were presented different travel goals in the inner city and had to make hypothetical travel mode choices.

In order to come to a decision, they could ask for information about the performance of different travel options being at their disposal for those trips. Information was displayed on an information display board. In different experimental runs, the external mobility context was changed: A restrictive push-measure (congestion charge for using the car in the inner city) and an incentive-driven pull-measure (initiation of an express bus line) were introduced.

De-routinising cognitive effects of both measures could only partially be confirmed. Travel mode choice, however, significantly shifted from car use to environmentally more benign modes. Attendant communication to explain the reasons for introducing the two measures caused no additional behavioural effects. Nevertheless, the acceptability of the congestion charge could be increased by such kind of communication. The validity of the empirical results for real-life settings is critically being discussed.

Verplanken, B., Aarts, H. & Van Knippenberg, A. (1997). Habit, information acquisition, and the process of making travel mode choices. *European Journal of Social Psychology*, 27, 539-560.

*Behavioural effects of the introduced policy measures in the experiment*



### Publications / Workshop

Harms, S. & J. Probst (2008). Nachhaltiger Stadtverkehr - Beeinflussung der Verkehrsmittelwahl durch push- und pull- Maßnahmen. *Umwelt-psychologie*.

Harms, S., Lanzendorf, M., Prillwitz, J. (2007). Nachfrageorientierte Perspektive - Das Verkehrsmittelwahlverhalten. In: Schöller, O., Canzler, W., Knie, A. (eds.). *Handbuch Verkehrspolitik*. VS Verlag, S. 735-758.

Harms, S. & S. Bruppacher (2006). Acceptability and effectiveness of environmentally targeted political push and pull measures. Scientific symposium, organised for the 45. meeting of the German Psychological Association, Nürnberg, September 17-21, 2006.

### Contact Details

Dr. Sylvia Harms  
Working Group Sustainable Transport  
Department of Urban Ecology, Environmental  
Planning and Transport  
Helmholtz-Centre for Environmental Research -  
UFZ  
Permoserstraße 15  
D-04318 Leipzig

Tel. +49 341 235 2369  
[sylvia.harms@ufz.de](mailto:sylvia.harms@ufz.de)  
[www.ufz.de](http://www.ufz.de)