

To: Transport & Health Policy Makers, & Practitioners
From: Professor Adrian Davis
Date: 13th January 2025
Subject: Essential Evidence 4 Scotland No.96 Build it and they will come: Attitudes, behaviour change and the built environment

Top Line: In response to home moves to more urban locations and decreases in trip length there is an impact of the built environment on mode choice. Home movers switch towards active modes and reduce car and public transport use. Attitude change can follow on from built environment change.

Based on previous travel behaviour studies it has been argued that attitudes, the built environment and travel behaviour are interlinked. Attitudes affect travel behaviour both directly (Fig 1, arrow 3), and indirectly through the built environment (arrows 2 and 1). However, it is possible that attitudes do not only affect, but are also affected by the built environment and travel behaviour (arrows a and b), a process which is referred to as reverse causality.¹ Critically, attitude can be changed by travel behaviour caused largely by built environment changes rather than needing attitude to be first changed to be supportive of behaviour change. Attitude change has generally been viewed as a trigger for change if not the key trigger required for behaviour change. Only relatively recently has reverse causality be tested in practice, partly as a result of studies of residential home moves to areas where the built environment is more conducive towards sustainable travel modes previously not available to the movers e.g. moving close to public transport corridors. People change their attitudes after exposure to new experiences.

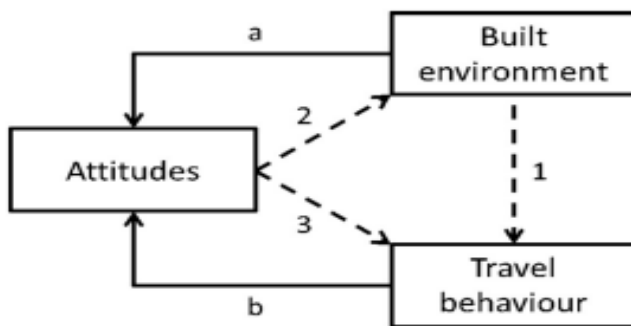


Fig. 1. Relationships between attitudes, the built environment and travel behaviour (solid lines indicate reverse causality) (based on Van de Coevering et al., 2016).

In a more recent German study of a panel of adults making a residential location change, researchers observed that changes in the built environment impacts mode choice.² As a caution, it was noted that there is a possibility that movers might select their residential location to be aligned with their individual travel attitudes, thus introducing an effect of travel attitudes on the built environment. However, the results suggested that the attitude towards a specific mode exerted no direct influence on the residential location choice, which would be indicative of travel-based residential self-selection. Nonetheless, mode attitudes towards public transport, walking and cycling play strongly into the development of a preference for urban areas that is taken into account in the residential location decision and thus leads to a more/less urban location. In the German study of movers, after relocating to more urban locations, active mode use increased while car and public transport use decreased.

¹ Van Wee, B., De Vos, J., Maat, K. 2019 Impacts of the built environment and travel behaviour on attitudes: Theories underpinning the reverse causality hypothesis, *Journal of Transport Geography*, 80, 102540

² Schimohr, K., Heinen, E., Næss, P., Scheiner, J. 2025 Changes in mode use after residential relocation: Attitudes and the built environment, *Transportation Research Part D*, 129, 104556.